

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

Construction Phase Monthly EM&A Report No. 72 (For December 2021)

January 2022

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This Monthly EM&A Report No. 72 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with

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

Certified by:

Terence Kong

Environmental Team Leader (ETL) Mott MacDonald Hong Kong Limited

Date 14 January 2022



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By Email

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

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

14 January 2022

Dear Sir,

Contract No. 3102 3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 72 (December 2021)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 72 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 January 2022.

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.

while

Jackel Law

Independent Environmental Checker

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Abbreviations

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

SWL	Southwest Lantau	
T2	Terminal 2	
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System	
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
The Manual	The Updated EM&A Manual	
TSP	Total Suspended Particulates	
WL	West Lantau	
WMP	Waste Management Plan	

Executive summary

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual).

This is the 72nd Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 December 2021.

Key Activities in the Reporting Period

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

EM&A Activities Conducted in the Reporting Period

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

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

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

Snapshots of EM&A Activities in the Reporting Period



Noise Impact Monitoring conducted by ET in Sha Lo Wan



Chemical Spill Drill conducted by Contractor



On-site Checking of Maintenance Record of Wastewater Treatment Facility

Results of Impact Monitoring

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

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

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

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction; and
- Backfilling works.

Airfield Works

Contract 3301 North Runway Crossover Taxiway

- Cabling works; and
- Stockpiling.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Piling and structure works;
- Stockpiling; and
- Pipe and drainage diversion works.

Contract 3303 Third Runway and Associated Works

- Architectural, Builder's and Finishing works;
- Footing and utilities work;
- Box culvert construction;
- Piling work;

- Operation of asphalt plant; and
- Cable laying and ducting works.

Contract 3305 Airfield Ground Lighting System

- Site office establishment;
- Cabling works;
- · Network installation; and
- Genset installation.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation; and
- Cabling works.

Contract 3307 Fire Training Facility

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

Contract 3308 Foreign Object Debris Detection System

- Site formation; and
- Foreign Object Debris Tower installation.

Contract 3310 North Runway Modification Works

- Deep cement mixing; and
- Steel deck erection.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Architectural, Builder's Work and Finishing works;
- Steel frame installation:
- Structure works; and
- Underground utilities construction.

Contract 3404 Integrated Airport Control System

- Equipment installation; and
- Cable laying.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Sheet piling and pile cap construction;
- Excavation and backfilling; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Site setup works; and
- Excavation and lateral support works.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Bridge demolition;
- Piling works;
- Drainage works;

- Reinforced concrete works; and
- Builders' works.

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

Contract 3601 New Automated People Mover System (TRC Line)

- Pull out test for guideway;
- Guidebeam installation; and
- Concreting work.

Contract 3602 Existing APM System Modification Works

- · Car modification; and
- Concreting work.

Contract 3603 Baggage Handling System (BHS)

BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Laying of drainage pipes and ducts;
- Site clearance;
- Paving works; and
- Road works.

Contract 3723 Construction Support Facilities

- Clearance works;
- Finishing works;
- Site formation; and
- Blinding and footing works.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Excavation and lateral support works;
- Rebar fixing and casting; and
- Jacking slab construction.

Contract 3802 APM and BHS Tunnels and Related Works

- Wall and slab construction:
- Installation of dewatering well;
- Pipe pile and sheet pile works; and
- Excavation and lateral supports.

Construction Support (Services / Licences):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant; and
- Material conveyor belt construction.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant; and
- Testing and commissioning for conveyor belt.

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level [^]		√	No breach of Action Level was recorded.	Nil
Complaint Received			In the previous reporting period, two emails regarding dust issue were received on 15 November 2021. A complaint regarding suspected dump truck for garbage disposal that was not properly covered was received on 1 December 2021.	ET requested the relevant contractor to provide information related to the complaint. During a regular site inspection, dust was observed when there was vehicle movement on haul road and was rectified by the contractor promptly. An ad-hoc inspection was conducted subsequently in which water spraying at the concerned haul road was observed. All contractors were reminded to properly implement dust mitigation measures, especially water spraying on the haul road in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed. ET requested the relevant contractors to provide information related to the complaint. Regular site inspections and ad-hoc inspection were conducted in which no item related to the covering of dump trucks was recorded. All contractors were reminded to ensure the proper covering of dump trucks for garbage disposal and avoid potential blowing away of materials during the process. Hence, the case was considered closed.
			A complaint regarding muddy water was received on 13 December 2021.	ET requested the relevant contractor to provide information related to the complaint. Regular site inspections and ad-hoc inspections were conducted in which no observation on muddy water was recorded. All contractors were reminded to properly implement water quality mitigation measures on their work sites in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.
Notification of any summons and status of prosecutions		√	No notification of summons nor prosecution was received.	Nil

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Change that affect the EM&A		V	There was no change to the construction works that may affect the EM&A.	Nil

Note:

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

1 Introduction

1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1¹. AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

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

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

The summary of construction works programme can be referred to **Section 1.4**.

1.2 Scope of this Report

This is the 72nd Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 December 2021.

1.3 Project Organisation

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

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance, Sustainability	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong	Environmental Team Leader	Terence Kong	2828 5919
Kong Limited)	Deputy Environmental Team Leader	Heidi Yu	2828 5704
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141
Reclamation Works:			
Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-CCC-CDC Joint	Project Manager	Alan Mong	3763 1352
Venture)	Environmental Officer	Zhang Bin Wang	3763 1451
Airfield Works:			
Party	Position	Name	Telephone
Contract 3301 North Runway Crossover	Deputy Project Director	Kin Hang Chung	9800 0048
Taxiway (FJT-CHEC-ZHEC Joint Venture)	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works	Project Manager	Dickey Yau	5699 4503
(China Road and Bridge Corporation)	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated	Project Manager	Andrew Keung	6277 6628
Works (SAPR Joint Venture)	Environmental Officer	Max Chin	6447 5707
Contract 3305 Airfield Ground Lighting System	Project Manager	Allam Al-Turk	2944 9725
(ADB Safegate Hong Kong Limited)	Environmental Officer	Calvin Sze	9205 9277
Contract 3306 Observation Facility Control System	Project Director	Dennis Yam	9551 9920
Supporting Interim 2RS and 3RS (Chinney Alliance Engineering Limited)	Environmental Officer	Billy To	9056 6300
Contract 3307 Fire Training Facility	Project Manager	Steven Meredith	6109 1813
(Paul Y. Construction Company Limited)	Environmental Officer	Albert Chan	9700 1083

Party	Position	Name	Telephone
Contract 3308 Foreign Object Debris Detection	Project Manager	Jeffrey Yau	9873 7422
System (DAS Aviation Services Group)	Environmental Officer	Terry Siu	9141 2511
Contract 3310 North Runway Modification	Project Manager	Kingsley Chiang	9424 8437
Works (China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	Federick Wong	9842 2703

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres	Contract Manager	Michael Kan	9206 0550
Enabling Works (Wing Hing Construction Co., Ltd.)	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres Building and Civil Works	Project Manager	Alice Leung	9220 3162
(Sun Fook Kong Construction Limited)	Environmental Officer	Ray Cheung	9785 1566
Contract 3404 Integrated Airport Control System (Shun Hing Systems	Project Manager	Andy Ng	9102 2739
Integration Co., Ltd.)	Environmental Officer	Richard Ng	9802 9577
Contract 3405 Third Runway Concourse Foundation and	Project Manager	Francis Choi	9423 3469
Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Environmental Officer	Jacky Lai	9028 8975
Contract 3408 Third Runway Concourse and Apron Works (Beijing Urban	Assistant Project Manager	Qian Zhang	5377 7976
Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture)	Environmental Officer	Malcolm Leung	7073 7559

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3503 Terminal 2 Foundation and	Project Manager	Eric Wu	3973 1718
Substructure Works (Leighton – Chun Wo Joint Venture)	Environmental Officer	Rex Yiu	6465 6861

Party	Position	Name	Telephone
ntract 3508 Terminal 2 pansion Works ammon Engineering &	Project Director	Richard Ellis	6201 5637
onstruction Company mited)	Environmental Officer	Fanny Law	6184 4650
itomated People Move	er (APM) and Baggage	Handling System (B	HS):
arty	Position	Name	Telephone
Contract 3601 New Lutomated People Mover System (TRC Line) CRRC Puzhen	Project Manager	Hongdan Wei	158 6180 9450
Sombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Environmental Officer	P L Wong	9143 2185
Contract 3602 Existing APM System Modification	Project Manager	Kunihiro Tatecho	9755 0351
Vorks Niigata Transys Co., Ltd.)	Environmental Officer	Carrie Kwan	9276 0551
Contract 3603 3RS Baggage Handling System VISH Consortium)	Project Manager	КСНо	9272 9626
vioi i consortiani)	Environmental Officer	Eric Ha	9215 3432
	-		
onstruction Support (F	Facilities):	Name	Telephone
	•	Name Thomas Lui	Telephone 9011 5340
Contract 3721 Construction Support Infrastructure Works	Position		
Contract 3721 Construction Support Infrastructure Works China State Construction Engineering (Hong Kong)	Position Site Agent	Thomas Lui	9011 5340
Contract 3721 Construction Support Infrastructure Works China State Construction Engineering (Hong Kong) td.) Contract 3722 Western Support Area – Construction	Position Site Agent Environmental Officer	Thomas Lui Gary Yeung	9011 5340 9042 1720
Contract 3721 Construction Support Infrastructure Works China State Construction Engineering (Hong Kong) td.) Contract 3722 Western Support Area – Construction Support Facilities Tapbo Construction Company Limited and Conwo Modular House	Position Site Agent Environmental Officer Deputy Project Director	Thomas Lui Gary Yeung Philip Kong	9011 5340 9042 1720 9337 8700
Contract 3721 Construction Support Infrastructure Works China State Construction Engineering (Hong Kong) td.) Contract 3722 Western Support Area – Construction Company Limited and Conwo Modular House Limited Joint Venture) Contract 3723 Eastern Support Area –	Position Site Agent Environmental Officer Deputy Project Director Environmental Officer	Thomas Lui Gary Yeung Philip Kong Eddie Suen	9011 5340 9042 1720 9337 8700 6338 8862
Contract 3721 Construction Support Infrastructure Works China State Construction Engineering (Hong Kong) Itd.) Contract 3722 Western Support Area – Construction Company Limited and Conwo Modular House Imited Joint Venture) Contract 3723 Eastern Support Area – Construction Support Construction Support Construction Support Construction Support Construction Support Construction Support Company Limited and Conwo Modular House Ltd.	Position Site Agent Environmental Officer Deputy Project Director Environmental Officer Deputy Project Director	Thomas Lui Gary Yeung Philip Kong Eddie Suen Philip Kong	9011 5340 9042 1720 9337 8700 6338 8862 9337 8700

Party	Position	Name	Telephone
Contract 3733 Emergency Repair Service	Project Manager	Michael Kan	9206 0550
(Wing Hing Construction Co., Ltd.)	Environmental Officer	Lisa He	5374 3418

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island	Project Manager	Kingsley Chiang	9424 8437
(China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	Eunice Kwok	9243 1331
Contract 3802 APM and BHS Tunnels and Related Works	Project Director	John Adams	6111 6989
(Gammon Construction Limited)	Environmental Officer	Phoebe Ng	9869 1105

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility	Project Manager	Benedict Wong	9553 2806
(K. Wah Concrete Company Limited)	Environmental Officer	C P Fung	9874 2872
Contract 3901B Concrete Batching Facility	Senior Project Manager	Gabriel Chan	2435 3260
(Gammon Construction Limited)	Environmental Officer	Rex Wong	2695 6319

1.4 Summary of Construction Works

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

The locations of key construction activities are presented in **Figure 1.1**. **Figure 1.2** presents the latest layout of enhanced silt curtain deployed.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period.

Table 1.2: Summary of Status of All Environmental Aspects under the Updated EM&A Manual

Parameters	EM&A Requirements	Status	
Air Quality			

Parameters	EM&A Requirements	Status
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine works.	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	Due to the completion of all marine-based DCM works within May 2021, regular DCM monitoring was ceased at all monitoring stations starting from 24 June 2021 and would be resumed if there are marine-based DCM works in the coming future.
Sewerage and Sewage Tre	eatment	
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD one year before the scheduled commencement of operation of the proposed third runway	The proposed methodology of the annual sewage flow monitoring was approved by EPD. The annual flow monitoring has been started since June 2021.
Details of the routine H ₂ S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The details of the routine H ₂ S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management		
Waste Monitoring	At least weekly	On-going
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD under EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
Terrestrial Ecology		
Pre-construction Egretry Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.

Parameters	EM&A Requirements	Status
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	-	The coral translocation was completed.
Post-Translocation Coral Monitoring	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins ((CWD)	
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and Passive Acoustic Monitoring (PAM): For	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	the whole duration of baseline period. Vessel line transect surveys: Two full	On-going
	surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	
Landscape & Visual		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels Implementation measures	Monitor and check	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going

Parameters	EM&A Requirements	Status
Complaint Hotline and Email channel	Construction phase	On-going
Environmental Log Book	Construction phase	On-going

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

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

- Two skipper training sessions provided by ET: 8 and 29 December 2021.
- Twenty environmental management meetings for EM&A review with works contracts: 1, 2, 3, 14, 15, 16, 17, 21, 22, 23, 24 and 29 December 2021.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

2 Air Quality Monitoring

Air quality monitoring of 1-hour Total Suspended Particulates (TSP) was conducted three times every six days at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

In accordance with the Manual, baseline air quality monitoring of 1-hour TSP levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.2**.

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level (μg/m³)	Limit Level (μg/m³)
AR1A	306	500
AR2	298	_

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 2021	Monthly EM&A Report No. 70, Appendix E
	SIBATA LD-3B-1 (Serial No. 597337)	10 May 2021	Monthly EM&A Report No. 65, Appendix D

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

- a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.
- b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.

- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the "Count" reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix D of Construction Phase Monthly EM&A Report No. 65, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
AR1A	23 - 109	306	500
AR2	26 - 170	298	

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

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

2.5 Conclusion

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

3 Noise Monitoring

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

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2 ⁽¹⁾	Tung Chung West Development	To be determined
NM3A ⁽²⁾	Site Office	Facade
NM4	Ching Chung Hau Po Woon Primary School	Free field
NM5	Village House in Tin Sum	Free field
NM6	House No. 1, Sha Lo Wan	Free field

Note:

- (1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.
- (2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**.

Table 3.2: Action and Limit Levels for Noise Monitoring

Monitoring Stations	Time Period	Action Level	Limit Level, L _{eq(30mins)} dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75dB(A) ⁽¹⁾

Note:

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	20 Mar 2021	Monthly EM&A Report No. 63, Appendix E
	Rion NL-52 (Serial No. 01287679)	20 Jun 2021	Monthly EM&A Report No. 66, Appendix D
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	20 Jun 2021	Monthly EM&A Report No. 66, Appendix D
	Castle GA607 (Serial No. 040162)	20 Mar 2021	Monthly EM&A Report No. 63, Appendix E

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	Leq (30mins)	Leq (30mins)
NM1A ⁽¹⁾	60 - 63	75
NM4 ⁽¹⁾⁽³⁾	60 - 66	70 ⁽²⁾
NM5 ⁽¹⁾⁽³⁾	53 - 59	75
NM6 ⁽¹⁾⁽³⁾	66 - 68	75

Notes:

- (1) +3dB(A) Façade correction included;
- (2) Reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.
- (3) Some of the noise measurement results were higher than the baseline monitoring levels. In order to reduce the influence of non-Project related noise on the monitoring results, these measurement results were corrected with reference to the baseline monitoring levels.

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

3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A and aircraft noise near NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

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

Table 4.1: Monitoring Locations of Impact Water Quality Monitoring

Monitorin g Station Description			Coordinates
		Easting	Northing
C1	Control Station	804247	815620
C2	Control Station	806945	825682
C3 ⁽²⁾	Control Station	817803	822109
IM1	Impact Station	807132	817949
IM2	Impact Station	806166	818163
IM3	Impact Station	805594	818784
IM4	Impact Station	804607	819725
IM5	Impact Station	804867	820735
IM6	Impact Station	805828	821060
IM7	Impact Station	806835	821349
IM8	Impact Station	808140	821830
IM9	Impact Station	808811	822094
IM10	Impact Station	809794	822385
IM11	Impact Station	811460	822057
IM12	Impact Station	812046	821459
SR1A ⁽¹⁾	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977
SR2	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
SR6A ⁽³⁾	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636
SR8 ⁽⁴⁾	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390

Notes:

- (1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.
- (2) 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.
- (3) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.
- (4) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 4.2**. The control and impact stations during ebb tide and flood tide for general water quality monitoring are presented in **Table 4.3**.

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

Parameters	Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for gen (excluding SR1A & SR8)	eral water quality	monitoring		
DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5mg/l		Surface and Middle 4.1mg/l 5mg/l for Fish Culture Zone (SR7) only	
	Bottom 3.4mg/l		Bottom 2.7mg/l	
Suspended Solids (SS) in mg/l	23	or 120% of	37	or 130% of
Turbidity in NTU	22.6	upstream control station at the same tide of the same day, whichever is higher	36.1	upstream control station at the same tide of the same day, whichever is higher
Action and Limit Levels SR1A				
SS (mg/l))	33		42	
Action and Limit Levels SR8				
SS (mg/l)	52		60	

Notes:

- (1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.
- (2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.
- (3) Depth-averaged results are used unless specified otherwise.

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

Control	Station	Impact	Statione

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

Note:

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

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and	YSI ProDSS (Serial No. 21G105356)	24 Dec 2021	Appendix D
turbidity)	YSI ProDSS (Serial No. 18A104824) (1)	24 Sep 2021	Monthly EM&A Report No. 69, Appendix E
	YSI ProDSS (Serial No. 15M100005)	22 Oct 2021	Monthly EM&A Report No. 70, Appendix E
	YSI ProDSS (Serial No. 16H104233)	26 Nov 2021	Monthly EM&A Report No. 71, Appendix E
	YSI ProDSS (Serial No. 16H104234)	26 Nov 2021	Monthly EM&A Report No. 71, Appendix E
	YSI ProDSS (Serial No. 17E100747)	24 Dec 2021	Appendix D

Note:

(1) The monitoring equipment was not used after the expiry date of the calibration certificate (23 Dec 2021).

Other equipment used as part of the impact water quality monitoring programme are listed in **Table 4.5**.

Table 4.5: Other Monitoring Equipment

Brand and Model
Van Dorn Water Sampler
Garmin eTrex Vista HCx
Sontek HydroSurveyor

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.3.3 Laboratory Measurement / Analysis

Analysis of SS 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 determination. The SS determination works were started within 24 hours after collection of the water samples. The analysis of SS have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS

Parameters	Instrumentation	Analytical Method	Reporting Limit	
SS	Analytical Balance	APHA 2540D	2mg/l	

4.4 Summary of Monitoring Results

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

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

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

IM1 |IM2 |IM3 |IM4 |IM5 |IM6 |IM7 |IM8 |IM9 |IM10 |IM11 |IM12 |SR1A |SR2 |SR3 |SR4A |SR5A |SR6A |SR7 |SR8 02/12/2021 04/12/2021 07/12/2021 09/12/2021 11/12/2021 14/12/2021 16/12/2021 18/12/2021 21/12/2021 23/12/2021 25/12/2021 28/12/2021 30/12/2021 No. of result triggering 0 0 1 0 0 0 0 0 0 ol 0 0 0 0 0 0 0 0 0 Action or Limit Level

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

Note: Detaile	ed results are presented in Appendix C .
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

For SS, one of the testing results triggered the corresponding Action Level, and investigation was conducted accordingly. The case occurred at only one monitoring station, which is located upstream of the Project during flood tide, and would unlikely be affected by the Project.

4.5 Conclusion

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

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

Nevertheless, as part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures as recommended in the Manual during weekly site inspection and regular environmental management meetings.

5 Waste Management

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

5.1 Action and Limit Levels

The Action and Limit Levels of the construction waste are provided in Table 5.1.

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel, reinforcement bar, structural steel, aluminum, copper, other metals and glass are sorted on-site and transported off-site for recycling. ET and IEC have carried out site audits regularly and reviewed the trip ticket system.

Table 5.2: Construction Waste Statistics

	C&D ⁽¹⁾ Material Stockpiled for Reuse or Recycle (m ³)		Reused in other		Chemical Waste (kg)	Chemical Waste (I)	General Refuse (tonne)
November 2021 ⁽²⁾⁽³⁾	*16,540	*6,051	7,039	5,493	0	1,400	2,631
December 2021 ⁽²⁾⁽⁴⁾	4,842	15,538	1,251	10,204	600	2,742	2,764

Notes:

- (1) C&D refers to Construction and Demolition.
- (2) Metals, paper and/or plastics were recycled in the reporting period.
- (3) Updated figure for the previous month is reported and marked with an asterisk (*). Updated figures for earlier months will be reported in the forthcoming Quarterly and Annual EM&A Reports.
- (4) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

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

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

5.3 Marine Sediment Management

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

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

6 Chinese White Dolphin Monitoring

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

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

6.1 Action and Limit Levels

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

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

NEL, NWL, AW, WL and SWL as a Whole
Running guarterly ⁽¹⁾ STG < 1.86 & ANI < 9.35

Action Level⁽³⁾ Running quarterly⁽¹⁾ STG < 1.86 & ANI < 9.35

Limit Level⁽³⁾ Two consecutive running quarterly⁽²⁾ (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

- (1) Action Level running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.
- (2) Limit Level two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.
- (3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

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

		nsect Lines in N			
Waypoint	Easting	Northing	Waypoint	Easting	Northing
		NE	EL .		
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NV	VL		
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	98	812516	821356
4N	807518	829230	9N	812516	824254
		A'	W		
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		W			
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
	799800				
6W		810450	12N	803750	818500
6E	801400	810450	WI		
40	000404	SV		007407	004407
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335

Waypoint	Easting	Northing	Waypoint	Easting	Northing
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

A 15-20m vessel with a flying bridge observation platform about 4 to 5m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

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

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

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking Survey

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

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 1, 3, 6, 7, 13, 15, 16 and 17 December 2021, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 453.76 km of survey effort was collected from these surveys and 376.86 km of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In December 2021, 7 sightings with 18 dolphins were sighted. Amongst these sightings, 6 sightings of 17 dolphins were on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in December 2021 is illustrated in **Figure 6.3**. In WL, CWD groups were recorded at waters off Tai O to Yi O; while in SWL, CWD groups were scattered at waters near Fan Lau. In NWL, the only CWD sighting was spotted at waters to the North of Lung Kwu Chau. There was no CWD sighting recorded in NEL survey area during the reporting period.

Legend SIGHTING LOCATIONS OF CWD THE BROTHERS MARINE PARK SHA CHAU AND LUNG KWU CHAU MARINE PARK SOUTHWEST LANTAU MARINE PARK VESSEL SURVEY TRANSECTS **3RS LAND-FORMATION FOOTPRINT** 3RS WORKS AREA Kilometers

Figure 6.3: Sightings Distribution of Chinese White Dolphins

Remarks: (1) Please note that there are 7 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

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

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In December 2021, a total of around 376.86 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 6 on-effort sightings with 17 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from October to December 2021), a total of around 1097.82 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 27 on-effort sightings and a total number of 89 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of December 2021 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. Although the running quarterly encounter rate ANI falls below the Action Level, the Action Level is not triggered as the running quarterly STG remains 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)
December 2021	1.59	4.51
Running Quarter from September to November 2021 ⁽¹⁾	2.46	8.11
Action Level	Running quarterly ⁽¹⁾ ST	G < 1.86 & ANI < 9.35

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

Group Size

In December 2021, 7 groups of 18 dolphins in total were sighted, and the average group size of CWDs was 2.6 dolphins per group. Numbers of CWD sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were similar. No CWD sighting with large group size (i.e. 10 or more dolphins) was recorded in this reporting month.

Activities and Association with Fishing Boats

Two CWD sightings were recorded engaging in feeding activities in December 2021. One CWD group was observed associated with operating gill-netter near Fan Lau.

Mother-calf Pair

In December 2021, no mother-calf pair was recorded.

6.4.2 Photo Identification

In December 2021, a total number of nine different CWD individuals were identified for totally nine times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm- yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm- yy)	Sighting Group No.	Area
NLMM016	07-Dec-21	1	NWL	SLMM037	06-Dec-21	2	SWL
SLMM003	06-Dec-21	2	SWL	WLMM040	06-Dec-21	2	SWL
SLMM012	16-Dec-21	1	SWL	WLMM043	15-Dec-21	1	WL
SLMM014	16-Dec-21	1	SWL	WLMM068	15-Dec-21	1	WL
SLMM025	16-Dec-21	1	SWL		•	,	-

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 16 December 2021 and at SC on 20 December 2021, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Three CWD groups were tracked from LKC station during the reporting period. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**. The first sighting location of CWD groups tracked at LKC station during land-based theodolite tracking survey in December 2021 was depicted in **Figure 6.4**.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	3	0.5
Sha Chau	1	6:00	0	0
TOTAL	2	12:00	3	0.25

Legend OWD GROUP OFF LUNG KWU CHAU LUNG KWU CHAU LAND-BASED STATION SHA CHAU AND LUNG KWU CHAU 0.75 1.5 ⊐ Kilometers MARINE PARK

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

Remark: Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

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. Both C-POD and F-POD are considered as effective PAM devices in detecting CWD occurrence, and F-POD was the main PAM device deployed where feasible. During this reporting period, the F-POD was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.5**). The F-POD was last deployed on 11 October 2021 and the next re-deployment is scheduled in early January 2022 to retrieve the data for analysis. Acoustic data would be reviewed to give an indication of CWDs occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, 1 to 2 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for seawall construction related works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.4** and **Section 7.5** respectively.

6.7 Timing of reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

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

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

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

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

7.2 Landscape and Visual Mitigation Measures

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

The implementation status of the environmental protection measures are summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The

monitoring programme for detailed design, construction, establishment works and long term management (10 years) stages is presented in **Table 7.3**. Event and Action Plan for Landscape and Visual impacts is stated in **Table 7.4**.

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures were checked by ET during weekly site inspection and reported by the Contractors during the monthly Environmental Management Meetings. Implementation	All works contracts
CM2 – Reduction of construction period to practical minimum	of the measures CM5, CM6 and CM7 by Contractors was observed.	
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree	Tree Protection Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project.	3302, 3503, 3508, 3602, 3801
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	The Contractors' performance on the implementation of the tree maintenance and protection measures were observed and checked by the ET weekly during construction period.	3802 (To be implemented)

Landscape and Visual Mitigation Measures during Construction

Implementation Status

Relevant Contract(s) in the Reporting Period

CM9 – Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme Tree Transplanting Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees will unavoidably be affected by the construction works.

3503, 3508, 3801

3802 (To be implemented)

The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site.

The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works.

Long term management of the transplanted trees were currently monitored by ET annually.

CM10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical To be implemented around taxiways and runways as soon as practicable.

To be implemented

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



Erection of site hoardings around works area in unobtrusive colours (CM5)



Avoidance of excessive height and bulk of site buildings (CM6)



Control of night-time lighting by hooding and minimisation of night working period (CM7)



General view of tree protection zone for retained tree (CM8)



General view of a transplanted tree (CM9)

In accordance with the Updated EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained and transplanted trees under the Project were 52 and 26, respectively. All works areas including 8 retained trees were handed over from Contract 3503 to Contract 3508, of which 5 trees will be felled by Contract 3508 at a later stage. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5**.

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

Table 7.3: Monitoring Programme for Landscape and Visual

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

Table 7.4: Event and Action Plan for Landscape and Visual

Event Action Level				
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	
Non-conformity on one occasion	Identify source.	Check report.	Notify Contractor.	Amend working

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

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

Existing					
Contract	Retain (nos.)	Transplant	Transplanted (nos.)		
		Establishment Period	Maintenanc e Period	(nos.)	
3302	9	0	0	0	
3503	0	6	3	0	
3508 ⁽¹⁾	24	12	0	0	
3602	2	0	0	0	
3801	17	0	5 ⁽²⁾	0	
Sub-total	52	18	8	0	
Provisional					
Contract	Retain (nos.)	Transplant	ed (nos.)	To-be-transplanted (nos.)	
3508 ⁽¹⁾	51	0		10	
Sub-total	51	0		10	
Grand Total	103	26	1	10	

Notes:

- (1) As some of the site areas have been handed over to Contract 3508, Contractor of Contract 3508 is currently managing the trees that are located within their site area. Existing trees to be managed by Contract 3508 is subject to change after initial tree surveys for each batch of site areas have been conducted by the Contractor.
- (2) Three transplanted trees (CT1194, CT1794 and CT1795) were subsequently felled after transplantation. Please refer to **Table 7.6** for details.

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

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

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks	
CT276	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	Next inspection will be conducted in February 2022. Photos of the las inspection in February 2021 can be	
		<u>Long Term Management</u> <u>period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	referred to Table 7.7 of th Construction Phase Monthly EM& Report No.62.	
CT1253	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801		
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station		
T835	22 Jan 2020	Establishment period 23 Jan 2020 – Jan 2021	Contract 3503	Next inspection will be conducted in February 2022. Photos of the last inspection in February 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.62.	
		Long Term Management period Feb 2021 – Jan 2030	_		
T836	13 Dec 2019	Establishment period 14 Dec 2020 – Jan 2021	Contract 3503		
		Long Term Management period Feb 2021 – Jan 2030	-		
T838	22 Jan 2020	Establishment period 23 Jan 2020 – Jan 2021	Contract 3503		
		Long Term Management period			
T812	21 Dec 2020	Feb 2021 – Jan 2030 Establishment period 22 Dec 2020 – Dec 2021	Contract 3503	Next inspection will be conducted in February 2022. Photos of the last inspection in December 2021 were shown in Table 7.7 .	
T814	20 Dec 2020	Establishment period 21 Dec 2020 – Dec 2021	Contract 3503		
T815	15 Dec 2020	Establishment period 16 Dec 2020 – Dec 2021	Contract 3503		
T829	18 Dec 2020	Establishment period 19 Dec 2020 – Dec 2021	Contract 3503		
T830	14 Dec 2020	Establishment period 15 Dec 2020 – Dec 2021	Contract 3503		
T831	19 Dec 2020	Establishment period 20 Dec 2020 – Dec 2021	Contract 3503		
T1493	6 Jul 2021	Establishment period 7 Jul 2021 – Jul 2022	Contract 3508	Next inspection will be conducted in January 2022. Photos of the last inspection in November 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No. 71	
T1494	6 Jul 2021	Establishment period 7 Jul 2021 – Jul 2022	Contract 3508		
T1495	10 Jul 2021	Establishment period 11 Jul 2021 – Jul 2022	Contract 3508		

Tree	Transplant	Management Stage	Management	Remarks
ID	Transplant Date	Management Stage	Management Agency	Venigin2
T1496	5 Jul 2021	Establishment period 6 Jul 2021 – Jul 2022	Contract 3508	_
T1497	5 Jul 2021	Establishment period 6 Jul 2021 – Jul 2022	Contract 3508	
T1498	29 Jun 2021	Establishment period 30 Jun 2021 – Jul 2022	Contract 3508	_
T1499	29 Jun 2021	Establishment period 30 Jun 2021 – Jul 2022	Contract 3508	-
T1500	30 Jun 2021	Establishment period 1 Jul 2021 – Jul 2022	Contract 3508	-
T1501	30 Jun 2021	Establishment period 1 Jul 2021 – Jul 2022	Contract 3508	_
T1502	5 Jul 2021	Establishment period 6 Jul 2021 – Jul 2022	Contract 3508	_
T1503	6 Jul 2021	Establishment period 7 Jul 2021 – Jul 2022	Contract 3508	-
T1504	24 Jun 2021	Establishment period 25 Jun 2021 – Jul 2022	Contract 3508	-
CT1194	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.
CT1794	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.

T812
T814
T815
T829
T830
T831

Table 7.7: Photos of the Existing Transplanted Trees Inspected in this Reporting Month

7.3 Land Contamination Assessment

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

According to the approved supplementary CAP, there are 3 remaining locations where site reappraisal / additional site investigation are proposed. Based on the latest construction information, there is no development programme for these locations at this stage. As such, the status of site re-appraisal/ additional site investigation shall be further updated upon latest development programme is available.

7.4 Audit of SkyPier High Speed Ferries

The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved

SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No ferry movement between HKIA SkyPier and Zhuhai and Macau was recorded in December 2021. Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.8**.

The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 2 to 4 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

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

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

Requirements in the SkyPier Plan	1 to 31 December 2021
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap for all SkyPier HSFs including those not using diverted route	2 to 4 daily movement (within the maximum daily cap - 125 daily movements)

7.5 Audit of Construction and Associated Vessels

The updated Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV) was submitted and approved in May 2020 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant
 construction vessels to familiarize them with the predefined routes; general education on
 local cetaceans; guidelines for avoiding adverse water quality impact; the required
 environmental practices / measures while operating construction and associated vessels
 under the Project; and guidelines for operating vessels safely in the presence of CWDs.
 The list of all trained skippers was properly recorded and maintained by ET.
- Three skipper training sessions were held by contractors' Environmental Officers.
 Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 3 skippers were trained by ET and 4 skippers were trained by contractors' Environmental Officers. In total, 1838 skippers were trained from August 2016 to December 2021.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.

- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.6 Implementation of Dolphin Exclusion Zone

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

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

7.7 Status of Submissions under Environmental Permits

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

Table 7.9: Status of Submissions under Environmental Permit

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

7.8 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory

requirements was recorded. The environmental licenses and permits which are valid in the reporting period are presented in **Appendix E**.

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

7.9.1 Complaints

Complaint received in the previous reporting period

As reported in the previous Monthly EM&A Report, two emails regarding dust issue were received on 15 November 2021. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the photos and videos provided by the complainant, ET recognized the location, identified a related contractor and requested them to provide information. According to the contractor, three water tankers were arranged to carry out water spraying for their site and one of the water tankers was designated to focus on watering along the concerned haul road. Extra water spraying on the concerned haul road by workers was also arranged. At one of the ET's weekly site inspection, dust was observed during vehicle movement on haul road and was rectified by the contractor subsequently; and at another regular inspection, no item related to dust issue was recorded. During an ad-hoc inspection by EPD, ET, IEC and AAHK, water spraying at the concerned haul road was observed. The ET also checked air quality monitoring results from before and after the receiving of the complaint and noted all results were within the corresponding Action and Limit Levels. ET would continue to monitor contractor's performance of water spraying in accordance with their management plan and reminded all contractors to properly implement dust mitigation measures, especially water spraying on the haul road in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

Complaints received in this reporting period

A complaint regarding suspected dump truck for garbage disposal that was not properly covered and leaving the 3RS construction site area via pier was received on 1 December 2021. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET recognized the location, identified two related contractors and requested them to provide information. According to the replies, one of the contractors reported they did not have dump trucks for garbage disposal leaving the alleged pier during the period of investigation. Another contractor replied they had dump trucks for the disposal of garbage going to landfill by marine route during the period of investigation, stating their dump trucks were covered entirely and checked by site supervisors before leaving their construction site and that refresher trainings on the proper covering of dump trucks were also provided to their site foremen and frontline workers. Based on the ET's weekly site inspections, no item related to the covering of dump trucks was recorded. And during an ad-hoc inspection by EPD, ET, IEC and AAHK, it was observed that all dump trucks were properly covered when embarking Roro barges. ET would continue to monitor contractor's performance and reminded all contractors to ensure the proper covering of dump trucks for garbage disposal. Hence, the case was considered closed.

A complaint regarding muddy water was received on 13 December 2021. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the photo provided by the complainant, ET recognized the location, identified a related contractor and requested them to provide information. According to the reply, there were work activities at the alleged location during the period of investigation and that silt curtain was provided to contain muddy water. The contractor also indicated provision of mitigation measures including daily visual check at their works area and training on water control measures to frontline staff. At ET's regular and ad-hoc site inspections and ad-hoc inspection by EPD, ET, IEC and AAHK, there was no observation on muddy water. For the installation of silt curtain, ET reminded

the contractor to maintain it properly. The ET also checked water quality monitoring results from before and after the receiving of the complaint and noted all results were within the corresponding Action and Limit Levels. ET would continue to monitor contractor's performance and reminded all contractors to properly implement water quality mitigation measures in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

7.9.2 Notifications of Summons or Status of Prosecution

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

7.9.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarised in ${\bf Appendix}\;{\bf F}.$

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

8.1 Construction Programme for the Coming Reporting Period

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

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction; and
- Backfilling works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cabling works; and
- Stockpiling.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Piling and structure works;
- Stockpiling; and
- Pipe and drainage diversion works.

Contract 3303 Third Runway and Associated Works

- Architectural, Builder's and Finishing works;
- Footing and utilities work;
- Box culvert construction;
- Piling work;
- Operation of asphalt plant; and
- Cable laying and ducting works.

Contract 3305 Airfield Ground Lighting System

- Site office establishment;
- Cabling works;
- Network installation; and
- Genset installation.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation; and
- Cabling works.

Contract 3307 Fire Training Facility

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

Contract 3308 Foreign Object Debris Detection System

Site formation; and

Foreign Object Debris Tower installation.

Contract 3310 North Runway Modification Works

- Deep cement mixing; and
- Steel deck erection.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Architectural, Builder's Work and Finishing works;
- Steel frame installation;
- Structure works; and
- Underground utilities construction.

Contract 3404 Integrated Airport Control System

- Equipment installation; and
- Cable laying.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Sheet piling and pile cap construction;
- Excavation and backfilling; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Site setup works; and
- Excavation and lateral support works.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Bridge demolition;
- Piling works;
- Drainage works;
- Reinforced concrete works; and
- Builders' works.

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

Contract 3601 New Automated People Mover System (TRC Line)

- Pull out test for guideway;
- Guidebeam installation; and
- Concreting work.

Contract 3602 Existing APM System Modification Works

- Car modification; and
- Concreting work.

Contract 3603 Baggage Handling System (BHS)

BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Laying of drainage pipes and ducts;
- Site clearance;

- Paving works; and
- Road works.

Contract 3723 Construction Support Facilities

- Clearance works;
- Finishing works;
- Site formation; and
- Blinding and footing works.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Excavation and lateral support works;
- Rebar fixing and casting; and
- Jacking slab construction.

Contract 3802 APM and BHS Tunnels and Related Works

- Wall and slab construction;
- Installation of dewatering well;
- · Pipe pile and sheet pile works; and
- Excavation and lateral supports.

Construction Support (Services / Licenses):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant; and
- Material conveyor belt construction.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant; and
- Testing and commissioning for conveyor belt.

8.2 Key Environmental Issues for the Coming Reporting Period

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

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from DCM works;
- DEZ monitoring for ground improvement works (DCM works) and seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

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

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

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

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

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

On the implementation of the SkyPier Plan, due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No HSF movement between HKIA SkyPier and Zhuhai and Macau was recorded during the reporting period. Therefore, no deviation was recorded in the HSF monitoring in the reporting period. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 2 to 4 daily movements, which are within the maximum daily cap of 125 daily movements.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Trainings have been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area, entered no entry zone, and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's CTCC representative to comply with the requirements of the MTRMP-CAV. The ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures

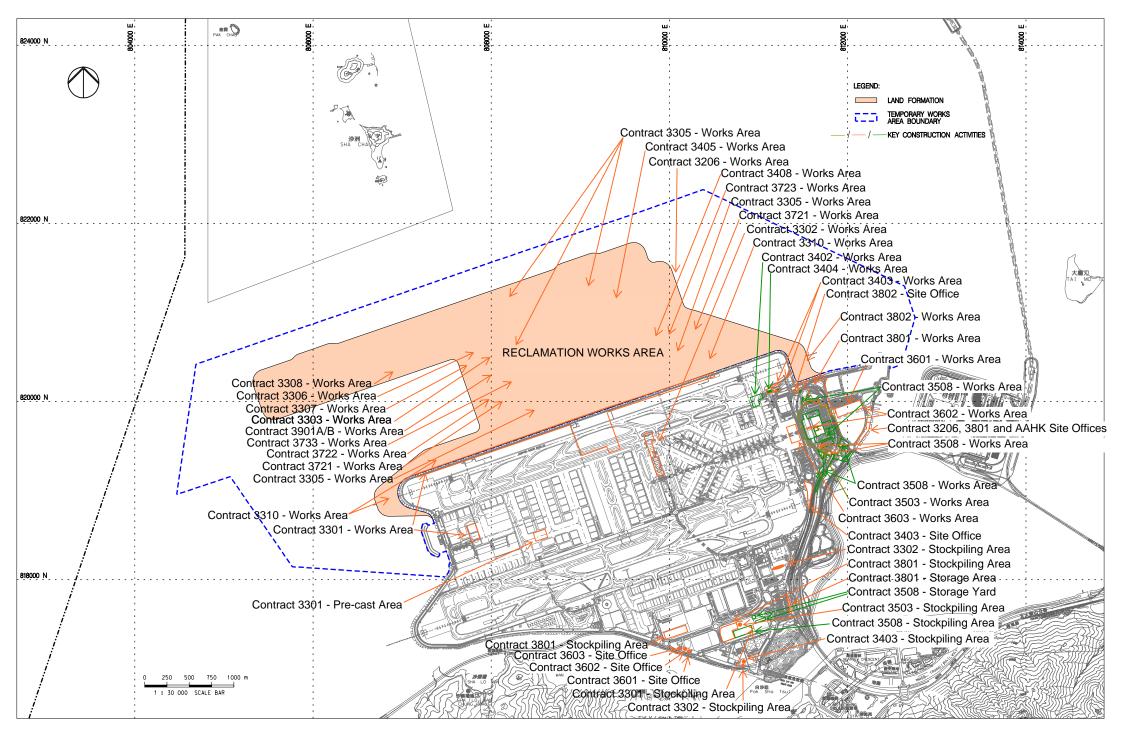
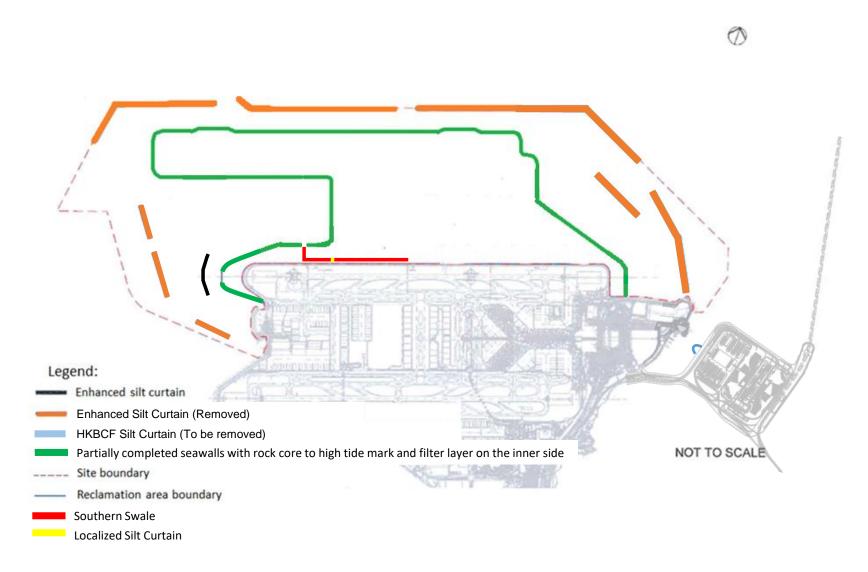
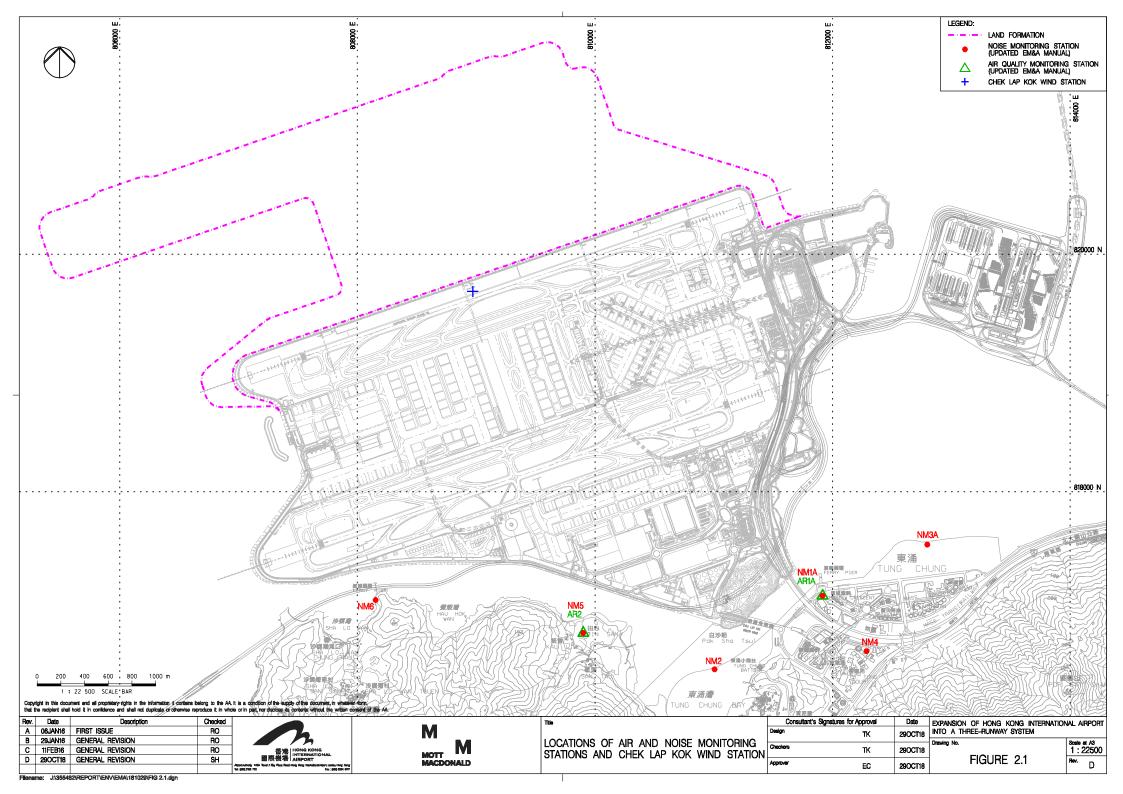
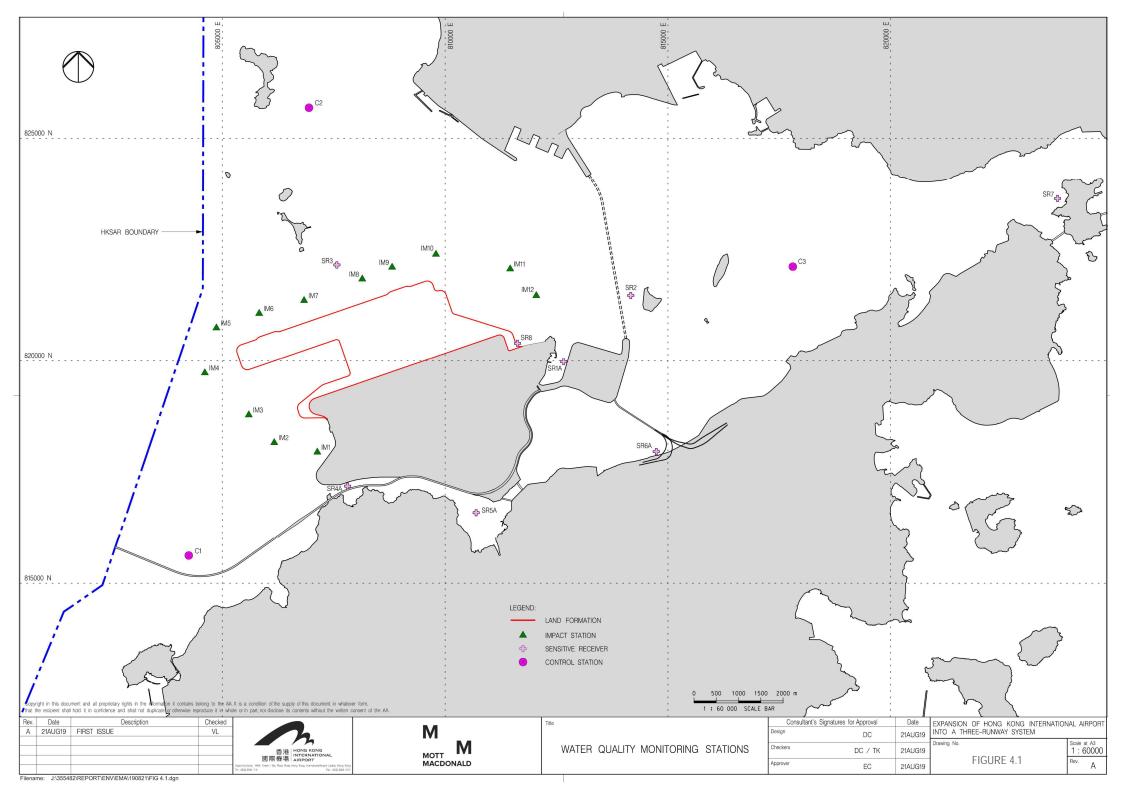


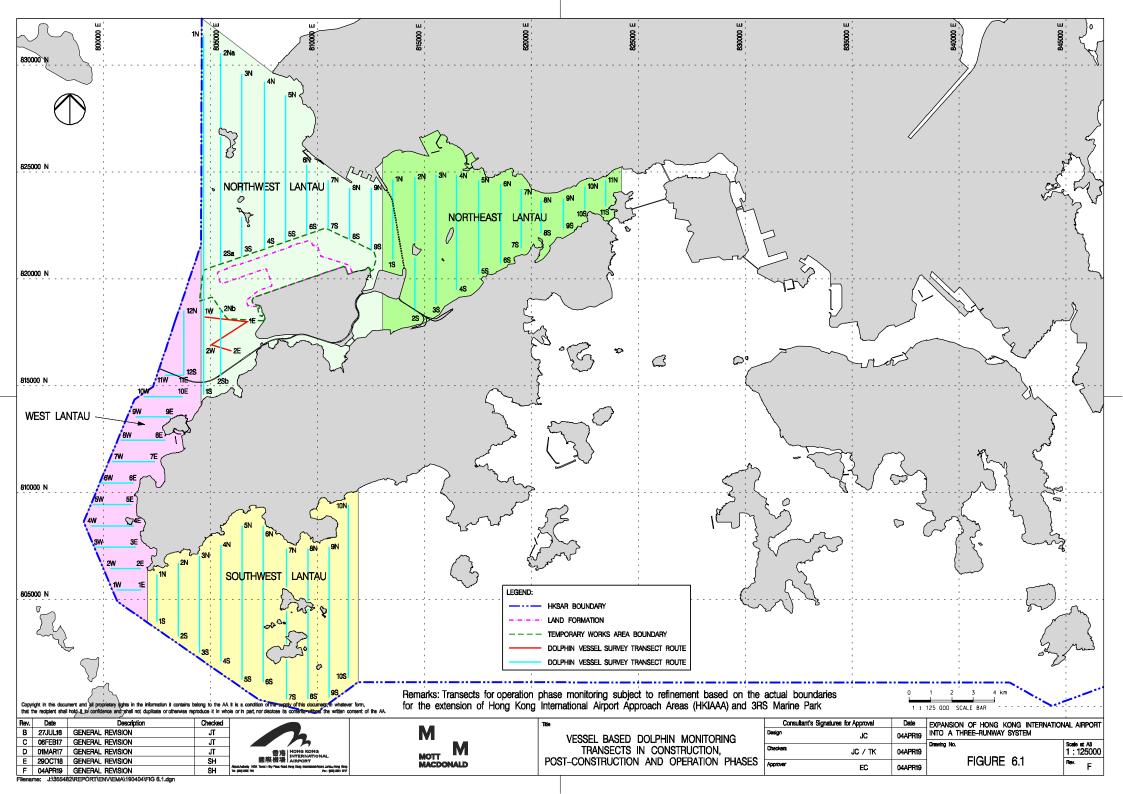
FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

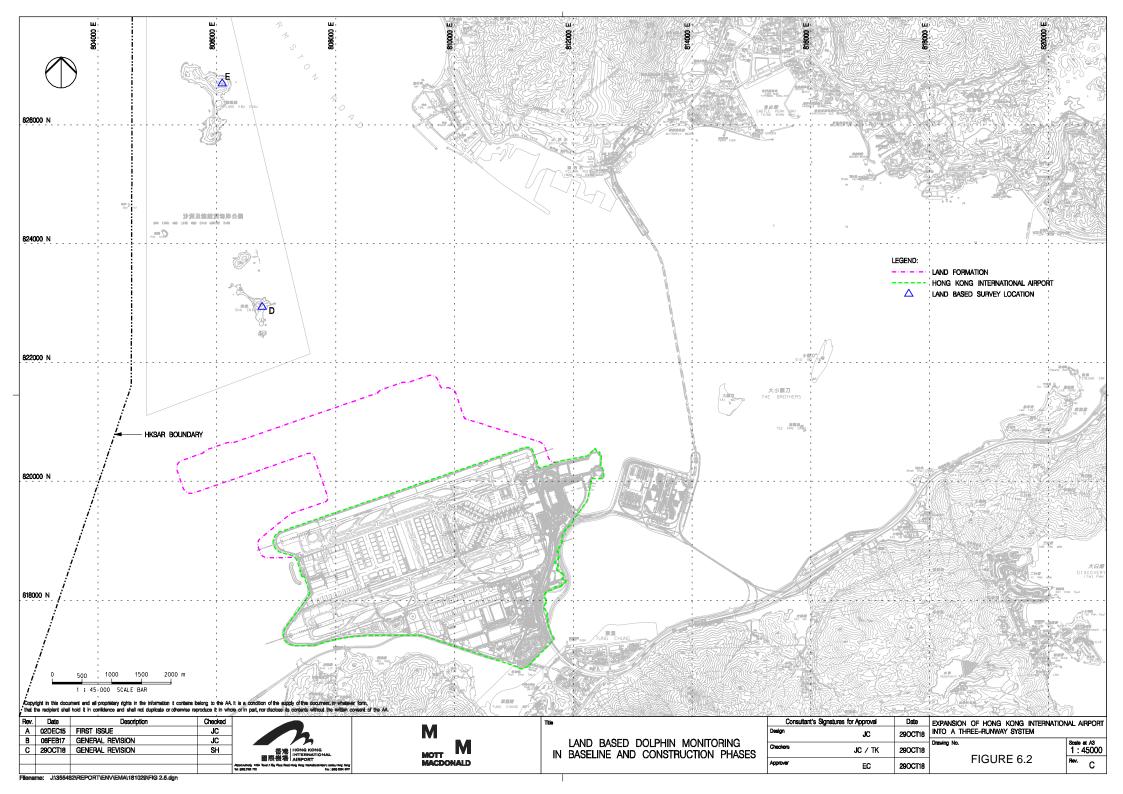
Figure 1.2
<u>Latest Layout of the Enhanced Silt Curtain and HKBCF Silt Curtain</u>

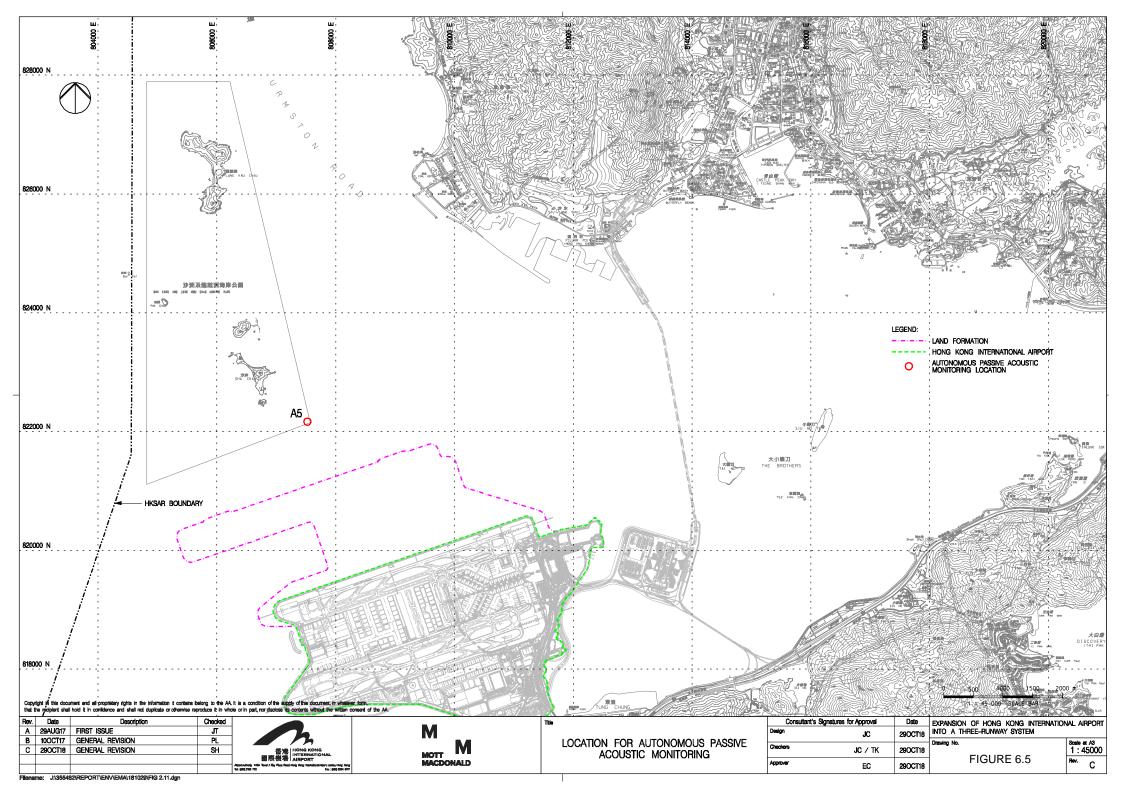












Appendix A. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase



Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Air Quality Impact – Construction Phase		
5.2.6.2	2.1	-	Dust Control Measures ■ Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	 Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling. 	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or byproducts should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning.	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Within construction site / Duration of the construction phase	I
			 Exposed Earth Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. 	Within construction site / Duration of the construction phase	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Loading, Unloading or Transfer of Dusty Materials • All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	Within construction site / Duration of the construction phase	ı
			Debris Handling • Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and	Within construction site / Duration of the construction phase	I
			 Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. Transport of Dusty Materials Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. 	Within construction site / Duration of the construction phase	1
			Wheel washing Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	Within construction site / Duration of the construction phase	ı
			Use of vehicles The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site;	Within construction site / Duration of the construction phase	1
			 Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. 		
			Site hoarding 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	ı



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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			• The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side;		
			Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; and		
			■ The opening between the storage bin and weighing scale of the materials shall be fully enclosed.		
			Loading of materials for batching	Within Concrete	1
			Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented:	Batching Plant / Duration of the	
			(a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and	construction phase	
			(b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit.		
			The loading bay shall be totally enclosed during the loading process.		
			Vehicles	Within Concrete	1
			 All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and 	Batching Plant / Duration of the	
			• All access and route roads within the premises shall be paved and adequately wetted.	construction phase	
			Housekeeping	Within Concrete	I
			• A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited.	Batching Plant / Duration of the construction phase	
5.2.6.6	2.1	-	Best Practices for Asphaltic Concrete Plant	Within Concrete	1
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include:	Batching Plant / Duration of the construction phase	
			Design of Chimney		
			• The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater;		
			■ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			■ The flue gas exit temperature shall not be less than the acid dew point; and		
			 Release of the chimney shall be directed vertically upwards and not be restricted or deflected. 		
			Cold feed side	Within Concrete	1
			 The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; 	Batching Plant / Duration of the	
			• 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;	construction phase	
			• 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. 		
			Hot feed side	Within Concrete	1
			• 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;	Batching Plant / Duration of the construction phase	
			• The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value;		
			 All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; 		
			 Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages; 		
			• All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
				Timing of completion of measures	implemented?**
			 Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units). 		
			Material transportation	Within Concrete	1
			• The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions;	Batching Plant / Duration of the construction phase	
			 Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and 		
			 Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers. 		
			Control of emissions from bitumen decanting	Within Concrete	1
			■ The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note;	Batching Plant / Duration of the	
			 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; 	construction phase	
			 Proper chimney for the discharge of bitumen fumes shall be provided at high level; 		
			 The emission of bitumen fumes shall not exceed the required emission limit; and 		
			• The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles.		
			Liquid fuel	Within Concrete	1
			 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. 	Batching Plant / Duration of the construction phase	
			Housekeeping	Within Concrete	1
			A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.	Batching Plant / Duration of the construction phase	
5.2.6.7	2.1	-	Best Practices for Rock Crushing Plants	Within Concrete	N/A as there was
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Batching Plant / Duration of the construction phase	no rock crushing plant at this stage
			Crushers		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			 The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; 		
			 The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; 		
			 Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and 		
			 Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure. 		
			Vibratory screens and grizzlies	Within Concrete	N/A as there was
			• All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and	Batching Plant / Duration of the construction phase	no rock crushing plant at this stage
			 All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. 		
			Belt conveyors	Within Concrete	N/A as there was
			 Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; 	Batching Plant / Duration of the construction phase	no rock crushing plant at this stage
			• 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.		
			Storage piles and bins	Within Concrete	N/A as there was
			 Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. 	Batching Plant / Duration of the construction phase	no rock crushing plant at this stage



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
				Timing of completion of measures	
			 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; and		
			• Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.		
			Rock drilling equipment	Within Concrete	N/A as there was
			 Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Batching Plant / Duration of the construction phase	no rock crushing plant at this stage
			Hazard to Human Life – Construction Phase		
Table 6.40	3.2	-	 Precautionary measures should be established to request barges to move away during typhoons. 	Construction Site / Construction Period	1
Table 6.40	3.2	-	• An appropriate marine traffic management system should be established to minimize risk of ship collision.	Construction Site / Construction Period	1
Table 6.40	3.2	-	 Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	1
			Noise Impact – Construction Phase		
7.5.6	4.3	-	Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:	Within the Project site / During construction phase / Prior to	1
			 only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; 	commencement of operation	
			 machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; 		
			 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. 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
7.5.6	4.3	-	Adoption of QPME ■ QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	 Use of Movable Noise Barriers Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	 Use of Noise Enclosure/ Acoustic Shed Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	Within the Project site / During construction phase / Prior to commencement of operation	I
			Water Quality Impact – Construction Phase		
8.8.1.2 and 8.8.1.3	5.1	2.26	 Marine Construction Activities General Measures to be Applied to All Works Areas 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 	Within construction site / Duration of the construction phase	1
			 Excess thaterials shall be cleaned from the decks and exposed littings 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 seabed 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 wastewater meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to All Works Areas The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report;	Within construction site / Duration of the construction phase	I – For marine filling
			 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; 		C – Completed in Nov 2020 for sand blanket
			• 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;		C – Completed in May 2018
			■ Closed grab dredger shall be used to excavate marine sediment;		1
			 Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and 		(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			■ The Silt Curtain Deployment Plan shall be implemented.		I
			Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	N/A (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			 Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and 		I – For C7a
					C – Completed in Dec 2021 for C8
					*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			 The silt curtains and silt screens should be regularly checked and maintained. 		1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Specific Measures to be Applied to Land Formation Activities during Marine Filling Works Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides; 	Within construction site / Duration of the construction phase	*(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			 Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; 		N/A (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			 Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and 		I – For C7a C – Completed in
					Dec 2021 for C8 (The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			■ The silt curtains and silt screens should be regularly checked and maintained.		1
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion	Within construction	N/A – the field
			 Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 	site / Duration of the construction phase	joint excavation works for the submarine cable diversion will no longer be conducted anymore
8.8.1.4	5.1	-	Modification of the Existing Seawall	At the existing	
	.		Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	northern seawall / Duration of the construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
			Timing of completion of measures	Implemented?^	
8.8.1.5	5.1	-	 Construction of New Stormwater Outfalls and Modifications to Existing Outfalls During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations. 	Within construction site / Duration of the construction phase	I
8.8.1.6 8.8.1.7	5.1	2.27	Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.	Within construction site / Duration of the construction phase	C – For approach lights N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			 For construction of the eastern approach lights at the CMPs Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; The excavated materials shall be removed using a closed grab within the steel casings; No discharge of the cement mixed materials into the marine environment will be allowed; and Excavated materials shall be treated and reused on-site. 		C – Completed in Oct 2021
8.8.1.8	5.1	<u>-</u>	Construction of Site Runoff and Drainage The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:	Within construction site / Duration of the construction phase	
			• Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sandbag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);		I
			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;		ı



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			• All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;		I
			• Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;	-	ı
			• 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	_	1
			• 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
			 Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the construction materials, soil, silt or debris from washing away into the drainage system; 		1
			• Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and to prevent stormwater runoff being directed into foul sewers; and		I
			Precautionary measures should be taken at any time of the year when rainstorms are likely. Actions to be taken when a rainstorm is imminent or forecasted are summarized in Appendix A2 of ProPECC Note PN 1/94. This includes actions to be taken during and/or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events.		I
8.8.1.9	5.1	-	Sewage Effluent from Construction Workforce	Within construction	I
			Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	site / During construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.10	5.1		General Construction Activities	Within construction	I
8.8.1.11			 Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and 	site / During construction phase	
			• Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.		
8.8.1.12	5.1	2.28	Drilling Activities for the Submarine Aviation Fuel Pipelines	Within construction site / During construction phase	C – Completed in
8.8.1.13			To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:		Jan 2019
			 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.		
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:	Within construction site / During	C – Completed in Jan 2019
			 During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and 	construction phase	
			• Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.		
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended:		
			■ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials;	Project Site Area / During design and construction phase	I
			 Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works; 	•	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
			Timing of completion of measures	implemented?	
			 Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work; 		I
			 Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and 	•	I
			■ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.	-	I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include:	Project Site Area /	I
			 Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; 	Construction Phase	
			 Training of site personnel in proper waste management and chemical waste handling procedures; 		
			 Provision of sufficient waste disposal points and regular collection for disposal; 		
			 Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; 		
			 Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; 		
			 All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; 		
			 C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; 		
			 The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and 		
			To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.		
10.5.1.3	7.1	_	The following practices should be performed to achieve waste reduction include:	Project Site Area /	1
			 Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; 	Construction Phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			 Adoption of repetitive design to allow reuse of formworks as far as practicable; 		
			 Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; 		
			 Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; 		
			 Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; 		
			 Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and 		
			Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	1
10.5.1.5	7.1	-	Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	1
			 The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; 	•	I
			 All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; 		I
			 Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; 		1
			■ Treated and untreated sediment should be clearly separated and stored separately; and	-	1
			Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.		I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:	Project Site Area / Construction Phase	N/A – the field joint excavation works for the
			 Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; 		submarine cable
			 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 		diversion will no longer be conducted anymore
			 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. 		anymore
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:	Project Site Area / Construction Phase	1
			 Good quality containers compatible with the chemical wastes should be used; 		
			 Incompatible chemicals should be stored separately; 		
			 Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and 		
			■ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.		
10.5.1.20	7.1	-	General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'windblown' light material.	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 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. 		C – Completed in Jan 2018
			 After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room. 		I *(CAR for golf course and Terminal 2 emergency power supply system nos.1, 2, 3, 4 and 5 were submitted to EPD)
			 Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively. 		N/A as no remediation was required.
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):	Project Site Area / Construction Phase	N/A as no contaminated soil was found.
			 To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; 	k	
			 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. 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	Pre-construction Egretry Survey ■ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	C – Completed in Jan 2019
12.7.2.3	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretry	During construction	C – Completed in
and 12.7.2.6			■ The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry;	phase at Sheung Sha Chau Island	Jan 2019
			• In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and		
			The containment pit at the daylighting location shall be covered or camouflaged.		
12.7.2.5	9.1	2.30	 Preservation of Nesting Vegetation 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	C – Completed in Jan 2019
12.7.2.4	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season	During construction	C – Completed in Jan 2019
and 12.7.2.6			 All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. 	phase at Sheung Sha Chau Island	
12.10.1.1	9.3	-	Ecological Monitoring During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found.	at Sheung Sha Chau Island	C – Completed in Jan 2019
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	■ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	C – Completed in Jan 2016
			Marine Ecological Impact – Construction Phase		
13.11.1.3 to 13.11.1.6	-	-	 Minimisation of Land Formation Area Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.7 to 13.11.1.10	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	C – Completed in Jan 2019 for diversion of aviation fuel pipeline
			 Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment; 	_	1
	 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; 		C – Completed in Oct 2021 for new approach lights		
			 Avoid bored piling during CWD peak calving season (Mar to Jun); 		N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			■ Prohibition of underwater percussive piling; and	-	1
			 Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	-	C – Completed in Jan 2019 for HDD works
13.11.2.1	-	-	Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 13.11.2.7			 Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; 	the construction phase	1
			 Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); 	_	I
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		C – Completed in Oct 2021 for new approach lights
			 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. 	-	C – Completed in Jan 2019 for HDD works
13.11.1.12	-	-	Strict Enforcement of No-Dumping Policy	All works area during the construction phase	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			 A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; 		
			 Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; 		
			 Fines for infractions should be implemented; and 		
			 Unscheduled, on-site audits shall be implemented. 		
13.11.1.13	-	-	 Good Construction Site Practices Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	 Minimisation of Land Formation Area Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4	10.3.1	-	SkyPier High Speed Ferries' Speed Restrictions and Route Diversions	Area between the	I
to 13.11.5.13			SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in Drawing No. MCL/P132/EIA/13-023 of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and	footprint and SCLKC Marine Park during construction phase	
			■ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.		
			Other mitigation measures	Area between the	
			 The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and 	footprint and SCLKC Marine Park during construction phase	1
			■ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.		C – Completed in Sep 2016
13.11.5.14	10.3.1	2.31	Dolphin Exclusion Zone	Marine waters around	
to 13.11.5.18			 Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; 	land formation works area during construction phase	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and 		1
			■ A DEZ would also be implemented during bored piling work but as a precautionary measure only.	-	C – Completed in Oct 2021 for the bored piling work of New approach lights
13.11.5.19	10.4	2.31	Acoustic Decoupling of Construction Equipment	Around coastal works	1
			 Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically- decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and 	area during construction phase	
			 Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 		
13.11.5.20	10.6.1	2.29	Spill Response Plan	Construction phase	1
			• An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.		
13.11.5.21	10.6.1	-	Construction Vessel Speed Limits and Skipper Training	All areas north and	1
to 13.11.5.23			 A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities (as currently indicated by the 1x1km grid squares in Figure 6 of Appendix 13.2 of EIA report). 	west of Lantau Island during construction phase	
			 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. 		
			Fisheries Impact – Construction Phase		
14.9.1.2 to	-		Minimisation of Land Formation Area	Land formation	I
14.9.1.5			 Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources. 	footprint / during detailed design phase to completion of construction	
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance	During construction	C – Completed in
			 Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 	phase at marine works area	Jan 2019 for diversion of aviation fuel pipeline



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; 		I
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		C – Completed in Oct 2021 for new approach lights
					N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			 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. 		C – Completed in Jan 2019 for HDD works
14.9.1.11	-		Strict Enforcement of No-Dumping Policy	All works area during	1
			 A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; 	the construction phase	
			 Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; 		
			 Fines for infractions should be implemented; and 		
			Unscheduled, on-site audits shall be implemented.		
14.9.1.12	-		Good Construction Site Practices	All works area during	1
			 Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; 	the construction phase	
			 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. 		
14.9.1.13 to 14.9.1.18	-		Mitigation for Indirect Disturbance due to Deterioration of Water Quality • Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	1
			• Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			 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. 		C – Completed on Jan 2019 for HDD work
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	CM1 - The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works;	I
				Upon handover and completion of works.	
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works;	I
				Upon handover and completion of works.	
Table 15.6	12.3	-	CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works;	1
				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;	1
				Upon handover and completion of works.	
Table 15.6	12.3	-	CM5 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works;	I
				Upon handover and completion of works. – may be disassembled in phases.	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	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	I
				completion of works.	
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works;	1
				Upon handover and completion of works. – may be disassembled in phases.	
Table 15.6	Specification shall be provided in the Contract Specification. Under this specification, the Contracto		All existing trees to be retained;	1	
			be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	Upon handover and completion of works.	
Table 15.6	12.3	-	CM9 - Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for	All existing trees to be affected by the works;	1
			necessary tree root and crown preparation periods shall be allowed in the project programme.	Upon handover and completion of works.	
Table 15.6	12.3	-	CM10 - Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A to this reporting month as the land formation works are still ongoing.
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable to the construction stage of this project.	-	-
			Health Impact – Aircraft Emissions		
			Not applicable to the construction stage of this project.		



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 Noise		
			Not applicable to the construction stage of this project.		_

Notes:

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

[&]quot;I" Implemented and on-going where applicable.

[&]quot; N/A" Not applicable to the construction works implemented during the reporting month. "^" Checked by ET through site inspection and record provided by the Contractor.

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Dec-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 Site Inspection	3 Site Inspection	4
			CWD Survey (Vessel)		CWD Survey (Vessel)	AR1A, AR2
				WQ General mid-ebb: 11:13 mid-flood: 17:03		WQ General mid-ebb: 13:00 mid-flood: 07:26
5	6 Site Inspection	7 Site Inspection	8 Site Inspection	9 Site Inspection	10 Site Inspection	11
	CWD Survey (Vessel)	CWD Survey (Vessel)		NM4, NM6	AR1A, AR2 NM1A, NM5	
40	42	WQ General mid-ebb: 15:2 mid-flood: 10:1	14	WQ General mid-ebb: 17:40 mid-flood: 12:35	5	WQ General mid-ebb: 20:24 mid-flood: 14:26
12	13 Site Inspection	14 Site Inspection	15	16 Site Inspection	17 Site Inspection	18
	CWD Survey (Vessel)	NM4, NM6	CWD Survey (Vessel)	CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM5	CWD Survey (Vessel)	
		WQ General mid-ebb: 09:3 mid-flood: 16:1		WQ General mid-ebb: 11:18 mid-flood: 16:57		WQ General mid-ebb: 12:35 mid-flood: 07:29
19	Site Inspection	21 Site Inspection	Site Inspection	23 Site Inspection	Site Inspection	25
	CWD Survey (Land-based)		AR1A, AR2 NM1A, NM5	NM4, NM6		
		WQ General mid-ebb: 14:1 mid-flood: 09:2	21	WQ General mid-ebb: 15:23 mid-flood: 10:37	7	WQ General mid-ebb: 17:07 mid-flood: 12:05
26	27	28 Site Inspection	29 Site Inspection	30 Site Inspection	31 Site Inspection	
		AR1A, AR2 NM1A, NM5	NM4, NM6			
		WQ General mid-ebb: 07:0 mid-flood: 14:2		WQ General mid-ebb: 09:51 mid-flood: 15:39		
		Notes: CWD - Chinese White Dolphin	NM1A/AR1A - Man Tung Road Park			
		Air quality and Noise Monitoring Station WQ - Water Quality	NM4 - Ching Chung Hau Po Woon Pr NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan	rimary School		

Tentative Monitoring Schedule of Next Reporting Period

Jan-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
						WQ General
						mid-ebb: 12:02 mid-flood: 17:04
2	3	4	5	6	7	8
	Site Inspection	Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Vessel) AR1A, AR2	CWD Survey (Vessel)	CWD Survey (Vessel)			AR1A, AR2
	NM1A, NM5	NM4, NM6				,
		WQ General		WQ General		WQ General
		mid-ebb: 14:27 mid-flood: 09:15		mid-ebb: 16:0° mid-flood: 10:48		mid-ebb: 17:54 mid-flood: 12:16
9	10	11	12	13	14	15
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)		AR1A, AR2	
				NM4, NM6	NM1A, NM5	
		WQ General		WQ General		WQ General
		mid-ebb: 07:07 mid-flood: 14:19		mid-ebb: 09:54 mid-flood: 15:18		mid-ebb: 11:39 mid-flood: 06:57
16	17	18	19	20	21	22
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
	CWD Survey (Land-based)		CWD Survey (Vessel)	CWD Survey (Vessel) AR1A, AR2		
		NM4, NM6		NM1A, NM5		
		WQ General		WQ General		WQ General
		mid-ebb: 13:27 mid-flood: 08:31		mid-ebb: 14:33 mid-flood: 09:31	7	mid-ebb: 15:55 mid-flood: 10:33
23	24	25	26	27	28	29
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
	CWD Survey (Land-based)		AR1A, AR2			
		NM4, NM6	NM1A, NM5			
		WQ General		WQ General		WQ General
		mid-ebb: 05:25 mid-flood: 12:21	5	mid-ebb: 08:00 mid-flood: 13:50	3	mid-ebb: 11:04 mid-flood: 15:49
30	31	Notes:	•1	10.0c		10.49
	Site Inspection	CWD - Chinese White Dolphin				
	AP1A AP2	O. D Offinoso White Dolprini	NM1A/AR1A - Man Tung Road Park			
	AR1A, AR2 NM1A, NM5	Air quality and Noise Monitoring Station	NM4 - Ching Chung Hau Po Woon Pri NM5/AR2 - Village House, Tin Sum	Imary School		
		WQ - Water Quality	NM6 - House No. 1, Sha Lo Wan			
		,				
		I				

Appendix C. Monitoring Results

Mott MacDonald Expansion of Hong Kong International Airport into a Three-Runway System
Air Quality Monitoring Results

1-hour TSP Results

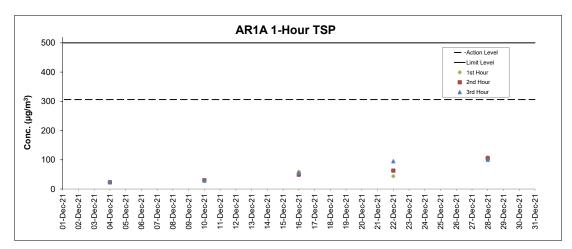
Station: AR1A- Man Tung Road Park

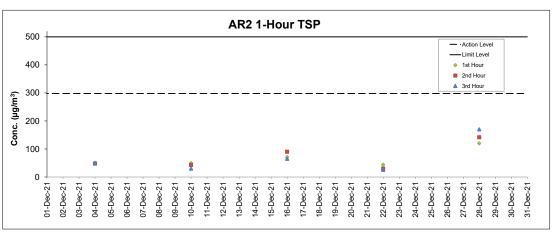
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
04-Dec-21	10:08	Sunny	2.8	54	24	306	500
04-Dec-21	11:08	Sunny	1.7	Variable	23	306	500
04-Dec-21	12:08	Sunny	4.7	344	25	306	500
10-Dec-21	12:57	Sunny	5.0	93	27	306	500
10-Dec-21	13:57	Sunny	6.7	125	30	306	500
10-Dec-21	14:57	Sunny	6.9	112	29	306	500
16-Dec-21	9:15	Sunny	6.7	88	59	306	500
16-Dec-21	10:15	Sunny	6.4	81	49	306	500
16-Dec-21	11:15	Sunny	7.2	84	55	306	500
22-Dec-21	12:55	Fine	2.8	316	44	306	500
22-Dec-21	13:55	Fine	3.3	307	63	306	500
22-Dec-21	14:55	Fine	2.5	290	95	306	500
28-Dec-21	7:45	Overcast	1.7	24	109	306	500
28-Dec-21	8:45	Overcast	2.2	31	105	306	500
28-Dec-21	9:45	Overcast	2.8	68	100	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Station. ARZ- Villag	e nouse, mi.	Juiii			1		
Date	Time	Weather	Wind Speed (m/s)	Wind Direction	1-hr TSP (µg/m³)	Action Level	Limit Level
Date	Time	Weather	willu speeu (III/s)	(deg)	1-111 13P (μg/111)	$(\mu g/m^3)$	(μg/m³)
04-Dec-21	14:06	Sunny	4.4	343	51	298	500
04-Dec-21	15:06	Sunny	2.8	343	48	298	500
04-Dec-21	16:06	Sunny	2.5	304	48	298	500
10-Dec-21	8:47	Sunny	2.5	32	50	298	500
10-Dec-21	9:47	Sunny	2.2	319	43	298	500
10-Dec-21	10:47	Sunny	2.8	50	30	298	500
16-Dec-21	13:51	Sunny	5.3	86	71	298	500
16-Dec-21	14:51	Sunny	3.1	87	90	298	500
16-Dec-21	15:51	Sunny	4.4	91	65	298	500
22-Dec-21	8:47	Overcast	2.2	62	44	298	500
22-Dec-21	9:47	Overcast	4.4	55	30	298	500
22-Dec-21	10:47	Overcast	1.4	Variable	26	298	500
28-Dec-21	11:59	Fine	2.5	350	120	298	500
28-Dec-21	12:59	Fine	3.3	317	142	298	500
28-Dec-21	13:59	Fine	4.2	324	170	298	500





- Notes

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

Noise Monitori	ng Results		

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

Noise Measurement Results

Station: NM1A- Man Tung Road Park

		Measured	I 1974) A		
		Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
10-Dec-21	Sunny	12:58	56.3	49.2	
10-Dec-21	Sunny	13:03	59.0	50.5	
10-Dec-21	Sunny	13:08	61.2	51.0	60
10-Dec-21	Sunny	13:13	57.9	51.1	00
10-Dec-21	Sunny	13:18	62.6	53.0	
10-Dec-21	Sunny	13:23	58.2	50.7	
16-Dec-21	Sunny	10:55	67.3	56.2	
16-Dec-21	Sunny	11:00	66.6	50.4	
16-Dec-21	Sunny	11:05	61.9	51.4	63
16-Dec-21	Sunny	11:10	57.6	51.9	03
16-Dec-21	Sunny	11:15	56.1	49.4	
16-Dec-21	Sunny	11:20	58.2	50.8	
22-Dec-21	Fine	12:57	58.3	49.4	
22-Dec-21	Fine	13:02	62.6	50.1	
22-Dec-21	Fine	13:07	65.3	50.9	60
22-Dec-21	Fine	13:12	57.8	50.6	00
22-Dec-21	Fine	13:17	58.8	50.4	
22-Dec-21	Fine	13:22	57.8	51.0	
28-Dec-21	Overcast	07:46	60.1	51.3	
28-Dec-21	Overcast	07:51	59.5	51.4	
28-Dec-21	Overcast	07:56	60.2	52.0	60
28-Dec-21	Overcast	08:01	61.3	54.2	00
28-Dec-21	Overcast	08:06	60.4	52.1	
28-Dec-21	Overcast	08:11	57.6	50.5	

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

			Measured	Measured		
Date	Weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^	
09-Dec-21	Sunny	13:56	64.6	55.4		
09-Dec-21	Sunny	14:01	62.1	56.3	1	
09-Dec-21	Sunny	14:06	65.2	56.1	66	
09-Dec-21	Sunny	14:11	66.0	60.2	00	
09-Dec-21	Sunny	14:16	66.2	58.2		
09-Dec-21	Sunny	14:21	66.3	57.2		
14-Dec-21	Sunny	13:28	66.0	61.8		
14-Dec-21	Sunny	13:33	65.6	62.0		
14-Dec-21	Sunny	13:38	65.2	62.1	60*	
14-Dec-21	Sunny	13:43	64.7	60.9	60.	
14-Dec-21	Sunny	13:48	65.0	60.9		
14-Dec-21	Sunny	13:53	63.9	60.0		
23-Dec-21	Overcast	13:40	61.1	56.4		
23-Dec-21	Overcast	13:45	59.9	54.9		
23-Dec-21	Overcast	13:50	62.7	57.1	62	
23-Dec-21	Overcast	13:55	60.9	55.8	02	
23-Dec-21	Overcast	14:00	60.8	56.1		
23-Dec-21	Overcast	14:05	60.0	55.9		
29-Dec-21	Sunny	13:41	59.9	55.3		
29-Dec-21	Sunny	13:46	59.6	54.7		
29-Dec-21	Sunny	13:51	60.7	55.5	61	
29-Dec-21	Sunny	13:56	60.1	54.1] 01	
29-Dec-21	Sunny	14:01	61.0	55.0		
29-Dec-21	Sunny	14:06	58.6	54.9		

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

^{(*) 13}dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
(*) The measurement result was corrected with reference to the baseline monitoring levels.

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured	Measured	
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
10-Dec-21	Sunny	08:51	53.6	48.2	
10-Dec-21	Sunny	08:56	51.3	47.5	
10-Dec-21	Sunny	09:01	58.7	48.6	56
10-Dec-21	Sunny	09:06	57.4	48.7	30
10-Dec-21	Sunny	09:11	52.0	47.8	
10-Dec-21	Sunny	09:16	52.2	47.9	
16-Dec-21	Sunny	14:37	58.7	48.1	
16-Dec-21	Sunny	14:42	54.2	48.5	
16-Dec-21	Sunny	14:47	51.1	48.0	59*
16-Dec-21	Sunny	14:52	52.3	47.1	39.
16-Dec-21	Sunny	14:57	53.4	47.3	
16-Dec-21	Sunny	15:02	61.5	48.2	
22-Dec-21	Overcast	08:53	52.4	46.4	
22-Dec-21	Overcast	08:58	54.6	48.1	
22-Dec-21	Overcast	09:03	54.6	48.0	55
22-Dec-21	Overcast	09:08	55.4	48.3	33
22-Dec-21	Overcast	09:13	53.4	48.0	
22-Dec-21	Overcast	09:18	56.9	49.1	
28-Dec-21	Fine	12:01	51.5	44.8	
28-Dec-21	Fine	12:06	54.1	46.4	
28-Dec-21	Fine	12:11	55.6	46.4	53
28-Dec-21	Fine	12:16	55.8	46.0	33
28-Dec-21	Fine	12:21	46.7	44.2	
28-Dec-21	Fine	12:26	48.6	44.3	

Noise Measurement Results

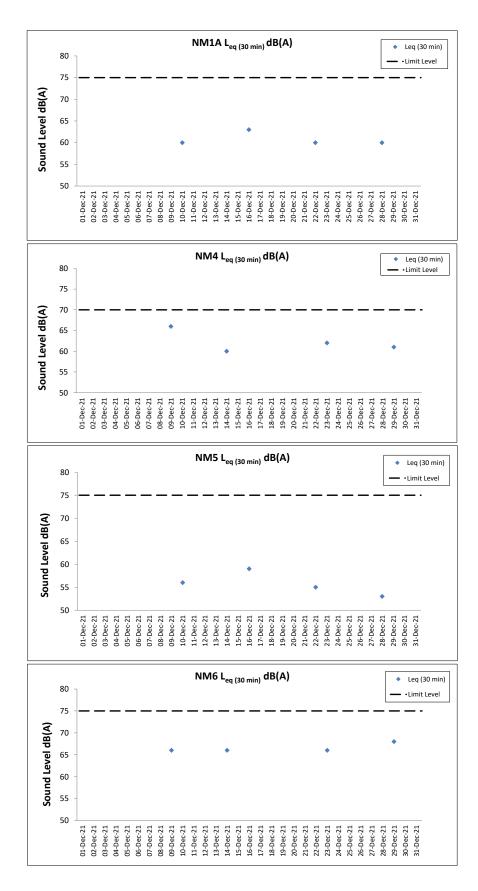
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured	Measured	Ι μην. Δ
Date	Weather	Time	$\mathbf{L}_{10} dB(A)$	L ₉₀ dB(A)	L _{eq(30mins)} dB(A) ^
09-Dec-21	Sunny	15:48	70.7	59.9	
09-Dec-21	Sunny	15:53	72.2	60.8	
09-Dec-21	Sunny	15:58	68.3	45.0	66*
09-Dec-21	Sunny	16:03	70.5	49.6	00
09-Dec-21	Sunny	16:08	67.3	49.8	
09-Dec-21	Sunny	16:13	70.2	48.9	
14-Dec-21	Sunny	15:55	69.6	47.5	
14-Dec-21	Sunny	16:00	67.4	45.0	
14-Dec-21	Sunny	16:05	56.7	43.3	66*
14-Dec-21	Sunny	16:10	65.1	44.7	60.
14-Dec-21	Sunny	16:15	74.0	47.3	
14-Dec-21	Sunny	16:20	70.8	58.9	
23-Dec-21	Drizzle	15:54	68.8	47.5	
23-Dec-21	Drizzle	15:59	57.3	44.1	
23-Dec-21	Drizzle	16:04	65.4	44.1	66
23-Dec-21	Drizzle	16:09	61.3	51.1	00
23-Dec-21	Drizzle	16:14	52.6	44.5	
23-Dec-21	Drizzle	16:19	60.9	48.4	
29-Dec-21	Sunny	16:01	71.0	51.4	
29-Dec-21	Sunny	16:06	67.7	48.7	
29-Dec-21	Sunny	16:11	49.4	44.9	68
29-Dec-21	Sunny	16:16	49.4	44.6	Uo
29-Dec-21	Sunny	16:21	53.4	46.6	
29-Dec-21	Sunny	16:26	71.8	45.4	

Remarks:

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

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



Notes

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

Water	Quality	Monito	ring Re	sults	

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

Water Quality Monitoring
Water Quality Monitoring Results on

02 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ılts on		02 December 21	during Mid-	Ebb Tide	9																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value		Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.0	92 96	21.0	21.0	8.2	8.2	33.0		93.6 93.6	93.6	6.9 6.9		1.0	-	9			
C1	Fine	Moderate	10:45	8.2	Middle	4.1	0.0	166	21.0	04.0	8.1	0.4	32.9		93.6	00.0	6.9	6.9	1.6	1.7	11	40	815623	804237
C1	Fine	woderate	10:45	8.2	Middle	4.1	0.0	180	21.0	21.0	8.1	8.1	32.9		93.6	93.6	6.9		1.5	1.7	11	12	815623	804237
					Bottom	7.2	0.0	111	20.9	20.9	8.1 8.1	8.1	32.8		94.3	94.4	6.9	7.0	2.6		15			
						7.2	0.0	118 146	20.9		8.2		32.8		106.2		7.0		5.1		15 7			
					Surface	1.0	0.3	148	21.6	21.6	8.2	8.2	33.2	33.2	106.2	106.2	7.7	7.8	5.1	1	7			
C2	Sunny	Rough	12:27	8.2	Middle	4.1	0.2	138	21.4	21.4	8.2	8.2	33.2		106.9	107.0	7.8	7.0	5.2	5.5	6	6	825668	806933
-	,	J				4.1 7.2	0.2	140 102	21.4		8.2		33.2 33.3		107.0 109.5		7.8 8.0		5.3 6.2	1	6			
					Bottom	7.2	0.2	102	21.2	21.2	8.2	8.2	33.3		109.5	109.6	8.0	8.0	6.3	1	4			
					Surface	1.0	0.2	207	22.6	22.6	8.1	8.1	33.8	33.8	94.2	94.2	6.7		4.9		6			
					Guildoo	1.0 5.9	0.2	220 229	22.6	22.0	8.1	0.1	33.8		94.2	01.2	6.7	6.8	4.9		6 7			
C3	Sunny	Rough	10:20	11.8	Middle	5.9	0.2	229	22.6 22.6	22.6	8.1 8.1	8.1	33.8	33.8	95.1 95.1	95.1	6.8		5.4 5.4	5.3	6	7	822090	817819
					Bottom	10.8	0.2	243	22.5	22.5	8.1	8.1	33.8	33.8	96.7	96.8	6.9	6.9	5.8	1	7			
					Bottom	10.8	0.3	260	22.5	22.5	8.1	0.1	33.8		96.8	30.0	6.9	0.5	5.8		7			
					Surface	1.0	0.1	249 260	20.4	20.4	8.1	8.1	32.6 32.6		96.2 96.2	96.2	7.2		1.4	1	12			
						1.0	0.1	200	20.4		0.1		32.0		90.2		-	7.2	1.5	1	-			
IM1	Fine	Moderate	11:04	5.2	Middle	-	-	-	-	-	-	-	-	1 -	-	-	-		-	2.2	-	11	817967	807134
					Bottom	4.2	0.1	153	20.4	20.4	8.1	8.1	32.5		96.4	96.5	7.2	7.2	2.9]	10			
						4.2 1.0	0.1	167 190	20.4		8.1	1	32.5 32.8		96.6 96.4		7.2 7.1		2.9	<u> </u>	10 9			
					Surface	1.0	0.0	190	20.7	20.7	8.2	8.2	32.8	32.8	96.3	96.4	7.1	7.0	2.2	1	9			
IM2	Fine	Moderate	11:11	7.0	Middle	3.5	0.1	180	20.9	20.9	8.1	8.1	33.0		93.8	93.9	6.9	7.0	3.4	3.2	8	8	818141	806151
	1 1110	moderate		7.0	Mildulo	3.5	0.1	194	20.9	20.0	8.1	0.1	33.0		93.9	00.0	6.9		3.3	0.2	8	Ü	0.0111	000101
					Bottom	6.0	0.1	83 89	20.9	20.9	8.1	8.1	32.9 32.9		95.3 95.5	95.4	7.0	7.0	4.1 4.1	1	7			
					Surface	1.0	0.1	226	20.8	20.8	8.2	8.2	32.9		94.5	94.4	7.0		1.4		6			
					Surface	1.0	0.1	247	20.8	20.6	8.2	0.2	32.9		94.3	34.4	7.0	7.0	1.5		6			
IM3	Fine	Moderate	11:17	7.2	Middle	3.6 3.6	0.0	254 274	20.9	20.9	8.1 8.1	8.1	33.0		94.1 94.4	94.3	6.9 7.0		2.6	2.5	7	7	818781	805579
					D. H	6.2	0.0	73	20.9	00.0	8.1	0.4	33.0		94.7	040	7.0	7.0	3.5	1	9			
					Bottom	6.2	0.1	78	20.9	20.9	8.1	8.1	33.0	33.0	94.8	94.8	7.0	7.0	3.5		9			
					Surface	1.0	0.3	147	21.0	21.0	8.2	8.2	33.0		93.9 93.9	93.9	6.9		1.1		8			
						4.4	0.3	157 156	21.0		8.2 8.1		33.0		93.9		6.9 6.9	6.9	1.1	-	10			
IM4	Fine	Moderate	11:25	8.8	Middle	4.4	0.1	156	21.0	21.0	8.1	8.1	33.0		93.9	93.9	6.9		1.8	1.7	10	11	819738	804616
					Bottom	7.8	0.2	154	20.9	20.9	8.1	8.1	32.9		94.8	94.9	7.0	7.0	2.2		14			
						7.8 1.0	0.2	164 199	20.9		8.1		32.9 32.6		95.0 95.9		7.0 7.1		2.3	<u> </u>	13 13			
					Surface	1.0	0.2	201	20.6	20.6	8.2	8.2	32.6		95.7	95.8	7.1	7.1	1.2	1	12			
IM5	Fine	Moderate	11:33	8.2	Middle	4.1	0.2	179	20.6	20.7	8.2	8.2	32.7		95.4	95.5	7.1	7.1	3.0	2.5	10	10	820723	804850
						4.1 7.2	0.2	179 183	20.7		8.2 8.1		32.7		95.6		7.1 7.1		2.9		10 9			
					Bottom	7.2	0.2	200	20.7	20.7	8.1	8.1	32.7 32.6	32.6	96.1 96.5	96.3	7.1	7.2	3.3	1	8			
					Surface	1.0	0.1	205	20.7	20.7	8.2	8.2	32.2	32.2	97.1	97.0	7.2		1.1		5			
					Guriace	1.0	0.1	216	20.7	20.7	8.2	0.2	32.3	JZ.2	96.8	37.0	7.2	7.1	1.0		6			
IM6	Fine	Moderate	11:41	7.2	Middle	3.6 3.6	0.1	210 220	20.6	20.6	8.2	8.2	32.3	32.3	94.8 94.7	94.8	7.1 7.0		1.8	1.6	4	5	821064	805843
					Bottom	6.2	0.1	175	20.6	00.0	8.1	0.4	32.3		95.3	05.5	7.1	7.1	2.1	1	4			
					DOLLOTT	6.2	0.2	178	20.6	20.6	8.1	8.1	32.3		95.6	95.5	7.1	7.1	2.1		4			
					Surface	1.0	0.1	125	20.6	20.6	8.2	8.2	32.5		94.7 94.6	94.7	7.0		1.9	1	7			
						4.3	0.1	136 109	20.6		8.2		32.5		94.6		7.0 7.0	7.0	2.6	1	7			
IM7	Fine	Moderate	11:49	8.6	Middle	4.3	0.2	113	20.5	20.5	8.2	8.2	32.6		94.1	94.1	7.0		2.7	2.5	6	6	821366	806854
					Bottom	7.6	0.1	136	20.5	20.5	8.2	8.2	32.5		94.8	94.9	7.0	7.1	3.0	1	6			
						7.6 1.0	0.1	146 67	20.5		8.2	1	32.5 33.3		95.0 105.1		7.1 7.6		3.0 4.3	 	6 8			
					Surface	1.0	0.3	67	21.5	21.5	8.2	8.2	33.3		105.1	105.1	7.6	7.6	4.3	1	8			
IM8	Sunnv	Moderate	12:00	7.8	Middle	3.9	0.2	72	21.3	21.3	8.2	8.2	33.4	33.4	104.0	104.0	7.6	1.0	5.2	5.2	7	7	821830	808151
						3.9	0.2	74	21.3		8.2		33.4		104.0		7.6		5.2	1	8	•		
					Bottom	6.8	0.3	74 76	21.1	21.1	8.2	8.2	33.6 33.6		102.9 103.0	103.0	7.5 7.5	7.5	6.1	1	6 7			
					1	0.0	0.0					1	00.0	1	.00.0		7.0		U.L	1				

02 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	toring Resu	ılts on		02 December 21	during Mid-	Ebb Tide	9																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h ()	Current Speed	Current	Water To	emperature (°C)	1	рН	Salir	nity (ppt)		aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Depi	n (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	91	21.4	21.4	8.2	8.2	33.2	33.2	104.9	104.9	7.6		3.2		8			
						1.0 3.6	0.3	96 83	21.4		8.2 8.2		33.2 33.2		104.9		7.6 7.6	7.6	3.2 4.8		9			
IM9	Sunny	Moderate	11:54	7.1	Middle	3.6	0.4	83	21.4	21.4	8.2	8.2	33.2		104.5	104.5	7.6		4.8	4.6	7	8	822098	808802
					Detterr	6.1	0.3	82	21.3	24.2	8.2	0.0	33.2		104.5	104.5	7.6	7.6	5.8		7			
					Bottom	6.1	0.3	86	21.3	21.3	8.2	8.2	33.2	33.2	104.5	104.5	7.6	7.0	5.8		7			
					Surface	1.0	0.2	85	21.1	21.1	8.2	8.2	33.1	33.1	106.0	106.0	7.8		4.6		6			
						1.0 4.0	0.2	91 84	21.1		8.2 8.2		33.1 33.1		105.9 105.5		7.8	7.8	4.7 5.9		7			
IM10	Sunny	Moderate	11:45	7.9	Middle	4.0	0.2	87	21.1	21.1	8.2	8.2	33.1	33.1	105.5	105.5	7.7		5.9	5.7	6	6	822388	809789
					Bottom	6.9	0.2	77	21.2	21.2	8.2	8.2	33.2		105.6	105.7	7.7	7.7	6.6		6			
					Dottoili	6.9	0.2	80	21.2	21.2	8.2	0.2	33.2		105.7	100.7	7.7	1.1	6.6		5			
					Surface	1.0	0.1	128 129	22.1	22.1	8.2	8.2	33.5		101.0	101.0	7.3 7.3		5.3 5.3		5			
						4.1	0.1	129	22.1		8.2		33.5		101.0		7.3	7.3	5.5		6	_		
IM11	Sunny	Moderate	11:35	8.2	Middle	4.1	0.1	125	22.1	22.1	8.2	8.2	33.5		101.0	101.0	7.3		5.6	5.4	6	6	822063	811441
					Bottom	7.2	0.1	104	22.1	22.1	8.2	8.2	33.6		101.2	101.3	7.3	7.3	5.5		6			
						7.2 1.0	0.1	108	22.1		8.2		33.6		101.3		7.3		5.5		6			
					Surface	1.0	0.1	164 173	22.2	22.2	8.1 8.1	8.1	33.6 33.6		98.9 98.9	98.9	7.1		4.6 4.7		8			
IM12	Sunny	Moderate	11:27	9.5	Middle	4.8	0.1	126	22.1	22.1	8.1	8.1	33.6		98.9	98.9	7.1	7.1	5.6	5.4	7	7	821459	812024
IIVI12	Suriny	woderate	11.27	9.5	ivildale	4.8	0.1	138	22.1	22.1	8.1	0.1	33.6	33.0	98.9	90.9	7.1		5.6	5.4	6	,	021409	012024
					Bottom	8.5	0.2	168	22.1	22.1	8.1	8.1	33.6		99.3	99.4	7.1	7.1	6.0		5			
						8.5 1.0	0.2	173	22.1		8.1 8.3		33.6 33.1	1	99.4 112.3		7.1 8.2		6.0 5.5		5 4			
					Surface	1.0	-		21.0	21.0	8.3	8.3	33.1	33.1	112.3	112.3	8.2		5.5		4			
SR1A	Sunny	Moderate	10:57	4.9	Middle	2.5	-		-	_	-	-	-	_	-	_	-	8.2	-	5.6	-	5	819973	812663
OKIA	Outliny	Woderate	10.57	4.5	Wilduic	2.5	-	-	-	_	-		-		-	_	-		-	5.0	-	3	013373	012005
					Bottom	3.9	-	-	21.0	21.0	8.3	8.3	33.1		112.2	112.3	8.3	8.3	5.7 5.7		5			
						1.0	0.2	319	22.2		8.1		33.6		96.5		6.9		5.4		6			
					Surface	1.0	0.2	320	22.2	22.2	8.1	8.1	33.6	33.6	96.5	96.5	6.9	6.9	5.5		6			
SR2	Sunny	Rough	10:42	5.7	Middle	-	-		-	-	-		-	_	-	-	-	0.9	-	7.3	-	6	821472	814168
	,	J				-	-	-	-		-				-		-		-		-		-	
					Bottom	4.7	0.2	320 327	22.2	22.2	8.1 8.1	8.1	33.7		96.8 97.0	96.9	6.9 7.0	7.0	9.1 9.1		6 7			
					Surface	1.0	0.3	103	21.6	21.6	8.2	8.2	33.4		103.6	103.6	7.5		5.5		5			
					Surface	1.0	0.3	104	21.6	21.0	8.2	0.2	33.4	33.4	103.6	103.0	7.5	7.5	5.6		6			
SR3	Sunny	Moderate	12:06	8.3	Middle	4.2	0.3	103	21.4	21.4	8.2	8.2	33.5	33.5	103.0	103.0	7.5		6.3	6.5	6	6	822157	807589
	-					4.2 7.3	0.3	108 85	21.4		8.2 8.2		33.5 33.7		103.0 102.6		7.5 7.5		6.3 7.6		6			
					Bottom	7.3	0.4	85	21.2	21.2	8.2	8.2	33.7		102.7	102.7	7.5	7.5	7.7		6			
					Surface	1.0	0.3	97	20.5	20.5	8.2	8.2	32.8	32.8	95.0	95.0	7.1		1.1		10			
					Ganado	1.0	0.4	98	20.5	20.0	8.2	0.2	32.8	02.0	95.0	00.0	7.0	7.0	1.0		10			
SR4A	Fine	Moderate	10:25	10.0	Middle	5.0 5.0	0.3	98 100	20.5	20.5	8.1 8.1	8.1	32.8	32.8	94.4	94.4	7.0		1.4 1.5	1.7	10	10	817197	807799
						9.0	0.4	84	20.5		8.1		32.8		94.2		7.0		2.7		9			
					Bottom	9.0	0.3	84	20.5	20.5	8.1	8.1	32.8		94.2	94.2	7.0	7.0	2.6		9			
					Surface	1.0	0.1	287	20.3	20.3	8.1	8.1	32.3	32.3	99.1	99.1	7.4		3.1		- 8			
						1.0	0.1	288	20.3		8.1		32.3		99.1		7.4	7.4	3.1		8			
SR5A	Fine	Moderate	10:07	5.4	Middle	-			-	-	-	-	-	-	-	-	-			3.6	-	9	816607	810673
					Bottom	4.4	0.1	200	20.2	20.2	8.1	8.1	32.2	32.2	98.8	98.9	7.4	7.4	4.1		10			
					Dottoili	4.4	0.1	202	20.2	20.2	8.1	0.1	32.2		98.9	30.3	7.4	7.4	4.2		10			
					Surface	1.0	0.1	296	20.2	20.2	8.1	8.1	32.2		98.6	98.6	7.4		1.9		9			
						1.0	0.1	310	20.1		8.1		32.2		98.5		7.4	7.4	1.9		9			
SR6A	Fine	Moderate	09:31	5.0	Middle	-	-		-	-	-	-	-	-	-	-	-		-	2.2	-	9	817959	814758
					Bottom	4.0	0.1	152	20.1	20.1	8.1	8.1	32.1	32.1	98.5	98.6	7.4	7.4	2.4		9			
						4.0	0.1	154	20.1		8.1		32.1		98.6		7.4		2.4		10			
					Surface	1.0 1.0	0.2	82 90	22.6 22.6	22.6	8.0	8.0	33.8		92.5 92.5	92.5	6.6		4.7 4.6	l	5 6			
SR7	Cuppy	Pough	00:46	17.0	Middle	9.0	0.2	81	22.6	22.6	8.0	9.0	33.8		92.6	92.6	6.6	6.6	5.0		6		823623	823755
317	Sunny	Rough	09:46	17.9	Middle	9.0	0.2	83	22.6	22.6	8.0	8.0	33.8	33.0	92.6	92.0	6.6		5.0	5.5	6	6	023023	023/35
					Bottom	16.9	0.1	57	22.5	22.5	8.0	8.0	33.8		93.5	93.5	6.7	6.7	6.9	1	7			
						16.9 1.0	0.1	61	22.5		8.0		33.8 33.0		93.5 109.4		6.7 7.9		6.9 5.0	-	6			
					Surface	1.0	-		21.7	21.7	8.2	8.2	33.0		109.4	109.4	7.9	7.0	5.0	l	7			
SR8	Sunnv	Moderate	11:19	4.7	Middle	-	-	-	-		-	-	-		-		-	7.9	-	5.0	-	6	820390	811599
						-	-		-		-		-		- 400.5		-		-		-	-		
					Bottom	3.7 3.7	-	-	21.5 21.5	21.5	8.2	8.2	33.3	33.3	109.5	109.5	8.0	8.0	5.0	ł	6			1
			1		1	3.1			21.5		0.2		აა.პ	<u> </u>	109.5		0.0		5.0		5			1

Water Quality Monitoring
Water Quality Monitoring Results on

02 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ilts on		02 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	F	Н	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average		Average			Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	37 40	21.1	21.1	8.2 8.2	8.2	33.0		93.8 93.6	93.7	6.9		1.3		12 11			
C1	Fine	Moderate	16:22	8.4	Middle	4.2	0.4	34	21.1	21.1	8.2	8.2	33.0		92.9	92.9	6.8	6.9	2.8	2.5	10	10	815615	804234
					Bottom	4.2 7.4	0.4	34 28	21.1 21.1	21.1	8.2 8.1	8.1	33.0 32.9	32.9	92.8 79.2	76.1	6.8 5.8	5.6	2.7 3.3		10 8			
						7.4 1.0	0.5 0.4	29 33	21.1 22.0		8.1 8.2		32.9 33.2		73.0 109.8		5.4 7.9	3.0	3.4 4.6		8			
					Surface	1.0	0.4	35	22.1	22.1	8.2	8.2	33.2	33.2	109.6	109.7	7.9	7.7	4.7		4			
C2	Sunny	Rough	15:19	8.1	Middle	4.1 4.1	0.4	35 36	22.2	22.2	8.1	8.1	33.3	33.3	102.4 102.3	102.4	7.4		5.2 5.3	5.2	4 5	5	825691	806953
					Bottom	7.1 7.1	0.5 0.5	38 40	22.2 22.2	22.2	8.1 8.1	8.1	33.5 33.5		99.9 99.9	99.9	7.2 7.2	7.2	5.8 5.8		6 5			
					Surface	1.0	0.5	264	22.6	22.6	8.1	8.1	33.8		94.0	94.0	6.7		6.1	1	8			
СЗ	Fine	Rough	17:19	12.8	Middle	1.0 6.4	0.5 0.5	289 270	22.6 22.6	22.6	8.1 8.1	8.1	33.8 33.8		94.0 93.8	93.9	6.7	6.7	6.1 8.9	6.5	8	8	822116	817826
03	rille	Rougii	17.19	12.0		6.4 11.8	0.5 0.5	292 274	22.6 22.6		8.1 8.1		33.8 33.8		93.9 94.0		6.7 6.7		8.9 4.4	0.5	8 7	0	022110	617620
					Bottom	11.8	0.5	274	22.6	22.6	8.1	8.1	33.8	33.0	94.0	94.0	6.7	6.7	4.4		6			
					Surface	1.0	0.2	311 313	20.7	20.7	8.2	8.2	32.6 32.6		106.1 105.8	106.0	7.9	7.9	3.0		13 13			
IM1	Fine	Moderate	16:01	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	1.5		3.9	-	11	817962	807121
					Bottom	4.0	0.1	279	20.7	20.7	8.2	8.2	32.6		105.3	105.4	7.8	7.8	4.8		9			
					Surface	4.0 1.0	0.1	297 9	20.7	20.9	8.2	8.2	32.6 32.7	32.7	105.5 98.0	98.0	7.8		4.7 1.8		10 7			
						1.0 3.2	0.3 0.3	9 18	20.9 20.9		8.2 8.2		32.7 32.7		98.0 98.1		7.2 7.2	7.2	1.8 2.1	1	7 9			
IM2	Fine	Moderate	15:55	6.4	Middle	3.2	0.3	19	20.9	20.9	8.2	8.2	32.7	32.1	98.2	98.2	7.2		2.1	2.4	10	9	818160	806166
					Bottom	5.4 5.4	0.2	29 29	20.9	20.9	8.1 8.1	8.1	32.7 32.7		98.3 98.4	98.4	7.3 7.3	7.3	3.3		10 10			
					Surface	1.0 1.0	0.3	3	20.8	20.8	8.2	8.2	32.8 32.8		96.3 96.1	96.2	7.1 7.1		1.1		11 10			
IM3	Fine	Moderate	15:49	7.0	Middle	3.5	0.4	352	20.9	20.9	8.2	8.2	32.9	32.9	95.5	95.5	7.0	7.1	1.1	1.5	6 7	8	818783	805605
					Bottom	3.5 6.0	0.4	355 349	20.9	20.9	8.2 8.2	8.1	32.9 32.9	32.0	95.5 95.5	95.6	7.0	7.1	1.2 2.4		7			
						6.0 1.0	0.4	354 308	20.9		8.1 8.2		32.9 32.5		95.6 96.0		7.1	7.1	2.3 3.0		7			
					Surface	1.0	0.3	317	20.7	20.7	8.2	8.2	32.5	32.5	95.9	96.0	7.1	7.1	3.1 4.7		7			
IM4	Fine	Moderate	15:40	8.2	Middle	4.1 4.1	0.3	317 337	20.7	20.7	8.2 8.2	8.2	32.6 32.6	32.0	95.3 95.3	95.3	7.1 7.1		4.7	4.3	7 8	8	819747	804594
					Bottom	7.2 7.2	0.2	10 10	20.7	20.7	8.1	8.1	32.6 32.6		95.7 96.0	95.9	7.1	7.1	5.3 5.2		8			
					Surface	1.0	0.3	14 14	20.6	20.6	8.2	8.2	32.5 32.5	32.5	102.7	102.6	7.6		1.7		8 7			
IM5	Fine	Moderate	15:32	8.0	Middle	4.0	0.3	13	20.6	20.7	8.2	8.2	32.5		102.5 101.8	101.8	7.6 7.6	7.6	2.2	2.5	6	6	820753	804869
	1 1110	Moderate	10.02	0.0		4.0 7.0	0.3	13 12	20.7		8.2 8.1		32.5 32.5		101.8 101.6		7.6 7.5		2.2 3.8		6	Ü	020100	001000
					Bottom	7.0	0.3	12 200	20.7	20.7	8.1	8.1	32.5	32.5	101.6	101.6	7.5	7.5	3.8		5			
					Surface	1.0	0.1 0.1	204	20.9	20.9	8.2 8.2	8.2	32.2 32.2	32.2	101.0 100.9	101.0	7.5 7.5	7.5	1.5 1.5		11			
IM6	Fine	Moderate	15:25	6.4	Middle	3.2 3.2	0.0	210 213	20.8	20.8	8.2	8.2	32.3		99.9	100.0	7.4 7.4		2.3	2.5	10 10	10	821059	805828
					Bottom	5.4 5.4	0.1	282 306	20.9	20.9	8.2 8.2	8.2	32.2 32.2		100.5 100.6	100.6	7.4 7.4	7.4	3.6 3.6	1	9			
					Surface	1.0	0.4	255	20.8	20.8	8.2	8.2	32.2	32.2	99.8	99.7	7.4		1.1		9			
11.47	-		45.40			1.0 4.0	0.4	256 259	20.8		8.2 8.2		32.2 32.2		99.6 99.0		7.4 7.3	7.4	1.1		9	•	004050	000040
IM7	Fine	Moderate	15:19	8.0	Middle	4.0 7.0	0.4	267 276	20.8	20.8	8.2	8.2	32.2	32.2	98.9	99.0	7.3		1.3	1.5	8	8	821358	806843
					Bottom	7.0	0.3	284	20.8	20.8	8.2	8.2	32.2 32.2	32.2	99.4 99.5	99.5	7.4 7.4	7.4	2.2	<u> </u>	8			
					Surface	1.0	0.3	242 243	21.4 21.4	21.4	8.2	8.2	33.3		110.4 110.4	110.4	8.0		4.7 4.6		7 6		-	
IM8	Sunny	Moderate	15:41	7.8	Middle	3.9	0.3	253	21.4	21.4	8.2	8.2	33.3	33.3	110.1	110.1	8.0	8.0	5.1	5.5	6	6	821848	808135
	-				Bottom	3.9 6.8	0.3	274 240	21.4 21.4	21.4	8.2 8.2	8.2	33.3 33.3	22.2	110.1 110.3	110.3	8.0	8.0	5.2 6.5		6 5			
DA: Denth-Aver					Bottom	6.8	0.2	254	21.4	21.4	8.2	0.2	33.3		110.3	110.3	8.0	0.0	6.6		5			

02 December 21 during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	ilts on		02 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	pН	1	Salir	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Bop		(m/s)	Direction	Value	Average		Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	233	21.3	21.3	8.2	8.2	33.3	33.3	105.5	105.5	7.7		4.3	-	6			
						3.7	0.4	233 245	21.3		8.2		33.3 33.3		105.5		7.7 7.7	7.7	6.0	4	6 5			
IM9	Sunny	Moderate	15:46	7.3	Middle	3.7	0.4	266	21.3	21.3	8.2	8.2	33.3	33.3	105.7	105.8	7.7		6.0	5.9	5	5	822088	808827
					D. W	6.3	0.4	247	21.3	04.0	8.2	0.0	33.3	00.0	106.3	106.3	7.8	7.8	7.4	1	5			
					Bottom	6.3	0.4	260	21.3	21.3	8.2	8.2	33.3	33.3	106.3	100.3	7.8	7.0	7.4	1	4			
					Surface	1.0	0.6	273	21.4	21.4	8.2	8.2	33.4	33.4	112.1	112.1	8.2		4.7		4			
					Gundoo	1.0	0.6	280	21.4	2	8.2	0.2	33.4	00.1	112.1		8.2	8.2	4.7		4			
IM10	Sunny	Rough	15:54	7.9	Middle	4.0	0.6	268	21.4	21.4	8.2	8.2	33.4	33.4	110.8	110.8	8.1		5.9	5.7	5	4	822402	809808
						6.9	0.6	286 277	21.4 21.4		8.2		33.4 33.4		110.7 110.0		8.1		6.0	+	5			
					Bottom	6.9	0.6	283	21.4	21.4	8.2	8.2	33.4	33.4	110.1	110.1	8.0	8.0	6.3	1	4			
					Surface	1.0	0.6	306	21.5	21.5	8.2	8.2	33.3	33.3	108.7	108.7	7.9		5.2		4			
					Surface	1.0	0.7	307	21.5	21.5	8.2	8.2	33.3	33.3	108.7	108.7	7.9	7.9	5.3	1	4			
IM11	Sunny	Rough	16:06	8.7	Middle	4.4	0.6	304	21.5	21.5	8.2	8.2	33.4	33.4	107.2	107.2	7.8	1.5	6.1	6.3	4	4	822062	811480
						4.4	0.6	320	21.5		8.2		33.4		107.1		7.8		6.1		4	•		
					Bottom	7.7	0.5	316	21.5 21.5	21.5	8.2	8.2	33.4	33.4	107.1	107.1	7.8	7.8	7.6	4	4			
						7.7 1.0	0.5	334 296	22.1		8.2		33.4 33.5		107.1		7.8		7.7 4.1	-	4			
					Surface	1.0	0.7	325	22.1	22.1	8.2	8.2	33.5	33.5	108.0	108.0	7.8		4.1	+	5			
IM12	0	D t	40.40	7.9	AC-LIII.	4.0	0.6	295	22.1	00.4	8.2	0.0	33.5	00.5	107.9	107.9	7.8	7.8	5.8		5	-	821451	812022
IM12	Sunny	Rough	16:13	7.9	Middle	4.0	0.6	317	22.1	22.1	8.2	8.2	33.5	33.5	107.9	107.9	7.8		5.8	5.6	5	5	821451	812022
					Bottom	6.9	0.6	295	22.0	22.0	8.2	8.2	33.5	33.5	108.3	108.3	7.8	7.8	6.8	1	6			
					Bottom	6.9	0.6	295	22.0	LL.0	8.2	0.2	33.5	00.0	108.3	100.0	7.8	7.0	6.8		5			
					Surface	1.0	-	-	21.6	21.6	8.3	8.3	33.2	33.2	122.0	122.0	8.9		5.7	1	7			
						1.0 1.8	-	-	21.6		8.3		33.2		121.9		8.9	8.9	5.7	4	7			
SR1A	Sunny	Moderate	16:42	3.5	Middle	1.8		-	H :	-		-	÷	-	÷	-	-		-:-	5.2	-	7	819975	812655
						2.5	-	-	21.6		8.2		33.2		121.4		8.8		4.8	1	6			
					Bottom	2.5	-	-	21.6	21.6	8.2	8.2	33.2	33.2	121.4	121.4	8.8	8.8	4.8	1	7			
					Surface	1.0	0.3	329	22.2	22.2	8.2	8.2	33.6	33.6	106.5	106.5	7.6		5.3		5			
					Gundoo	1.0	0.3	332	22.2		8.2	0.2	33.6	00.0	106.5	100.0	7.6	7.6	5.3		5			
SR2	Fine	Rough	16:56	4.8	Middle	-	-	-	-		-	-	-	-	-	-	-		-	5.8	-	5	821472	814144
						3.8	0.3	333	22.2		8.2		33.6		106.5		7.6		6.2	4	- 4			
					Bottom	3.8	0.3	355	22.2	22.2	8.2	8.2	33.6	33.6	106.5	106.5	7.6	7.6	6.2	+	4			
					Surface	1.0	0.2	251	21.6	24.0	8.2	0.0	33.2	00.0	110.2	440.0	8.0		5.0	1	5			
					Surface	1.0	0.2	266	21.6	21.6	8.2	8.2	33.2	33.2	110.2	110.2	8.0	8.0	5.1	1	6			
SR3	Sunnv	Moderate	15:36	7.9	Middle	4.0	0.2	253	21.6	21.6	8.2	8.2	33.2	33.2	110.3	110.3	8.0	0.0	5.8	5.6	5	5	822164	807569
0.10	ouy	moderate	10.00	7.0	Middle	4.0	0.3	255	21.6	21.0	8.2	0.2	33.2	00.2	110.3	110.0	8.0		5.8	- 0.0	5	Ü	OLL 101	001000
					Bottom	6.9	0.3	251	21.5 21.5	21.5	8.2	8.2	33.2	33.2	111.1	111.1	8.1 8.1	8.1	6.0	1	4			
						1.0	0.3	270 68	20.7		8.2		33.2		103.6		7.7		1.3	-	10			
					Surface	1.0	0.2	71	20.7	20.7	8.2	8.2	32.4	32.4	103.6	103.6	7.7		1.2	+	10			
						4.9	0.1	47	20.7		8.2		32.4		103.4		7.7	7.7	2.0	1	9	_		
SR4A	Fine	Moderate	16:40	9.8	Middle	4.9	0.1	47	20.7	20.7	8.2	8.2	32.4	32.4	103.4	103.4	7.7		2.0	2.3	8	9	817211	807825
					Bottom	8.8	0.2	59	20.7	20.7	8.2	8.2	32.4	32.4	102.8	102.8	7.6	7.6	3.6]	8			
					Bottom	8.8	0.2	60	20.7	20.7	8.2	0.2	32.4	OZ. 1	102.7	102.0	7.6	7.0	3.6	<u></u>	8			
					Surface	1.0 1.0	0.2	313	20.8	20.8	8.2	8.2	32.1 32.1	32.1	107.7	107.6	8.0		3.8	1	9			
						1.0	0.2	337	20.7		8.2		32.1		107.5		8.0	8.0	3.7	4	- 8			
SR5A	Fine	Moderate	16:56	5.4	Middle			-	H :	-		-	÷	-	÷	-	-		-:-	4.0		9	816603	810687
					D. W	4.4	0.1	319	20.7	00.7	8.2	0.0	32.0	00.0	105.6	405.4	7.8	7.0	4.3	1	10			
					Bottom	4.4	0.2	323	20.7	20.7	8.2	8.2	32.0	32.0	105.2	105.4	7.8	7.8	4.4	1	9			
					Surface	1.0	0.0	287	20.8	20.8	8.3	8.2	32.2	32.2	109.4	109.4	8.1		1.2		14			
						1.0	0.0	314	20.8		8.2		32.2		109.3		8.1	8.1	1.2	4	15			
SR6A	Fine	Moderate	17:22	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	1.7	-	15	817959	814748
						3.2	0.1	- 5	20.8		8.2		32.2		109.1		8.1		2.3	4	15			
					Bottom	3.2	0.1	5	20.8	20.8	8.2	8.2	32.2	32.2	109.0	109.1	8.1	8.1	2.2	4	16			
					0	1.0	0.3	60	22.6	20.0	8.1	0.4	33.8	00.0	93.4	00.4	6.6		4.4	-	4			
					Surface	1.0	0.3	65	22.6	22.6	8.1	8.1	33.8	33.8	93.4	93.4	6.6	6.7	4.4	1	4			
SR7	Fine	Rough	17:57	15.4	Middle	7.7	0.2	52	22.6	22.6	8.1	8.1	33.9	33.9	93.7	93.7	6.7	0.7	5.5	5.4	4	5	823635	823728
OI ()	TITIO	rtougn	17.57	10.4	IVIIGUIG	7.7	0.2	55	22.6	22.0	8.1	3.1	33.9	55.5	93.7	30.1	6.7		5.5	0.4	4	3	020000	020120
					Bottom	14.4	0.3	29	22.5	22.5	8.1	8.1	33.9	33.9	94.7	94.8	6.7	6.7	6.2	4	6			1
					1	14.4	0.3	30	22.5	ļ	8.1		33.9		94.8		6.7		6.2	₩	6			
					Surface	1.0		-	21.6 21.6	21.6	8.2	8.2	33.3	33.3	113.4	113.4	8.2		5.6 5.6		4			1
						1.0	-		21.0		- 0.2		-		-		- 0.2	8.2	5.0	1	-	_		
SR8	Sunny	Moderate	16:21	3.7	Middle	-	-	-	-	-	-	-	-	† -	-	-	-		-	6.1	-	5	820409	811608
					Bottom	2.7	-		21.5	21.5	8.2	8.2	33.3	33.3	113.0	113.1	8.2	8.2	6.5	1	5			1
					DULLOTTI	2.7	-	-	21.5	21.0	8.2	0.2	33.3	ىن.ن	113.1	113.1	8.2	0.2	6.5	1	5			1

04 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resi	ilts on		04 December 21	during Mid-		•															
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dept	th (m)	Current Speed	Current Direction		emperature (°C)	pH		nity (ppt)		aturation (%)	Disso	gen	Turbidity(·	Suspende (mg	/L)	Coordinate HK Grid	Coordinate HK Grid
Otation	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value Average	Value	_	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.0	137 139	21.0 21.0	21.0	8.1 8.1	34.0	34.0	94.4	94.2	6.9		8.1 8.1	l	11 10			
C1	Fine	Calm	12:19	8.8	Middle	4.4	0.2	164	21.0	21.0	8.1	34.0		93.0	93.0	6.8	6.9	9.1	9.2	11	12	815600	804249
01	1 1110	Cairr	12.13	0.0	Wildelic	4.4 7.8	0.2	173 179	21.0 20.9		8.1	34.0 34.0		92.9 90.7		6.8		9.1 10.3	J.2	11	12	013000	004243
					Bottom	7.8	0.1	193	20.9	20.9	8.1 8.1	34.0		90.7	90.5	6.6	6.6	10.3	ı	13			
					Surface	1.0	1.3	175	20.0	20.0	8.2 8.2	32.8		98.6	98.5	7.4		8.7	<u> </u>	9			
						1.0 5.9	1.3	179 177	20.0 19.9		8.2	32.8 32.8		98.4 98.8		7.4 7.4	7.4	8.9 9.6	١	9			
C2	Cloudy	Moderate	11:16	11.8	Middle	5.9	1.2	179	19.9	19.9	8.1	32.8	32.0	99.0	98.9	7.4		9.6	9.2	9	10	825668	806936
					Bottom	10.8	1.0	168 168	19.9 19.9	19.9	8.1 8.1	32.8		100.3	100.4	7.5 7.5	7.5	9.2	ı	10			
					Surface	1.0	0.6	86	21.5	21.5	8.2	32.9	32.0	90.7	90.7	6.6		4.3		8			
					Canado	1.0 5.4	0.6	92 102	21.5 21.4	21.0	8.2	32.9 32.9		90.7 91.8		6.6 6.7	6.7	4.4 5.0	ı	8			
C3	Cloudy	Moderate	13:04	10.8	Middle	5.4	0.4	102	21.4	21.4	8.1	32.9		92.1	92.0	6.7		5.1	5.0	6	7	822101	817811
					Bottom	9.8	0.4	123	21.3	21.3	8.1 8.1	32.9	32.9	96.0	96.2	7.0	7.0	5.5	ı	5			
						9.8 1.0	0.4	126 200	21.3		8.1	32.9 33.9	1	96.3 98.2		7.0		5.4 4.4	_	6 11			
					Surface	1.0	0.1	216	20.6	20.6	8.2	33.9	33.9	97.9	98.1	7.2	7.2	4.5	ı	11			
IM1	Fine	Calm	11:58	5.0	Middle	-	-	-	-	-		-	-	-	-	-		-	5.2	-	12	817947	807134
					Bottom	4.0	0.1	197	20.5	20.5	8.2 8.2	33.9	33.9	88.4	88.0	6.5	6.5	5.9	ı	12			
					Bottom	4.0	0.1	209	20.5	20.5	8.2	33.9		87.5		6.5	0.5	5.9	—	12			
					Surface	1.0	0.0	14	20.8	20.8	8.1 8.1	33.9		97.5 97.2	97.4	7.2 7.1	- 4	8.1 8.1	ı	10			
IM2	Fine	Calm	11:51	7.0	Middle	3.5	0.0	326	20.7	20.7	8.1 8.1	33.9	33.9	95.6	95.6	7.0	7.1	9.4	9.5	11	11	818173	806161
					_	3.5 6.0	0.0	351 178	20.7		8.1	33.9 33.8		95.6 89.3		7.0 6.6		9.5 10.9	l	11 12			
					Bottom	6.0	0.1	191	20.9	20.9	8.1	33.8	33.0	88.8	89.1	6.5	6.6	10.8	ш_	12			
					Surface	1.0	0.0	292 294	20.8	20.8	8.1 8.1	33.9	33.9	97.6 97.4	97.5	7.2 7.2		9.0 8.9	l	10			
IM3	Fine	Calm	11:45	7.2	Middle	3.6	0.0	359	20.7	20.7	8.1 8.1	34.0	34.0	96.3	96.2	7.1	7.2	9.9	9.6	11	11	818786	805574
		Cuin	11.10		middle	3.6 6.2	0.1	330	20.7	20.1	8.1	34.0		96.1	00.2	7.1		9.9 10.0	I	10		010100	000011
					Bottom	6.2	0.0	164 179	20.7	20.7	8.1 8.1	34.0 33.9	33.9	91.2	91.1	6.7	6.7	10.0	ı	12 12			
					Surface	1.0	0.1	2	20.8	20.8	8.1	34.0	34.0	95.9	95.8	7.0		7.9		11			
						1.0 4.5	0.1	2 289	20.8		8.1	34.0 33.9		95.6 93.4		7.0 6.9	6.9	7.9 8.2	1	10			
IM4	Fine	Calm	11:36	9.0	Middle	4.5	0.1	299	20.7	20.7	8.1	33.9	33.9	93.0	93.2	6.8		8.1	8.5	9	9	819708	804605
					Bottom	8.0 8.0	0.1	302 303	20.7	20.7	8.1 8.1	34.0		92.0	91.9	6.8	6.8	9.7 9.6	l	8			
					Surface	1.0	0.1	346	20.7	20.7	8.1 8.1	34.0	34.0	96.6	96.5	7.1		8.6		8			
					Ourlace	1.0 4.2	0.2	318 351	20.7	20.7	8.1	34.0 34.0		96.3 94.9	30.3	7.1 7.0	7.1	8.5 9.2	l	8			
IM5	Fine	Calm	11:26	8.4	Middle	4.2	0.2	323	20.6	20.6	8.1 8.1	34.0		94.9	94.8	7.0		9.2	9.3	8	8	820722	804861
					Bottom	7.4	0.1	338	20.7	20.7	8.1	34.0		93.1	93.1	6.9	6.9	10.0	ı	8			
					2	7.4 1.0	0.1	311 222	20.7	00.7	8.1	34.0		93.0	101.7	6.8 7.5		10.1 4.9	_	9			
					Surface	1.0	0.2	237	20.7	20.7	8.2	33.7	33.1	101.7	101.7	7.5	7.3	5.0	ı	9			
IM6	Fine	Calm	11:18	7.6	Middle	3.8	0.2	211 229	20.6 20.6	20.6	8.1 8.1	33.8		96.8 96.6	96.7	7.1 7.1		5.1 5.1	5.4	8	8	821051	805836
					Bottom	6.6	0.2	198	20.6	20.6	8.1	33.8	33.7	95.3	95.3	7.0	7.0	6.2	l	7			
					Bottom	6.6 1.0	0.3	204 321	20.6	20.0	8.1	33.7		95.2	00.0	7.0	7.0	6.2 7.0		8			
					Surface	1.0	0.1	352	20.6	20.6	8.2	33.8	33.8	100.3	100.2	7.4	7.3	7.0	l	7			
IM7	Fine	Calm	11:16	9.0	Middle	4.5	0.1	271	20.4	20.4	8.2	33.8		97.0	96.9	7.2	1.3	8.9	8.6	8	8	821343	806840
						4.5 8.0	0.1	278 229	20.4		8.2 0.2	33.8		96.8 95.9		7.2 7.1		8.8 9.9	ı	8			
					Bottom	8.0	0.1	233	20.5	20.5	8.2	33.9	33.9	95.8	95.9	7.1	7.1	9.8	<u> </u>	8			
					Surface	1.0 1.0	0.3	185 201	20.4	20.4	8.2 8.2	32.8		97.3 97.1	97.2	7.2 7.2		7.8 7.8	ı	8			
IM8	Cloudy	Moderate	11:38	8.0	Middle	4.0	0.3	192	20.1	20.1	8.2	32.9	32.0	95.2	95.3	7.1	7.2	9.8	9.0	9	9	821835	808138
	O.O.G.	.nouorato		0.0		4.0 7.0	0.4	200 207	20.1		8.2	32.9 32.9		95.3 95.5		7.1 7.1		9.6 9.9	J.5	8	_	02.000	555.56
	L				Bottom	7.0	0.2	210	20.1	20.1	8.3	32.9		95.5	95.5	7.1	7.1	8.9		9			
DA: Denth-Aver																							

04 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	toring Resu	ılts on		04 December 21	during Mid-	Ebb Tide	9																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	-	pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Оатрінід Бер	()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	150	20.4	20.4	8.2	8.2	32.8	32.8	97.7	97.7	7.3	,	9.3		8			
						1.0 3.7	0.4	152 146	20.4		8.2 8.2		32.8 32.9		97.6 95.9		7.3 7.2	7.3	9.2 9.6		8			
IM9	Cloudy	Moderate	11:43	7.4	Middle	3.7	0.4	150	20.1	20.1	8.2	8.2	32.9		96.2	96.1	7.2		9.3	12.6	9	9	822116	808817
					Bottom	6.4	0.3	141	20.1	20.1	8.2	8.2	32.9	32.9	97.4	97.5	7.3	7.3	18.6		10			
						6.4	0.3	144	20.1		8.2		32.9		97.5		7.3		19.8		10			
					Surface	1.0	0.8	102 109	20.2	20.2	8.2	8.2	32.7	32.7	93.0 92.7	92.9	6.9		6.6		7			
IM10	Cloudy	Moderate	11:50	7.7	Middle	3.9	0.7	92	20.1	20.1	8.2	8.2	32.7	32.7	92.2	92.3	6.9	6.9	7.0	7.2	8	8	822363	809797
IIVITO	Cioudy	Woderate	11.50	1.1	ivildule	3.9	8.0	100	20.1	20.1	8.2	0.2	32.7	32.1	92.4	92.3	6.9		7.2	1.2	8	0	022303	009191
					Bottom	6.7	0.7	91 93	20.1	20.1	8.2	8.2	32.7	32.7	94.4	94.5	7.1 7.1	7.1	7.8 7.8		8			
					0	1.0	0.9	104	20.7	00.7	8.2	0.0	32.8		98.0	00.0	7.3		5.5		9			
					Surface	1.0	1.0	113	20.7	20.7	8.2	8.2	32.8	32.0	98.0	98.0	7.3	7.3	5.6		9			
IM11	Cloudy	Moderate	11:58	8.4	Middle	4.2	0.9	102	20.6	20.6	8.2	8.2	32.8		98.3	98.4	7.3	7.5	5.6	6.1	9	10	822050	811460
	,					4.2 7.4	1.0	107 100	20.6		8.2 8.2		32.8 32.8		98.4		7.3 7.4		5.6 7.1		9			
					Bottom	7.4	0.8	108	20.5	20.5	8.2	8.2	32.8		99.6 99.8	99.7	7.4	7.4	7.1		11			
					Surface	1.0	0.8	92	20.9	20.9	8.2	8.2	32.9	32.0	94.8	94.7	7.0		6.0		9			
					Odriace	1.0	0.8	94	20.9	20.3	8.2	0.2	32.9		94.6	34.7	7.0	7.0	6.4		8			
IM12	Cloudy	Moderate	12:05	9.2	Middle	4.6 4.6	0.6	83 87	20.7	20.7	8.2	8.2	32.9 32.9		94.5	94.6	7.0		7.7 7.8	8.7	7	7	821472	812023
						8.2	0.0	73	20.7		8.3		32.9		96.1		7.1		12.2		6			
					Bottom	8.2	0.5	74	20.7	20.7	8.3	8.3	32.9	32.9	96.6	96.4	7.1	7.1	11.9		6			
					Surface	1.0	-	-	20.5	20.5	8.3	8.3	32.8	32.8	100.5	100.5	7.5		5.8		9			
						1.0 2.8	-	-	20.4		8.3		32.8		100.4		7.5	7.5	5.9		8			
SR1A	Cloudy	Moderate	12:31	5.5	Middle	2.8	-		-	-	-	-	-	-	-	-	-		-	5.9	-	8	819971	812657
					Bottom	4.5	-		20.3	20.3	8.3	8.3	32.7		100.3	100.4	7.5	7.5	6.0		8			
					Bottom	4.5	-	-	20.3	20.5	8.3	0.5	32.7		100.4	100.4	7.5	7.5	6.1		8			
					Surface	1.0 1.0	0.7	65 68	20.5	20.5	8.2	8.2	32.8 32.8	32.8	99.8	99.8	7.4 7.4		5.7 6.1		8			
SR2	Claudi	Madasata	10.15	2.7	Made	-	-	-	-	-	-		-		-		-	7.4	-		-	7	004445	044460
SR2	Cloudy	Moderate	12:45	3.7	Middle	-	-		-	-	-	-	-		-	-	-		-	6.3	-	′	821445	814168
					Bottom	2.7	0.4	67	20.3	20.3	8.2	8.2	32.7		99.6	99.7	7.4	7.4	6.7		6			
						2.7	0.4	71 198	20.3		8.2		32.7		99.7 97.0		7.4		6.8 7.4		5 7			
					Surface	1.0	0.4	208	20.4	20.5	8.2	8.2	32.7		96.8	96.9	7.2	7.2	7.5		7			
SR3	Cloudy	Moderate	11:32	9.1	Middle	4.6	0.5	203	20.2	20.2	8.2	8.2	32.8		95.6	95.6	7.1	1.2	8.4	8.7	7	7	822158	807549
	,					4.6 8.1	0.5 0.4	222	20.2		8.3		32.8		95.6		7.1		8.3 10.3		7	-		
					Bottom	8.1	0.4	221 224	20.1	20.1	8.3	8.3	33.0		96.3 96.5	96.4	7.2	7.2	10.3		6			
					Surface	1.0	0.5	87	20.6	20.6	8.2	8.2	33.9	33.9	96.5	96.3	7.1		7.1		13			
					Surface	1.0	0.5	94	20.6	20.0	8.2	0.2	33.9		96.1	90.3	7.1	6.9	7.1		13			
SR4A	Fine	Calm	12:41	9.2	Middle	4.6 4.6	0.4	80	20.6	20.6	8.2	8.2	34.0	34.0	91.9 91.5	91.7	6.8		8.0	8.1	13 13	13	817210	807789
						8.2	0.5	80 83	20.8		8.2		33.8		88.0		6.5		9.2		14			
					Bottom	8.2	0.4	84	20.8	20.8	8.2	8.2	33.8		86.5	87.3	6.4	6.5	9.3		13			
					Surface	1.0	0.0	39	20.7	20.7	8.2	8.2	33.7	33.7	98.6	98.4	7.3		9.4		10			
						1.0	0.0	40	20.7		8.2		33.7		98.1		7.2	7.3	9.4		10			
SR5A	Fine	Calm	12:57	3.4	Middle	-	-		-	-	-	-	-	-	-	-	-		-	10.0	-	10	816595	810717
					Bottom	2.4	0.0	71	20.8	20.8	8.2	8.2	33.5		87.9	87.6	6.5	6.5	10.5		10			
					Bottom	2.4	0.0	72	20.8	20.0	8.2	0.2	33.5		87.3	07.0	6.4	0.0	10.5		10			
					Surface	1.0	0.0	240 253	20.8	20.8	8.2	8.2	33.7 33.6		103.5	103.4	7.6 7.6		7.3 7.3		13 12			
SR6A	Fine	Calm	13:46	5.0	Middle	-	-	-	-		-		-		-		-	7.6	-	8.1	-	12	817966	814745
SROA	rine	Califi	13.40	5.0	Middle	-	-		-	-	-	-	-		-	-	-		-	0.1	-	12	017900	014745
					Bottom	4.0 4.0	0.0	186 194	20.8	20.8	8.2	8.2	33.6 33.6		102.3	102.3	7.5 7.5	7.5	8.9 8.9		12 12			
						1.0	0.6	93	21.4		8.2		32.9		87.6		6.4		7.0		5			
					Surface	1.0	0.7	93	21.4	21.4	8.2	8.2	32.9	32.9	87.6	87.6	6.4	6.5	7.4		5			
SR7	Cloudy	Moderate	13:30	16.4	Middle	8.2	0.3	68	21.4	21.4	8.2	8.2	32.9	32.9	88.6	88.7	6.5		8.4	7.9	4	4	823657	823737
						8.2 15.4	0.3	70 29	21.4 21.4		8.2 8.2		32.9 32.9		88.7 91.2		6.5 6.7		8.3 8.2	-	4			
					Bottom	15.4	0.3	30	21.4	21.4	8.2	8.2	32.9		91.4	91.3	6.7	6.7	8.3		4			
					Surface	1.0	-	-	20.5	20.5	8.3	8.3	32.8		102.7	102.7	7.6		5.8		7			
						1.0	-	-	20.5		8.3		32.8		102.6		7.6	7.6	5.8		8			
SR8	Cloudy	Moderate	12:12	4.2	Middle	-	-		-	-	-	-	-	-	-	-	-		-	5.9	-	7	820377	811608
					Bottom	3.2	-	-	20.4	20.4	8.3	8.3	32.8		103.4	103.6	7.7	7.7	6.0	1	6			
					DULLOTTI	3.2	-		20.4	20.4	8.3	0.3	32.8		103.7	103.0	7.7	1.1	6.0		6			

04 December 21 during Mid-Flood Tide

Semilar Confile Time Depth (res) Semilar Confile Time Depth (res) Semilar Confile Time Depth (res) Semilar Confile Time Semilar Confile Time T	Water Qual	lity Monit	oring Resu	ilts on		04 December 21	during Mid-	Flood Ti	ide																
Couling County						Sampling Dept	th (m)	Speed			emperature (°C)					-	(%)	Оху	gen	,		(mg	/L)	Coordinate HK Grid	Coordinate HK Grid
C1 Five Cain 0757 8.4 Models 425 257 677 817 81 81 81 825 839 82 727 72 82 82 82 82 82 82 82 82 82 82 82 82 82	Otation	Condition	Condition	Time	Depth (m)						Average		verage		Average		Average		DA		DA		DA	(Northing)	(Easting)
C1 Free Coin						Surface					20.7		8.1		33.9		99.6								
Bettom	C1	Fine	Calm	07:57	8.4	Middle	4.2				20.7	8.1	8.1	33.9	33.0		99.6	7.3	7.3		0.4	10	10	815641	804228
C2 Couly Moderate 08 68 11.8	01	11110	Callii	07.57	0.4	Wilddic					20.7	8.1	0.1		33.3		33.0				3.4		10	013041	004220
C2 Cloudy Madewale 00:50 11.0 Made						Bottom					20.7		8.1		33.9		100.0		7.3						
C2 Couly Maderale 0558 11.8 Made 15.9 C.5 C.						Surface	1.0	0.6			20.5		8.2		32.6		96.3	7.2		9.5					
Column C												8.2							7.2						
Country Moderate	C2	Cloudy	Moderate	08:58	11.8	Middle	5.9	0.3	199	20.0	20.1	8.1	8.1	32.8	32.7	96.3	96.3	7.2		10.3	10.1	9	9	825698	806960
County Moderate OS.22 10.4 Moderate OS.22 10.6 OS.22						Bottom					19.9		8.1		32.8		97.8		7.4						
C3 Coudy Moderate 06.32 10.4 Moderate 06.33 10.4 Moderate 06.33 10.4 Moderate 06.33 10						Surface	1.0	0.6	256	20.9	20.9	8.1	8.1	32.9	32.9	91.6	916	6.7		9.3		16			
Mode												8.1							6.8						
Sufface Sufface Sufface Sufface Sufface Sufface Suff	C3	Cloudy	Moderate	06:32	10.4	Middle					20.9		8.1		32.9		92.6				9.8		15	822092	817797
Miles						Bottom					20.8		8.1		32.9		93.5		6.9						
Middle						Curtana					20.4	8.2	0.0		22.0		100.6								
MM Five Calm 08:17 52 Model						Suriace			308	20.4	20.4	8.2	0.2		33.9	102.6	102.6		7.6	6.6					
M2 Fine Calm 08.22 0.8 Middle 3.4 0.2 331 20.5 20.	IM1	Fine	Calm	08:17	5.2	Middle		1	-	-	-	-	-		-	-	-			-	7.1		11	817929	807139
M2 Fine Calm 08.25 6.8 Middle 3.4 0.2 313 20.5 20.5 8.1 8.1 33.9 33.9 100.7 10.7 7.4 7.6 7.5 13.3 13.8						Bottom					20.4		8.2		33.7		102.6		7.6						
M2 Fine Caim 08:25 6.8 Middle 34 02 321 205 81 81 339 39 1007 7, 74 7, 74 7, 77 8 10 1 1 81 81 81 81 81 81 81 81 81 81 81 81						Surface					20.5	8.1	0.1		22.0		100.7								
Microscope Mic						Suriace					20.5	8.1	0.1		33.9		100.7		7.4						
M3 Fine Calm 08:32 7.0 Middle 3.5 0.4 3 20.4 20.4 8.1 8.1 34.0 34.0 34.0 10.6 100.8 7.4 7.5 7.5 9.1 9 9 81	IM2	Fine	Calm	08:25	6.8	Middle					20.5		8.1		33.9		100.6				8.5		11	818178	806147
M3 Fine Calm 08:32 7.0 Middle 3.5 0.4 3.8 20.4 20.4 8.1 8.1 34.0 34.0 100.8 100.8 7.4 7.5 8.1 10 10 10 10 10 10 10						Bottom					20.5		8.2		33.9		101.4		7.5						
M3 Fine Calm 08.32 7.0 Middle 3.5 0.4 3.2 0.4 3.5 0.4 3.2 0.4 0.8 0.8 0.8 0.8 7.5 0.9 0.9 0.8												8.2													
Middle						Surface	1.0	0.5	8	20.4	20.4	8.1	8.1	34.0	34.0	100.6	100.6	7.4	7.5	8.1		10			
Bottom	IM3	Fine	Calm	08:32	7.0	Middle	3.5				20.4		8.2		34.0		100.8				9.4		9	818776	805577
NA Fine Calm 08.41 8.6 Middle 4.3 0.5 4 20.5						Bottom	6.0	0.3	358	20.4	20.4	8.2	8.2	34.0	34.0	101.0	101.1	7.5	7.5	10.1					
MA												8.2													
MA						Surface		0.6	9		20.4	8.2	8.2	33.7	33.7	101.3	101.4	7.5	7.5	7.2		8			
Bottom 7.6	IM4	Fine	Calm	08:41	8.6	Middle					20.5		8.2		33.9		101.7				8.5		9	819717	804613
Mode Note						Bottom	7.6	0.5	9	20.5	20.5	8.2	8.2	33.8	33.8	102.2	102.3	7.6	7.6	9.8		10			
Middle												8.2													
Middle						Surface	1.0	0.8	330	20.5	20.5		8.1		33.9		100.6		7.5	6.9		9			
Bottom 7.2 0.6 12 20.5 20.5 8.2 8.2 33.9 33.9 33.9 101.6 101.7 7.5 7.5 8.6 9	IM5	Fine	Calm	08:49	8.2	Middle					20.5		8.2		33.9		101.1		7.0		7.8		9	820751	804855
No.						Bottom	7.2	0.6	12	20.5	20.5	8.2	8.2	33.9	33.0	101.6	101.7	7.5	7.5	8.6		9			
Middle												8.2							7.0						
Middle S.8 T.6 Middle S.8 N.0 24 20.6 20.6 8.2 8.2 33.7 33.7 101.0 101.0 7.5 6.9 6.9 9 9 82						Surface	1.0				20.6		8.2		33.7		101.9		7.5						
Bottom 6.6 0.1 128 20.5 20.5 8.2 8.2 33.7 33.7 101.7 101.8 7.5 7.5 7.8 10	IM6	Fine	Calm	08:58	7.6	Middle					20.6		8.2		33.7		101.0		7.5		6.6		9	821076	805828
Surface 1.0 0.1 123 20.4 20.4 8.2 8.2 33.8 33.8 33.8 101.9 101.9 7.5 7.5 8.2 9.9						D-#					20.5	0.0	0.0		22.7		404.0		7.5						
Middle 1.0 0.1 123 20.4 20.4 8.2 8.2 33.8 33.8 100.9 100.9 7.5 7.5 8.2 9.9 9 82						Bottom					20.5	8.2	0.2		33.7				7.5						
Middle						Surface					20.4		8.2		33.8		100.9								
Bottom 7.4 0.1 233 20.3 20.4 8.2 33.8 101.0 1.9 7.5 9.5 9 9 1.6 11.6 10 10 10 10 10 10 10 10 10 10 10 10 10	IM7	Fine	Calm	09:06	8.4	Middle					20.4		8.2		33.8		101.0		7.5		9.8		9	821354	806824
Surface 1.0												8.2													
Middle						Bottom	7.4	0.1	247	20.4	20.4	8.2	ŏ.2	33.8	33.8	102.0	101.9	7.6	7.6	11.7		10			
IMB Cloudy Moderate 08:34 8.0 Middle 4.0 0.1 256 20.4 20.4 8.2 8.2 32.6 32.6 32.6 96.9 97.0 7.2 1.2 7.7 8.3 10 11 82 82 82 82 82 82 82 82 82 82 82 82 82						Surface					20.4		8.2		32.6		97.1								
4.0 0.1 267 20.3 8.2 32.7 97.0 7.2 7.7 10 Bottom 7.0 0.2 273 20.2 20.2 8.2 8.2 32.7 32.7 98.5 8.6 7.4 7.4 9.2 9	IM8	Cloudy	Moderate	08:34	8.0	Middle	4.0	0.1	256	20.4	20.4	8.2	8.2	32.6	32.6	96.9	97.0	7.2	7.2	7.6	8.3	10	11	821848	808159
												8.2													
7.0 0.2 297 20.2 8.2 32.7 98.7 7.4 10.5 10						Bottom	7.0	0.2	297	20.2	20.2	8.2	8.2	32.7	32.7	98.7	98.6	7.4	7.4	10.5		10			

04 December 21 during Mid-Flood Tide

Water Qua	lity Monit	toring Resu	ılts on		04 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water To	emperature (°C)		рН	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ar (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	287	20.1	20.1	8.2	8.2	32.8	32.8	96.7	96.8	7.2		6.4		7			
						1.0	0.2	295	20.1	-	8.2		32.8		96.8		7.2	7.3	6.5		7			
IM9	Cloudy	Moderate	08:28	7.6	Middle	3.8	0.2	292 312	20.1	20.1	8.3	8.3	32.8 32.8		98.6 98.9	98.8	7.4 7.4		6.9 6.9	6.9	9	9	822106	808789
					_	6.6	0.2	298	20.0		8.3		32.8		100.3		7.5		7.2		11			
					Bottom	6.6	0.2	325	20.0	20.0	8.3	8.3	32.8	32.8	100.7	100.5	7.5	7.5	7.2		11			
					Surface	1.0	0.6	313	20.2	20.2	8.3	8.3	32.8	32.8	98.9	99.0	7.4		11.5		25			
					Surface	1.0	0.6	330	20.2	20.2	8.3	0.5	32.8		99.0	99.0	7.4	7.4	11.6		24			
IM10	Cloudy	Moderate	08:21	8.3	Middle	4.2	0.6	312	20.1	20.1	8.3	8.3	32.8		99.5	99.6	7.4		13.1	13.0	22	21	822387	809797
	,					4.2	0.7	321	20.1		8.3		32.8		99.6		7.4		13.4		23			
					Bottom	7.3 7.3	0.6	312 312	20.1	20.1	8.3	8.3	32.7		99.8	99.9	7.5 7.5	7.5	14.0		16 17			
						1.0	0.7	333	20.5		8.2		32.9		94.9		7.1		13.8		14			
					Surface	1.0	0.7	338	20.5	20.5	8.2	8.2	32.9		94.9	94.9	7.1	7.2	13.8		15			
IM11	Cloudy	Moderate	07:45	8.5	Middle	4.3	0.6	315	20.4	20.4	8.2	8.2	32.9	32.9	96.4	96.5	7.2	1.2	12.5	13.0	17	18	822071	811438
114111	Cioudy	Woderate	07.40	0.5	Wildule	4.3	0.6	327	20.4	20.4	8.2	0.2	32.9		96.6	30.5	7.2		12.9	10.0	16	10	022011	011430
					Bottom	7.5	0.6	295	20.4	20.4	8.2	8.2	32.8		97.6	97.8	7.3	7.3	12.5		24			
						7.5 1.0	0.6	310 264	20.4		8.2		32.8		97.9		7.3		12.5		24			
					Surface	1.0	0.6	264	20.3	20.3	8.2	8.2	32.9 32.9		95.4 95.5	95.5	7.1 7.1		10.2		11			
						4.5	0.5	256	20.3		8.2		32.9		96.4		7.2	7.2	14.2		15			
IM12	Cloudy	Moderate	07:38	8.9	Middle	4.5	0.5	256	20.3	20.3	8.2	8.2	32.9		96.5	96.5	7.2		14.3	13.0	15	14	821456	812025
					Bottom	7.9	0.4	257	20.3	20.3	8.2	8.2	32.9		97.0	97.1	7.2	7.2	14.6		15			
					Bottom	7.9	0.4	262	20.3	20.3	8.2	0.2	32.9		97.1	31.1	7.2	1.2	14.5		15			
					Surface	1.0	-	-	20.2	20.2	8.2	8.2	32.7	32.7	96.7	96.8	7.2		5.4		13			
						1.0	-	-	20.2		8.2		32.7		96.8		7.2	7.2	5.5		13			
SR1A	Cloudy	Moderate	07:09	5.2	Middle	2.6 2.6	-	-	-	-	-	-	-	-	-	-	-		-	6.0	-	13	819972	812662
						4.2	-	-	20.1		8.2		32.7		98.5		7.4		6.2		13			
					Bottom	4.2	-	-	20.1	20.1	8.2	8.2	32.7		100.1	99.3	7.5	7.5	7.0		13			
					Surface	1.0	0.1	169	20.4	20.4	8.1	8.1	32.9	32.9	94.8	94.9	7.1		11.6		16			
					Surface	1.0	0.1	181	20.4	20.4	8.1	0.1	32.9	32.9	94.9	94.9	7.1	7.1	11.9		16			
SR2	Cloudy	Moderate	06:54	4.5	Middle	-	-	-	-	-	-						-	7.1	-	12.4	-	15	821474	814146
	,					-	-	-	-		-		-				-		-		-			
					Bottom	3.5 3.5	0.2	145 148	20.3	20.3	8.1	8.1	32.9 32.9		96.5 97.0	96.8	7.2	7.2	13.1		14 14			
						1.0	0.4	229	20.0		8.2		32.9		94.3		7.1		9.4		9			
					Surface	1.0	0.4	231	20.0	20.0	8.2	8.2	32.9		94.4	94.4	7.1	7.0	9.8		9			
SR3	Cloudy	Moderate	08:40	9.0	Middle	4.5	0.2	249	19.8	19.8	8.2	8.2	33.0	33.0	96.2	96.5	7.2	7.2	10.1	10.2	9	10	822162	807576
SKS	Cidudy	Woderate	00.40	5.0	Wildule	4.5	0.2	251	19.8	19.0	8.2	0.2	33.0		96.7	90.5	7.3		10.6	10.2	10	10	022102	00/3/0
					Bottom	8.0	0.2	262	19.8	19.8	8.2	8.2	33.0		98.0	98.2	7.4	7.4	10.8		11			
						8.0 1.0	0.2	271 102	19.8		8.2		33.0		98.3		7.4		10.6 6.2		10			
					Surface	1.0	0.6	102	20.4	20.4	8.2	8.2	33.9	33.9	100.9	100.9	7.5 7.5		6.1		11			
						4.8	0.5	99	20.4		8.2		33.9		100.8		7.5	7.5	7.2		10			
SR4A	Fine	Calm	07:33	9.6	Middle	4.8	0.5	105	20.4	20.4	8.2	8.2	33.9	33.9	100.9	100.9	7.5		7.2	7.1	10	10	817179	807831
					Bottom	8.6	0.4	89	20.3	20.3	8.2	8.2	33.9	33.9	100.8	100.9	7.5	7.5	8.0		10			
					Bottom	8.6	0.4	90	20.3	20.3	8.2	0.2	33.9	33.9	100.9	100.9	7.5	1.5	8.0		10			
					Surface	1.0	0.1	141	20.4	20.4	8.2	8.2	33.6	33.6	104.9	104.9	7.8		7.1		12			
						1.0	0.1	149	20.4		8.2		33.6		104.8		7.8	7.8	7.2		12			
SR5A	Fine	Calm	07:13	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	7.7		11	816581	810704
						3.6	0.1	146	20.3		8.2		33.6		104.2		7.7		8.3		9			
					Bottom	3.6	0.1	152	20.3	20.3	8.2	8.2	33.6		104.1	104.2	7.7	7.7	8.2		10			
					Surface	1.0	0.0	233	20.9	20.9	8.1	8.1	33.6		103.7	103.7	7.6		6.7		12			
					Surface	1.0	0.0	239	20.9	20.9	8.1	0.1	33.6	33.0	103.7	103.7	7.6	7.6	6.6		11			
SR6A	Fine	Calm	06:44	5.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	7.2	-	11	817941	814759
						4.0	- 0.1	- 220	20.9		- 0.4		- 22.5		102.7		- 7.0		7.8		- 10			
					Bottom	4.0	0.1	229 243	20.9	20.9	8.1	8.1	33.5 33.5	33.5	103.7	103.8	7.6 7.6	7.6	7.8		10 9			
						1.0	0.1	290	21.1		8.1		32.9		89.9		6.6		9.1		14			
					Surface	1.0	0.1	300	21.1	21.1	8.1	8.1	32.9		89.9	89.9	6.6	6.6	9.1	l	13			
SR7	Cloudy	Moderate	06:06	16.4	Middle	8.2	0.1	92	21.1	21.1	8.1	8.1	32.9	32.9	90.1	90.2	6.6	0.0	11.1	11.0	10	11	823630	823728
GIV/	Cioudy	INDUCIALE	00.00	10.4	IVIIUUIC	8.2	0.2	101	21.1	41.1	8.1	J. I	32.9		90.2	JU.2	6.6		11.3	11.0	10		023030	023120
					Bottom	15.4	0.2	103	21.1	21.1	8.1	8.1	32.8		90.3	90.3	6.6	6.6	12.6		9			
			<u> </u>			15.4	0.2	105	21.1		8.1		32.8		90.3		6.6		12.6		10			
					Surface	1.0	-	-	20.1	20.1	8.2	8.2	32.8		96.9 97.2	97.1	7.3		9.2 9.4	1	10 9			1
						1.0		H :	20.1		8.2	-	32.8	-	97.2		7.3	7.3	9.4		-			
SR8	Cloudy	Moderate	07:30	4.3	Middle	-	-	-	1	-	-	-	-	1 -	-	† -	-		-	9.7	-	9	820401	811616
					Bottom	3.3	-		20.1	20.1	8.2	8.2	32.8	32.8	98.9	99.0	7.4	7.4	9.9	İ	9			
					DOLLOTTI	3.3	-	-	20.1	20.1	8.2	0.2	32.8	32.0	99.1	99.0	7.4	1.4	10.1		9			

Water Quality Monitoring
Water Quality Monitoring Results on

07 December 21 during Mid-Ebb Tide

Water Qua	ity Monit	oring Resu	ilts on		07 December 21	during Mid-	Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value		Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	145 159	20.4	20.4	8.2	8.2	33.1		95.5 95.5	95.5	7.1 7.1		7.9 8.0	-	15 16			
						4.2	0.2	164	20.4		8.3		33.1		95.0		7.1	7.1	9.1	1	15			
C1	Cloudy	Rough	14:53	8.4	Middle	4.2	0.2	168	20.4	20.4	8.3	8.3	33.1	33.1	95.1	95.1	7.1		9.1	9.2	16	16	815604	804234
					Bottom	7.4	0.1	176	20.3	20.3	8.3	8.3	33.1		96.4	96.5	7.2	7.2	10.4		15			
					BOILOTT	7.4	0.1	185	20.3	20.3	8.3	0.3	33.1	33.1	96.5	90.5	7.2	1.2	10.5		16			
					Surface	1.0	0.3	14	20.6	20.6	8.2	8.2	33.3	33.3	117.8	117.7	8.7		7.0		8			
						1.0	0.3	15	20.6		8.2		33.3		117.6		8.7	8.5	7.0	_	8			
C2	Fine	Moderate	13:41	12.2	Middle	6.1	0.2	32 32	20.6	20.6	8.2	8.2	33.3		112.5 112.5	112.5	8.3		7.8 7.8	7.5	9	8	825702	806932
					D. III.	11.2	0.3	42	20.6	00.0	8.2		33.4		112.3	440.0	8.3	0.0	7.9		8			
					Bottom	11.2	0.3	43	20.6	20.6	8.2	8.2	33.3		112.3	112.3	8.3	8.3	7.8		8			
					Surface	1.0	0.2	71	21.5	21.5	8.1	8.1	33.8	33.8	98.5	98.5	7.1		4.5		6			
						1.0	0.2	76	21.5		8.1		33.8		98.5		7.1	7.1	4.5	1	6			
C3	Fine	Moderate	15:27	11.9	Middle	6.0	0.2	73 73	21.4	21.4	8.1 8.1	8.1	33.8	33.8	98.3 98.4	98.4	7.1 7.2		4.8 4.7	4.7	7	6	822124	817819
						10.9	0.2	99	21.4		8.1		33.8		99.8		7.3		5.0	1	6			
					Bottom	10.9	0.1	103	21.4	21.4	8.1	8.1	33.8		100.0	99.9	7.3	7.3	5.1		7			
					Surface	1.0	0.1	213	20.1	20.1	8.3	8.3	32.9	32.9	103.8	103.8	7.8		4.9		8			
					Surface	1.0	0.1	225	20.1	20.1	8.3	0.5	32.9	32.9	103.8	103.6	7.8	7.8	4.9		8			
IM1	Cloudy	Moderate	14:32	5.1	Middle	-	-	-	-	-	-	-	-		-	-	-		<u>:</u>	6.3	-	8	817930	807130
						4.1	0.1	197	19.8		8.3		32.9		98.5		7.4		7.7	-	9			
					Bottom	4.1	0.1	215	19.8	19.8	8.3	8.3	32.9		98.6	98.6	7.4	7.4	7.7		8			
					Surface	1.0	0.2	85	20.0	20.0	8.3	8.3	32.5		102.0	101.9	7.7		6.1		11			
					Surface	1.0	0.2	90	20.0	20.0	8.3	0.5	32.5		101.8	101.5	7.6	7.6	6.1		11			
IM2	Cloudy	Moderate	14:25	7.0	Middle	3.5	0.1	96	19.9	19.9	8.3	8.3	32.6		99.4	99.4	7.5	1.0	6.4	6.9	11	11	818148	806150
						3.5 6.0	0.1	100 172	19.9 19.9		8.3 8.3		32.6 32.7		99.3 95.9		7.5 7.2		6.4 8.3	4	11			
					Bottom	6.0	0.1	183	19.9	19.9	8.3	8.3	32.7		95.9	95.9	7.2	7.2	8.3		11			
					Surface	1.0	0.1	42	20.0	20.0	8.3	8.3	32.5		101.5	101.4	7.6		6.6		12			
					Surface	1.0	0.1	44	20.0	20.0	8.3	0.5	32.5		101.3	101.4	7.6	7.5	6.6		13			
IM3	Cloudy	Moderate	14:18	7.2	Middle	3.6	0.1	24	19.9	19.9	8.3	8.3	32.6		98.3	98.3	7.4		7.7	8.0	11	12	818804	805578
						3.6 6.2	0.2	25 327	19.9 19.9		8.3 8.3		32.6 32.7		98.2 97.3		7.4 7.3		7.8 9.5	4	11			
					Bottom	6.2	0.1	329	19.9	19.9	8.3	8.3	32.7	32.7	97.3	97.3	7.3	7.3	9.6		11			
					Surface	1.0	0.2	54	19.9	19.9	8.3	8.3	32.5		100.7	100.7	7.6		7.2		13			
					Ouriace	1.0	0.2	56	19.9	10.0	8.3	0.0	32.5		100.6	100.7	7.6	7.5	7.2		14			
IM4	Cloudy	Rough	14:08	8.9	Middle	4.5	0.1	354	19.8	19.8	8.3	8.3	32.7		97.5	97.5	7.3		9.6	9.4	13	13	819704	804607
		-				4.5 7.9	0.2	358 320	19.8 19.9		8.3 8.3		32.7 32.7		97.4 96.7		7.3 7.3		9.6 11.4	4	14 13			
					Bottom	7.9	0.1	326	19.9	19.9	8.3	8.3	32.7		96.7	96.7	7.3	7.3	11.2	1	12			
					Surface	1.0	0.3	6	19.9	19.9	8.3	8.3	32.6	32.6	100.2	100.2	7.5		7.7		14			
					Surface	1.0	0.4	6	19.9	15.5	8.3	0.5	32.6	32.0	100.2	100.2	7.5	7.5	7.7		13			
IM5	Cloudy	Moderate	13:58	8.6	Middle	4.3	0.3	6	19.9	19.9	8.3	8.3	32.6		98.3	98.3	7.4		9.6	9.3	13	14	820721	804874
						4.3 7.6	0.4	<u>6</u> 8	19.9 19.9		8.3 8.3		32.6 32.6		98.3 97.9		7.4 7.4		9.7 10.4	4	14 13			
					Bottom	7.6	0.2	8	19.9	19.9	8.3	8.3	32.6		97.9	97.9	7.4	7.4	10.4	1	14			
					Surface	1.0	0.0	203	20.0	20.0	8.3	8.3	32.6	32.6	102.6	102.6	7.7		2.6		9			
					Odriace	1.0	0.0	214	20.0	20.0	8.3	0.0	32.6	32.0	102.5	102.0	7.7	7.7	2.6		8			
IM6	Cloudy	Moderate	13:50	7.8	Middle	3.9	0.0	81	19.9	19.9	8.3	8.3	32.7	32.7	100.6	100.6	7.6		2.7	2.7	7	7	821054	805804
						3.9 6.8	0.0	88 113	19.9 19.9		8.3 8.3		32.7 32.8		100.5 96.2		7.6 7.2		2.8	4	6 5			
					Bottom	6.8	0.1	116	19.9	19.9	8.3	8.3	32.8		96.1	96.2	7.2	7.2	2.8		6			
					Surface	1.0	0.1	177	19.9	19.9	8.3	8.3	33.0	33.0	98.0	98.0	7.4		4.6		9			
					Odriace	1.0	0.1	184	19.9	10.0	8.3	0.0	33.0		98.0	30.0	7.4	7.4	4.6		8			
IM7	Cloudy	Moderate	13:41	9.0	Middle	4.5	0.1	177	19.9	19.9	8.3	8.3	32.9		97.7	97.7	7.3		5.6	5.6	9	9	821331	806841
						4.5 8.0	0.1	187 135	19.9 19.9		8.3 8.3		32.9 32.9		97.7 97.7		7.3 7.3		5.7 6.6	4	9			
					Bottom	8.0	0.0	135	19.9	19.9	8.3	8.3	32.9		97.7	97.7	7.3	7.3	6.6	1	9			
					Surface	1.0	0.5	71	20.6	20.6	8.2	8.2	33.6		107.0	107.0	7.9		8.2	Ì	8			
					Surface	1.0	0.5	74	20.6	20.0	8.2	0.2	33.6	33.0	106.9	107.0	7.9	7.9	8.2	1	7			
IM8	Fine	Moderate	14:02	7.9	Middle	3.9	0.4	69	20.5	20.5	8.2	8.2	33.6		106.1	106.1	7.8		8.7	8.7	9	9	821813	808124
						3.9 6.9	0.4	71 64	20.5		8.2		33.6 33.6		106.1 106.1		7.8 7.8		8.7 9.1	-	8 10			
					Bottom	6.9	0.3	66	20.5	20.5	8.2	8.2	33.6		106.1	106.2	7.8	7.8	9.1	1	9			
					1		0.0						00.0	1	100.2				0.1	1	·			

07 December 21 during Mid-Ebb Tide

Water Qua	ity Monit	oring Resu	ilts on		07 December 21	during Mid-	Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	F	pН	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	88	20.6	20.6	8.2	8.2	33.4	33.4	107.1	107.1	7.9		6.8		11			
						1.0 3.6	0.3	89 85	20.6		8.2 8.2		33.4 33.5		107.0 106.0		7.9 7.8	7.9	6.8 7.5	-	10			
IM9	Fine	Moderate	14:08	7.2	Middle	3.6	0.3	91	20.6	20.6	8.2	8.2	33.5		106.0	106.0	7.8		7.5	7.4	9	10	822072	808814
					Bottom	6.2	0.3	93	20.6	20.6	8.2	8.2	33.6		107.0	107.1	7.9	7.9	7.8	-	9			
					Bottom	6.2	0.4	100	20.5	20.0	8.2	0.2	33.6		107.1	107.1	7.9	1.5	7.8	<u> </u>	8			
					Surface	1.0	0.4	72	20.8	20.8	8.2	8.2	33.4	33.4	114.9	114.9	8.5		4.8	-	8			
						1.0 3.8	0.4	78 76	20.8		8.2 8.2		33.4 33.5		114.8 108.6		8.5	8.3	4.9 5.0	4	- 8 - 7			
IM10	Fine	Moderate	14:14	7.7	Middle	3.8	0.4	80	20.7	20.7	8.2	8.2	33.5		108.6	108.6	8.0		5.0	5.0	8	8	822386	809810
					Bottom	6.7	0.4	74	20.6	20.6	8.2	8.2	33.4	33./	109.2	109.3	8.1	8.1	5.1	*	7			
					Dottom	6.7	0.4	77	20.6	20.0	8.2	0.2	33.4		109.3	100.0	8.1	0.1	5.2	<u> </u>	8			
					Surface	1.0	0.0	0	21.0	21.0	8.2	8.2	33.7		110.7	110.6	8.1		4.9 4.9	4	5			
						4.2	-	0	20.9		8.2		33.6		107.0		7.9	8.0	5.3		6	_		
IM11	Fine	Moderate	14:25	8.4	Middle	4.2	-	0	20.9	20.9	8.2	8.2	33.6		106.9	107.0	7.8		5.3	5.3	5	6	822037	811450
					Bottom	7.4	0.0	0	20.9	20.9	8.2	8.2	33.6		107.7	107.7	7.9	7.9	5.5]	6			
						7.4	0.0	0	20.8		8.2		33.7		107.7		7.9		5.6		7			
					Surface	1.0	0.4	66 66	20.9	20.9	8.2	8.2	33.6		107.9	107.9	7.9 7.9		5.4 5.4	4	9			
IM12	F 10		44.04	9.8	10.10	4.9	0.4	73	20.8	00.0	8.2	0.0	33.6		106.3	106.3	7.8	7.9	5.9		8		004440	812063
IM12	Fine	Moderate	14:31	9.8	Middle	4.9	0.4	78	20.8	20.8	8.2	8.2	33.6	33.0	106.3	106.3	7.8		6.0	6.0	8	8	821440	812063
					Bottom	8.8	0.4	72	20.7	20.7	8.2	8.2	33.7		107.3	107.4	7.9	7.9	6.8	1	8			
						8.8 1.0	0.4	75	20.7		8.2		33.7		107.4		7.9		6.8	₩	7			
					Surface	1.0	-		20.9	20.9	8.2	8.2	33.7	33.7	112.0 112.0	112.0	8.2		4.0	-	6 5			
SR1A	Fine	Moderate	14:55	5.0	Middle	2.5	-		-		-	_	-		-		-	8.2	-	4.3	-	6	819982	812654
SKIA	rille	Woderate	14.55	3.0	Wildule	2.5	-		-	-	-	-	-		-		-		-	4.3	-	0	019902	012034
					Bottom	4.0	-	-	20.9	20.9	8.2	8.2	33.7		112.3	112.4	8.2	8.2	4.6	-	6 7			
						4.0 1.0	0.5	336	20.9		8.2 8.2		33.7 33.7		112.5 108.3		8.2 7.9		4.5 4.8	₩	7			
					Surface	1.0	0.5	309	21.0	21.0	8.2	8.2	33.7	33.7	108.2	108.3	7.9		4.8	-	7			
SR2	Fine	Moderate	15:08	4.8	Middle	-	-		-		-	-	-		-	_	-	7.9	-	4.9	-	7	821464	814152
ONZ	TING	Woderate	13.00	4.0	Wilduic	-	-	-	-	-	-		-		-		-		-	7.5	-	,	021404	014132
					Bottom	3.8	0.5	130	20.8	20.8	8.2	8.2	33.7		107.2	107.2	7.9	7.9	5.0	-	8 7			
						3.8 1.0	0.5	142 88	20.8		8.2 8.2		33.7		107.2		7.9 8.1		5.0 10.0		13			
					Surface	1.0	0.5	95	20.6	20.6	8.2	8.2	33.4		109.5	109.6	8.1	8.1	10.0		12			
SR3	Fine	Moderate	13:57	8.8	Middle	4.4	0.5	87	20.4	20.4	8.2	8.2	33.4		107.9	107.9	8.0	0.1	11.3	11.1	11	11	822143	807559
0.10	1 1110	moderate	10.07	0.0	Middlo	4.4	0.5	93	20.4	20.1	8.2	0.2	33.4		107.9	107.0	8.0		11.3	1	12		OLL 110	001000
					Bottom	7.8 7.8	0.4	81 81	20.4	20.4	8.2	8.2	33.4		108.0	108.0	8.0	8.0	12.0 12.1	4	10			
					0(1.0	0.3	67	20.1	00.4	8.3	0.0	32.6	1	103.2	400.0	7.7		6.4	_	10			
					Surface	1.0	0.4	69	20.1	20.1	8.3	8.3	32.6	32.6	103.1	103.2	7.7	7.6	6.3	*	10			
SR4A	Cloudy	Calm	15:14	9.8	Middle	4.9	0.3	65	20.1	20.1	8.3	8.3	32.7	32.7	100.7	100.7	7.5		7.3	7.4	9	9	817190	807812
	,					4.9 8.8	0.3	68 69	20.1		8.3 8.3		32.7 32.7		100.6 100.3		7.5 7.5		7.4 8.4	-	8			
					Bottom	8.8	0.3	74	20.1	20.1	8.3	8.3	32.7	32.7	100.3	100.3	7.5	7.5	8.4	-	9			
					Surface	1.0	0.0	339	20.3	20.3	8.3	8.3	32.9		104.4	104.3	7.8		5.4		12			
					Odriace	1.0	0.0	357	20.3	20.0	8.3	0.0	32.9	32.3	104.2	104.5	7.8	7.8	5.4		11			
SR5A	Cloudy	Calm	15:29	3.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	5.6	-	11	816597	810687
						2.9	0.0	322	20.2		8.3		32.9		102.4		7.6		5.9	-	10			
					Bottom	2.9	0.0	344	20.2	20.2	8.3	8.3	32.8		102.4	102.4	7.6	7.6	5.9		10			
					Surface	1.0	0.1	33	20.7	20.7	8.3	8.3	32.8		109.1	109.0	8.1		3.5		8			
						1.0	0.1	36	20.7		8.3		32.8		108.9		8.1	8.1	3.6	-	9			
SR6A	Cloudy	Calm	15:56	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.0	-	9	817983	814724
					Bottom	3.6	0.1	36	20.5	20.5	8.3	8.3	32.9	32.9	106.8	106.8	7.9	7.9	4.5	-	8			
					BOLLOTT	3.6	0.1	37	20.5	20.5	8.3	0.3	32.9	32.9	106.8	100.6	7.9	7.9	4.5	<u> </u>	9			
					Surface	1.0	0.4	38	21.5	21.5	8.1	8.1	33.8		95.8	95.8	7.0		5.2	1	7			
						1.0 8.3	0.4	40 35	21.5 21.4		8.1 8.1		33.8 33.8		95.8 96.2		7.0	7.0	5.2 5.3	-	7			
SR7	Fine	Moderate	15:52	16.5	Middle	8.3	0.4	35	21.4	21.4	8.1	8.1	33.8	33.8	96.3	96.3	7.0		5.3	5.4	7	7	823647	823722
					Bottom	15.5	0.4	33	21.4	21.4	8.1	8.1	33.9	33.9	98.9	99.1	7.2	7.2	5.6	1	6			
					DOROIT	15.5	0.4	33	21.4	21.4	8.1	0.1	33.9	33.9	99.2	JJ. I	7.2	1.2	5.6	<u> </u>	6			
	I				Surface	1.0			20.7	20.7	8.2	8.2	33.7	33.7	108.4	108.4	8.0		5.4	4	8			1
						1.0	-		20.7		8.2		33.7		108.4		8.0	8.0	5.4	1	7			
SR8	Fine	Moderate	14:39	5.0	Middle	-	-	-	-	-	-	-	-	1 -	-	-	-		-	5.5	-	8	820543	811895
					Bottom	4.0	-		20.5	20.5	8.1	8.1	33.8	33.8	108.1	108.1	8.0	8.0	5.6]	8			
					Dottom	4.0	-	-	20.5	20.0	8.1	5.	33.8	55.5	108.1		8.0	0.0	5.6		7			

07 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ilts on		07 December 21	during Mid-	Flood T	ide																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	69 70	19.7 19.7	19.7	8.3	8.3	32.3	32.3	102.0 102.0	102.0	7.7		12.2 12.3		16 16			
C1	Fine	Rough	10:45	7.7	Middle	3.9	0.4	63	19.8	19.8	8.3	8.3	32.6		98.2	98.2	7.4	7.6	15.3	14.6	13	14	815634	804263
		Ü				3.9 6.7	0.4	66 56	19.8 19.9		8.3 8.3		32.6 32.9		98.2 96.3		7.4		15.3 16.3	1	14 14			
					Bottom	6.7	0.5	61	19.9	19.9	8.3	8.3	32.9	32.9	96.4	96.4	7.2	7.2	16.1		13			
					Surface	1.0	0.4	359 330	20.6 20.6	20.6	8.2	8.2	33.1		120.0 119.8	119.9	8.9	8.7	6.5 6.9		8			
C2	Fine	Moderate	11:04	10.0	Middle	5.0 5.0	0.4	1	20.6 20.5	20.6	8.2 8.2	8.2	33.1 33.1	33.1	113.3 113.1	113.2	8.4 8.4	0.7	7.2 7.2	7.4	9	9	825665	806951
					Bottom	9.0	0.4	8	20.5	20.5	7.9	7.9	33.1		112.4	112.4	8.3	8.3	8.2		9			
						9.0	0.4	8 264	20.5		7.9 8.1		33.1 33.6		112.4 103.7		8.3 7.6	0.0	8.2 6.3		9			
					Surface	1.0	0.7	284	20.7	20.7	8.1	8.1	33.6	33.0	103.6	103.7	7.6	7.6	6.4		10			
C3	Fine	Moderate	09:10	10.9	Middle	5.5 5.5	0.5	262 262	20.7	20.7	8.1 8.1	8.1	33.6 33.6		102.6 102.6	102.6	7.6 7.6		6.8	6.7	9	9	822124	817823
					Bottom	9.9	0.4	269	20.7	20.7	8.1	8.1	33.7	33.7	102.9	103.0	7.6	7.6	7.0		8			
					Surface	9.9 1.0	0.5 0.1	292 317	20.7 19.9	19.9	8.1 8.3	8.3	33.7 32.9		103.0 100.4	100.4	7.6 7.5		7.0 7.8		8 14			
						1.0	0.1	318	19.9	19.9	8.3	0.3	32.9	32.9	100.4	100.4	7.5	7.5	7.9		13			
IM1	Fine	Moderate	11:05	4.9	Middle	-	-		-	-	Ė	-	-	-	-	-	-		-	8.8	-	15	817930	807125
					Bottom	3.9 3.9	0.1	303 316	19.8 19.8	19.8	8.3	8.3	32.9 32.9		100.2	100.3	7.5 7.5	7.5	9.8 9.9		15 16			
					Surface	1.0	0.2	352	19.8	19.8	8.3	8.3	32.6	32.6	100.1	100.1	7.5		9.5		16			
IM2	Fine	Moderate	11:13	6.6	Middle	1.0 3.3	0.2	324 336	19.8 19.7	19.7	8.3 8.3	8.3	32.6 32.6		100.1 99.0	99.0	7.5 7.5	7.5	9.6 12.0	11.9	14 16	16	818153	806162
IIVIZ	rine	woderate	11:13	0.0	ivildale	3.3 5.6	0.3	337 347	19.7	19.7	8.3	0.3	32.6	32.0	99.0		7.5	•	12.1 14.0	11.9	16	10	010100	000102
					Bottom	5.6	0.2	347	19.7 19.7	19.7	8.3 8.3	8.3	32.6 32.6		99.3 99.4	99.4	7.5 7.5	7.5	14.0		17 18			
					Surface	1.0	0.3	334 349	19.8 19.8	19.8	8.3	8.3	32.6 32.6		99.8 99.8	99.8	7.5 7.5		11.3 11.5		22			
IM3	Fine	Moderate	11:20	6.8	Middle	3.4	0.3	328	19.7	19.7	8.3	8.3	32.5	32.5	99.2	99.2	7.5	7.5	13.8	13.6	21	21	818761	805588
						3.4 5.8	0.3	333 323	19.7 19.7		8.3 8.3		32.5 32.5		99.2 99.4		7.5 7.5		13.8 15.8		22 19			
					Bottom	5.8	0.3	323	19.7	19.7	8.3	8.3	32.5	32.5	99.4	99.4	7.5	7.5	15.6		19			
					Surface	1.0	0.5	338 311	19.7 19.7	19.7	8.3	8.3	32.6 32.6		98.6 98.6	98.6	7.4	7.4	10.2		15 15			
IM4	Fine	Rough	11:30	8.6	Middle	4.3 4.3	0.5 0.5	339 340	19.7 19.7	19.7	8.3 8.3	8.3	32.6 32.6		97.4 97.4	97.4	7.4 7.4	7.4	15.6 15.8	14.8	14 13	14	819718	804617
					Bottom	7.6	0.4	342	19.7	19.7	8.3	8.3	32.6	32.6	97.5	97.5	7.4	7.4	18.4		14			
						7.6 1.0	0.4	344 30	19.7 19.8		8.3 8.3		32.6 32.6		97.5 100.2		7.4 7.6		18.3 9.2		13 16			
					Surface	1.0	0.6	32	19.8	19.8	8.3	8.3	32.6	32.0	100.2	100.2	7.6	7.6	9.2		15			
IM5	Fine	Moderate	11:38	8.2	Middle	4.1 4.1	0.6	34 34	19.7 19.7	19.7	8.3	8.3	32.6 32.6	32.6	99.2 99.2	99.2	7.5 7.5		12.4 12.5	10.8	15 14	15	820713	804859
					Bottom	7.2 7.2	0.5	38 38	19.7 19.7	19.7	8.3	8.3	32.6 32.6		99.6 99.8	99.7	7.5 7.5	7.5	10.7 10.9		15 14			
					Surface	1.0	0.2	29	19.9	19.9	8.3	8.3	32.8	32.8	99.6	99.5	7.5		3.9		6			
						1.0 3.7	0.2	31 44	19.9 19.8		8.3 8.2		32.8 32.9		99.4 96.8		7.5 7.3	7.4	3.9	١	7			
IM6	Fine	Moderate	11:45	7.4	Middle	3.7	0.3	47	19.8	19.8	8.2	8.2	32.9	32.9	96.8	96.8	7.3		3.8	4.1	8	8	821065	805824
					Bottom	6.4	0.3	52 54	19.8 19.8	19.8	8.2 8.3	8.2	32.9 32.9		96.6 96.6	96.6	7.3	7.3	4.6 4.4		10 9			
					Surface	1.0 1.0	0.1 0.1	183 196	19.9 19.9	19.9	8.2 8.2	8.2	32.9 32.9	32.9	96.8 96.8	96.8	7.3 7.3		7.4 7.4		11 11			
IM7	Fine	Moderate	11:54	8.5	Middle	4.3	0.1	177	19.8	19.8	8.2	8.2	32.9		96.2	96.2	7.2	7.3	9.8	9.6	11	11	821340	806818
	1 110	Moderate	11.01	0.0		4.3 7.5	0.1	189 177	19.8 19.8		8.2		32.9 32.9		96.2 96.3		7.2		9.8 11.6	0.0	11		021010	000010
					Bottom	7.5	0.1	180	19.8	19.8	8.3	8.3	32.9	32.9	96.3	96.3	7.2	7.2	11.5	1	10			
					Surface	1.0	0.1	21 22	20.5	20.5	8.2	8.2	33.4 33.4		107.5 107.5	107.5	8.0		6.6 6.6	1	8			
IM8	Fine	Moderate	10:40	7.3	Middle	3.6	0.1	33	20.4	20.4	8.2	8.2	33.4	33.4	107.0	107.0	7.9	8.0	6.6	6.6	8	9	821850	808153
					Bottom	3.6 6.3	0.1	35 56	20.4	20.4	8.2 8.2	8.1	33.4 33.4		106.9 107.0	107.0	7.9 7.9	7.9	6.6 6.7	1	9			
DA: Depth-Aver					DULLOTTI	6.3	0.1	60	20.4	20.4	8.1	0.1	33.4		107.0	107.0	7.9	1.9	6.7		10			

07 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ılts on		07 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Oamping Dep	()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	241	20.4	20.4	8.2	8.2	33.4	33.4	105.1	105.1	7.8		10.3		11			
						3.5	0.2	241 240	20.4		8.2		33.4 33.5		105.1		7.8 7.8	7.8	10.3		11			
IM9	Fine	Moderate	10:34	7.0	Middle	3.5	0.2	256	20.4	20.4	8.2	8.2	33.5	33.5	105.1	105.1	7.8		10.7	10.8	12	12	822083	808790
					Bottom	6.0	0.1	249	20.4	20.4	8.1	8.1	33.5	33.5	105.4	105.5	7.8	7.8	11.2		14			
					Bottom	6.0	0.1	249	20.4	20.4	8.1	0.1	33.5	33.3	105.5	105.5	7.8	7.0	11.2		15			
					Surface	1.0	0.4	303	20.4	20.4	8.2	8.2	33.5	33.5	106.3	106.3	7.9		8.2		11			
						1.0 4.1	0.4	315	20.4		8.2		33.5		106.3		7.9	7.9	8.2		11			
IM10	Fine	Moderate	10:28	8.2	Middle	4.1	0.4	301 323	20.4	20.4	8.2	8.2	33.5 33.5	33.5	105.8 105.8	105.8	7.8		10.2	10.2	11	12	822386	809778
					Bottom	7.2	0.4	300	20.4	20.4	8.1	8.1	33.4	33.4	105.8	105.8	7.8	7.9	12.1		13			
					BOLLOTTI	7.2	0.4	322	20.4	20.4	8.1	0.1	33.4	33.4	105.8	105.6	7.9	7.9	12.1		13			
					Surface	1.0	0.6	312	20.4	20.4	8.2	8.2	33.5	33.5	105.6	105.6	7.8		10.3		20			
						1.0 3.5	0.6	315 305	20.4		8.2		33.5 33.5		105.6		7.8 7.8	7.8	10.3 11.1		19 14			
IM11	Fine	Moderate	10:18	7.1	Middle	3.5	0.5	324	20.4	20.4	8.2	8.2	33.5	33.5	105.1 105.1	105.1	7.8		11.1	11.2	15	16	822047	811437
						6.1	0.5	310	20.4		8.1		33.5		105.4		7.8		12.0		13			
					Bottom	6.1	0.5	335	20.4	20.4	8.1	8.1	33.5	33.5	105.4	105.4	7.8	7.8	12.0		14			
					Surface	1.0	0.5	288	20.6	20.6	8.2	8.2	33.6	33.6	104.1	104.1	7.7		11.0		14			
					Gundoo	1.0	0.5	310	20.6	20.0	8.2	0.2	33.6	00.0	104.1	101.1	7.7	7.7	11.0		13			
IM12	Fine	Moderate	10:11	8.7	Middle	4.4 4.4	0.5	291 293	20.5	20.5	8.1	8.1	33.6 33.6	33.6	104.2	104.2	7.7 7.7		11.1	11.4	13 13	13	821458	812041
						7.7	0.5	289	20.5		8.1		33.5		104.2		7.7		12.0		12			
					Bottom	7.7	0.5	297	20.5	20.5	8.1	8.1	33.5	33.5	104.6	104.6	7.7	7.7	12.0		13			
					Surface	1.0	-	-	20.6	20.6	8.1	8.1	33.7	33.7	105.0	105.0	7.7		6.3		7			
					Odridoc	1.0	-	-	20.6	20.0	8.1	0.1	33.7	33.1	105.0	100.0	7.7	7.7	6.4		7			
SR1A	Fine	Moderate	09:46	5.0	Middle	2.5	-	-	-		-	-	-	-	-	-	-		-	6.5	-	7	819974	812658
						2.5 4.0	-	-	20.5		8.1		33.7		105.1		7.8		6.6		- 8			
					Bottom	4.0		-	20.5	20.5	8.1	8.1	33.7	33.7	105.1	105.1	7.8	7.8	6.6		7			
					Surface	1.0	0.1	123	20.6	20.6	8.1	8.1	33.6	33.6	104.1	104.1	7.7		10.2		18			
					Surface	1.0	0.1	132	20.6	20.6	8.1	0.1	33.6	33.0	104.1	104.1	7.7	7.7	10.2		17			
SR2	Fine	Moderate	09:29	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	11.3	-	17	821465	814177
						3.3	0.1	100	20.5		- 0.4		- 22.6		104.2		- 77		12.3		- 16			
					Bottom	3.3	0.1	100	20.5	20.5	8.1	8.1	33.6 33.6	33.6	104.3	104.4	7.7	7.7	12.3		15			
					Surface	1.0	0.0	68	20.7	20.7	8.2	8.2	33.3	33.3	113.7	113.6	8.4		6.6		7			
					Surface	1.0	0.0	72	20.7	20.7	8.2	0.2	33.3	33.3	113.5	113.0	8.4	8.3	6.6		8			
SR3	Fine	Moderate	10:46	8.6	Middle	4.3	0.0	53	20.6	20.6	8.2	8.2	33.3	33.3	111.2	111.2	8.2	0.0	7.5	7.4	8	7	822137	807554
						4.3 7.6	0.0	56 30	20.6		8.2 8.2		33.3		111.1		8.2		7.6 8.0		7			
					Bottom	7.6	0.1	31	20.6	20.6	8.2	8.2	33.3	33.3	111.5	111.5	8.2	8.2	8.0		6			
					Surface	1.0	0.2	70	19.9	19.9	8.2	8.2	32.9	22.0	97.6	97.6	7.3		5.0		10			
					Surface	1.0	0.2	73	19.9	15.5	8.2	0.2	32.9	32.9	97.5	97.0	7.3	7.3	5.1		9			
SR4A	Fine	Calm	10:20	9.2	Middle	4.6	0.3	86	19.8	19.8	8.2	8.2	32.9	32.9	96.8	96.8	7.3	7.0	5.2	5.7	8	8	817196	807821
						4.6 8.2	0.3	91 82	19.8 19.7		8.2 8.2		32.9 32.9		96.8 96.5		7.3		5.3 7.0		- 8 - 7			
					Bottom	8.2	0.3	89	19.7	19.7	8.2	8.2	32.9	32.9	96.5	96.5	7.3	7.3	6.8		8			
					Surface	1.0	0.1	277	19.9	19.9	8.2	8.2	32.9	32.9	98.8	98.8	7.4		4.6		8			
					Surface	1.0	0.1	284	19.9	19.9	8.2	0.2	32.9	32.9	98.8	90.0	7.4	7.4	4.7		9			
SR5A	Fine	Calm	10:02	3.8	Middle	-	-	-	-	_	-	-	-	-	-	-	-		-	4.9	-	9	816576	810713
						2.8	0.0	277	19.9		8.3		32.9		99.3		7.5		5.1		- 8			
					Bottom	2.8	0.0	286	19.9	19.9	8.3	8.3	32.9	32.9	99.5	99.4	7.5	7.5	5.1		9			
					0	1.0	0.1	255	20.2	20.0	8.2	0.0	33.0	00.0	97.6	07.0	7.3		4.4		10			
					Surface	1.0	0.1	275	20.2	20.2	8.2	8.2	33.0	33.0	97.6	97.6	7.3	7.3	4.4		9			
SR6A	Fine	Moderate	09:31	4.1	Middle	-	-	-	-	_	-	-	-	-	-	-	-	7.0	-	4.5	-	12	817951	814724
						3.1	- 0.1	251	- 20.0		- 0.0		- 22.0		- 07.5		- 70		- 4.6		-			
					Bottom	3.1	0.1	273	20.2	20.2	8.2	8.2	32.9	32.9	97.5 97.5	97.5	7.3	7.3	4.6 4.7		14 13			
					0(1.0	0.3	39	20.9	20.0	8.1	0.4	33.7	00.7	100.4	400.4	7.4		8.5		14			
					Surface	1.0	0.3	41	20.9	20.9	8.1	8.1	33.7	33.7	100.4	100.4	7.4	7.4	8.4	1	13			1
SR7	Fine	Moderate	08:42	16.5	Middle	8.3	0.2	24	20.9	20.9	8.1	8.1	33.7	33.7	100.5	100.5	7.4		9.3	9.2	14	13	823649	823745
						8.3	0.2	25	20.9		8.1		33.7		100.5		7.4		9.3	-	13			
					Bottom	15.5 15.5	0.2	5 5	20.9	20.9	8.1	8.1	33.7	33.7	100.8	100.9	7.4	7.4	10.0	1	11 12			
			1		Curt : :	1.0		-	20.5	20.5	8.2	0.0	33.6	20.0	106.5	100.5	7.9		7.5		12			
					Surface	1.0	-	-	20.5	20.5	8.2	8.2	33.6	33.6	106.5	106.5	7.9	7.9	7.5	İ	13			
SR8	Fine	Moderate	10:05	5.0	Middle	-	-	-	-	-	-	-	-	I -	-			1.5	-	7.7	-	11	820375	811610
						4.0	-	-	- 20.5		- 0.4		- 22.6		100.0		- 7.0		- 70	-	9			1
					Bottom	4.0	-	-	20.5	20.5	8.1	8.1	33.6	33.6	106.6	106.7	7.9 7.9	7.9	7.9 7.9	1	8			
			1		1	4.0			1 20.0	1	0.1	1	JJ.0	1	100.7		1.5		1.5		U			1

Water Quality Monitoring
Water Quality Monitoring Results on

09 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	its on		09 December 21	during Mid-	Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value		Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	158	21.0	21.0	8.2	8.2	33.5		108.7	106.9	8.0		7.8		8			
						1.0 4.4	0.2	163 164	21.0 21.1		8.2	ļ	33.5		105.1		7.7	7.7	7.9 9.3	4	8			
C1	Fine	Calm	17:45	8.8	Middle	4.4	0.2	171	21.1	21.1	8.2	8.2	33.8	33.8	103.8	103.8	7.6 7.6		9.6	9.1	8	8	815615	804257
					_	7.8	0.2	155	20.7		8.2	·	34.2		107.4		7.9		10.0		6			
					Bottom	7.8	0.2	168	20.6	20.7	8.2	8.2	34.3		107.6	107.5	7.9	7.9	10.1		7			
						1.0	0.4	155	20.4		8.3		31.4		113.2		8.5		1.5		4			
					Surface	1.0	0.4	161	20.4	20.4	8.3	8.3	31.4	31.4	112.8	113.0	8.5	8.4	1.6		4			
C2	Fine	Moderate	16:46	12.5	Middle	6.3	0.4	158	20.2	20.2	8.3	8.3	31.6	31.6	110.2	110.2	8.3	0.4	2.1	2.7	4	5	825702	806938
02	TIIIC	Woderate	10.40	12.5	Wilduic	6.3	0.4	173	20.2	20.2	8.3	0.0	31.6		110.1	110.2	8.3		2.2	2.,	4	3	023702	000330
					Bottom	11.5	0.5	167	20.1	20.1	8.3	8.3	31.9		104.4	104.4	7.9	7.9	4.4		6			
						11.5	0.5	178	20.1		8.3		31.9		104.4		7.8		4.5		6			
					Surface	1.0	0.3	111 112	20.3	20.4	8.2	8.2	32.7 32.7	32.7	94.4	94.3	7.0 7.0		1.8	-	7			
						5.9	0.3	123	20.4		8.2		32.7		94.1		6.7	6.9	2.3	4	7			
C3	Cloudy	Moderate	18:25	11.7	Middle	5.9	0.3	127	20.6	20.6	8.2	8.2	32.8	32.8	90.6	90.6	6.7		2.3	2.4	7	7	822086	817793
					D. W	10.7	0.4	108	20.5	00.5	8.2	0.0	32.9	00.0	91.6	04.0	6.8	0.0	3.0	1	5			
					Bottom	10.7	0.4	114	20.4	20.5	8.2	8.2	33.0		91.9	91.8	6.8	6.8	3.1	1	6			
					Surface	1.0	0.2	152	21.0	21.0	8.2	8.2	33.4	33.4	111.7	111.6	8.2		7.1		6			
					Odilaco	1.0	0.2	155	20.9	21.0	8.2	0.2	33.4	33.4	111.5	111.0	8.2	8.2	7.2		5			
IM1	Fine	Calm	17:26	5.2	Middle	-	-	-	-	-	-		-		-	-	-	0.2	-	7.5	-	6	817931	807120
						-	-	-	-		-		-		- 407.0		-		-	_	-			
					Bottom	4.2	0.0	116 125	20.8	20.8	8.2	8.2	33.4 33.4		107.3 107.2	107.3	7.9 7.9	7.9	7.8 7.8	4	6			
						1.0	0.0	204	21.0		8.2	1	33.5		107.2		7.7		7.0		9			
					Surface	1.0	0.2	208	20.9	21.0	8.2	8.2	33.5	33.5	105.4	105.5	7.7		7.0		8			
IM2	Fine	Calm	17:19	7.0	Middle	3.5	0.1	200	20.9	20.9	8.2	8.2	33.5	33.5	104.7	104.7	7.7	7.7	8.6	8.3	8	8	818147	806181
IIVIZ	rine	Calm	17:19	7.0	ivildale	3.5	0.1	211	20.9	20.9	8.2	0.2	33.5		104.6	104.7	7.7		8.6	0.3	8	٥	010147	000101
					Bottom	6.0	0.1	224	20.9	20.9	8.2	8.2	33.5		104.1	104.1	7.7	7.7	9.2		7			
					Dottom	6.0	0.1	224	20.9	20.0	8.2	0.2	33.4		104.1	101.1	7.7		9.2		7			
					Surface	1.0	0.2	245	21.0	21.0	8.2	8.2	33.5		105.7	105.6	7.8		8.7 8.7	_	8			
						1.0 3.6	0.2	263 203	20.9		8.2		33.5 33.5		105.5 104.8		7.7 7.7	7.7	9.1	-	8			
IM3	Fine	Calm	17:11	7.2	Middle	3.6	0.1	218	20.9	20.9	8.2	8.2	33.5	33.5	104.8	104.8	7.7		9.2	9.3	8	8	818778	805582
						6.2	0.1	344	20.9		8.2		33.5		104.7		7.7		10.0	1	9			
					Bottom	6.2	0.1	348	20.9	20.9	8.2	8.2	33.5		104.7	104.7	7.7	7.7	10.1		9			
					Surface	1.0	0.3	219	21.1	21.1	8.2	8.2	33.4		109.6	109.6	8.0		6.4		7			
						1.0	0.4	235	21.1		8.2		33.4		109.5		8.0	8.0	6.5		8			
IM4	Fine	Calm	17:02	8.8	Middle	4.4	0.3	219	21.0	21.0	8.2	8.2	33.4		108.7	108.7	8.0		7.2	7.4	8	8	819707	804592
						4.4 7.8	0.3	238 228	21.0		8.2 8.2		33.4 33.6		108.6 108.5		8.0		7.1 8.6	4	9			
					Bottom	7.8	0.3	245	20.7	20.7	8.2	8.2	33.6		108.7	108.6	8.0	8.0	8.7	1	10			
						1.0	0.4	219	20.7		8.2		33.4		104.4		7.7		7.6		10			
					Surface	1.0	0.4	226	20.7	20.7	8.2	8.2	33.4		104.3	104.4	7.7	7.7	7.5		10			
IM5	Fine	Calm	16:55	8.4	Middle	4.2	0.3	215	20.7	20.7	8.2	8.2	33.4	33.4	104.3	104.4	7.7	1.1	8.3	8.3	11	11	820722	804884
IIVIS	TIIIC	Odilli	10.55	0.4	Wilduic	4.2	0.4	216	20.7	20.1	8.2	0.2	33.4		104.5	104.4	7.7		8.3	0.5	11		020122	004004
					Bottom	7.4	0.1	226	20.6	20.6	8.2	8.2	33.5		106.0	106.1	7.8	7.9	9.1	1	12			
						7.4 1.0	0.1	232 284	20.6		8.2	 	33.6		106.2		7.9		9.0 5.0	_	12			
					Surface	1.0	0.1	284	20.9	21.0	8.2	8.2	32.7		121.9 117.2	119.6	9.0		5.0	1	5			
						3.8	0.1	272	20.9		8.2		33.2		113.0		8.3	8.6	5.8		5			
IM6	Fine	Calm	16:47	7.6	Middle	3.8	0.1	292	20.9	20.9	8.2	8.2	33.2	33.2	112.8	112.9	8.3		5.9	5.7	5	5	821054	805804
					Bottom	6.6	0.1	287	20.7	20.7	8.2	8.2	33.5		109.8	109.9	8.1	8.1	6.1		4			
					Dottoili	6.6	0.1	305	20.6	20.1	8.2	0.2	33.5		109.9	103.3	8.1	0.1	6.1		4			
					Surface	1.0	0.2	239	20.8	20.8	8.3	8.2	32.3		122.7	122.6	9.1		3.9		5			
						1.0 4.3	0.2	239	20.8		8.2	1	32.3		122.4		9.1	8.8	3.9 4.9	4	5			
IM7	Fine	Calm	16:40	8.6	Middle	4.3	0.1	246 263	20.8	20.8	8.2	8.2	32.8 32.8		113.2 113.1	113.2	8.4 8.4		5.0	5.0	5 4	4	821358	806823
						7.6	0.1	257	20.8		8.2	+	33.3		106.6		7.8		6.1	1	3			
					Bottom	7.6	0.2	281	20.8	20.8	8.2	8.2	33.3		106.7	106.7	7.9	7.9	6.2	1	3			
					Curtons	1.0	0.3	135	20.0	20.0	8.3	0.2	31.4		110.7	110.4	8.4		2.9	†	3			
					Surface	1.0	0.3	140	20.0	20.0	8.3	8.3	31.4	31.4	110.1	110.4	8.3	8.1	3.0]	3			
IM8	Fine	Moderate	17:10	8.0	Middle	4.0	0.3	138	20.0	20.0	8.3	8.3	31.4		104.5	104.4	7.9	0.1	3.6	3.6	3	4	821838	808156
					***************************************	4.0	0.3	147	20.0		8.3	1	31.5		104.3		7.9		3.6	1	4			
					Bottom	7.0	0.4	128	20.0	20.0	8.3	8.3	31.9		102.7 102.7	102.7	7.7	7.7	4.1	4	6			
						7.0	0.4	130	20.0		8.3	1	31.9	1	102.7		7.7		4.1		ь			

09 December 21 during Mid-Ebb Tide

Water Qua	ity Monit	oring Resu	ılts on		09 December 21	during Mid-	Ebb Tide	е																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	ı	pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Camping Dep		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	141 143	20.4	20.4	8.3	8.3	31.3	31.3	114.9 114.6	114.8	8.6		1.6		5			
						3.7	0.3	143	20.4		8.3		31.3 31.8		105.0		8.6 7.9	8.3	2.1		5			
IM9	Fine	Moderate	17:16	7.4	Middle	3.7	0.3	151	20.1	20.1	8.3	8.3	31.8		105.1	105.1	7.9		2.1	1.9	4	4	822095	808826
					Bottom	6.4	0.4	129	20.1	20.1	8.3	8.3	31.8		105.4	105.5	7.9	7.9	2.1		3			
					Bottom	6.4	0.4	129	20.1	20.1	8.3	0.5	31.8	31.0	105.6	103.3	7.9	1.5	2.1		3			
					Surface	1.0	0.3	155	20.4	20.4	8.3	8.3	31.6	31.6	111.7	111.7	8.4	9	1.5		8			
						1.0	0.3	156 146	20.4		8.3		31.6		111.6		8.4	8.1	1.5		7			
IM10	Fine	Moderate	17:22	7.4	Middle	3.7	0.3	146	20.2	20.2	8.3	8.3	32.2 32.2	32.2	103.8	103.9	7.8 7.8		2.5 2.5	2.3	5	6	822400	809794
						6.4	0.3	138	20.2		8.2		32.4		98.7		7.4		2.7		5			
					Bottom	6.4	0.3	146	20.1	20.2	8.2	8.2	32.6		99.4	99.1	7.5	7.5	3.0		5			
					Surface	1.0	0.4	141	20.2	20.2	8.3	8.3	32.5		101.6	101.5	7.6		2.4		6			
					Odridoc	1.0	0.4	149	20.2	20.2	8.3	0.0	32.5		101.4	101.5	7.6	7.6	2.4		7			
IM11	Fine	Moderate	17:34	8.1	Middle	4.1	0.4	152	20.2	20.2	8.3	8.3	32.5		100.2	100.2	7.5		2.4	2.4	5	5	822035	811445
						4.1	0.4	161	20.2		8.3		32.5		100.1		7.5		2.4		5			
					Bottom	7.1 7.1	0.4	156 170	20.2	20.2	8.2	8.2	32.5 32.5		100.1	100.2	7.5 7.5	7.5	2.4		4			
						1.0	0.4	148	20.2		8.2		32.6	1	99.2		7.4		3.9		6			
					Surface	1.0	0.4	159	20.2	20.2	8.2	8.2	32.6		99.1	99.2	7.4		3.9		7			
IM12	Cloudy	Moderate	17:40	8.9	Middle	4.5	0.3	150	20.1	20.1	8.2	8.2	32.6	32.6	98.7	98.7	7.4	7.4	4.1	4.1	6	6	821474	812055
IIVITZ	Oloudy	Woderate	17.40	0.3	Wildule	4.5	0.3	154	20.1	20.1	8.2	0.2	32.6		98.6	30.7	7.4		4.2	7.1	6	U	021474	012000
					Bottom	7.9	0.4	152	20.1	20.1	8.2	8.2	32.6		98.5	98.6	7.4	7.4	4.2		6			
						7.9 1.0	0.4	153	20.1		8.2		32.6		98.6		7.4		4.3 2.8		6			
					Surface	1.0	-	-	20.5	20.5	8.2	8.2	32.7 32.7	32.7	102.6 102.5	102.6	7.6 7.6		2.8		5			
						2.7		-	-		0.2		-		102.5		7.0	7.6	2.0		-			
SR1A	Cloudy	Moderate	18:07	5.3	Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-	3.1	-	5	819983	812655
					Bottom	4.3	-	-	20.3	20.3	8.2	8.2	32.9	32.9	101.0	100.9	7.5	7.5	3.4		5			
					DOLLOTTI	4.3	-	-	20.2	20.3	8.2	0.2	32.9	32.9	100.8	100.9	7.5	7.5	3.4		6			
					Surface	1.0	0.2	155	20.2	20.2	8.2	8.2	32.6	32.6	99.3	99.2	7.4		3.0		5			
						1.0	0.2	159	20.2		8.2		32.6		99.1		7.4	7.4	3.1		5			
SR2	Cloudy	Moderate	18:15	4.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.2	-	6	821441	814182
						3.8	0.3	161	19.8		8.2		32.8		99.2		7.5		5.2		6			
					Bottom	3.8	0.3	166	19.8	19.8	8.2	8.2	32.8		99.2	99.2	7.5	7.5	5.7		7			
					Surface	1.0	0.4	168	20.2	20.2	8.3	8.3	31.3		115.3	115.1	8.7		1.8		4			
					Odridoc	1.0	0.4	182	20.2	20.2	8.3	0.0	31.3		114.9	110.1	8.7	8.2	1.9		4			
SR3	Fine	Moderate	17:05	8.5	Middle	4.3	0.4	167	20.0	20.0	8.3	8.3	31.9		101.1	101.1	7.6		2.4	3.9	4	4	822162	807558
						4.3 7.5	0.4	168 155	20.0		8.3		31.9		101.0		7.6		2.4 8.0		4			
					Bottom	7.5	0.4	163	20.1	20.1	8.3	8.3	32.4		100.9	101.0	7.6 7.6	7.6	7.3		4			
						1.0	0.3	56	21.1		8.2		33.5	1	108.0		7.9		6.4		12			
					Surface	1.0	0.3	59	21.1	21.1	8.2	8.2	33.5	33.5	107.9	108.0	7.9	7.0	6.5		12			
SR4A	Fine	Calm	18:04	9.6	Middle	4.8	0.3	56	21.1	21.1	8.2	8.2	33.5	33.5	107.5	107.5	7.9	7.9	7.4	7.6	11	11	817209	807790
OIGA	TITIC	Caim	10.04	3.0	Wilduic	4.8	0.4	60	21.1	21.1	8.2	0.2	33.5		107.5	107.5	7.9		7.5	7.0	11		017203	001130
					Bottom	8.6	0.3	63	21.0	21.0	8.2	8.2	33.6		107.2	107.2	7.9	7.9	8.8		10			
						8.6 1.0	0.3	69 24	21.0		8.2		33.6		107.2 108.7		7.9		8.7 7.1		10			
					Surface	1.0	0.1	25	21.1	21.1	8.2	8.2	33.5 33.6	33.5	108.6	108.7	8.0 7.9		7.1		8			
						-	-	-	-		-		-		-		-	8.0	-		-	_		
SR5A	Fine	Calm	18:18	5.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	7.4	-	9	816573	810696
					Bottom	4.0	0.1	46	21.1	21.1	8.1	8.1	33.5		107.6	107.6	7.9	7.9	7.6		10			
					Dottom	4.0	0.1	47	21.1	21.1	8.1	0.1	33.5		107.5	107.0	7.9	1.5	7.7		10			
					Surface	1.0	0.1	57	21.1	21.1	8.2	8.2	33.5		109.7	109.7	8.0		5.5		9			
						1.0	0.1	60	21.1		8.2		33.5		109.7		8.0	8.0	5.5		9 -			
SR6A	Fine	Calm	18:43	5.0	Middle	-		-	-	-		-	÷	-	-	-	-		-	5.9	-	9	817968	814726
					D. III.	4.0	0.1	55	21.1	04.4	8.2	0.0	33.6	00.7	109.7	400.7	8.0		6.4		8			
					Bottom	4.0	0.1	57	21.1	21.1	8.2	8.2	33.8		109.6	109.7	8.0	8.0	6.3		9			
					Surface	1.0	0.4	55	20.6	20.6	8.2	8.2	32.8		89.0	89.1	6.6		2.3		6			
					Ouriace	1.0	0.4	57	20.6	20.0	8.2	0.2	32.8		89.1	00.1	6.6	6.6	2.3		6			
SR7	Cloudy	Moderate	18:43	16.4	Middle	8.2	0.3	58	20.6	20.6	8.2	8.2	32.8	32.8	89.5	89.6	6.6		2.3	2.3	5	5	823633	823733
						8.2	0.3	62	20.6		8.2		32.8		89.6		6.6		2.3	-	5			
					Bottom	15.4 15.4	0.4	66 71	20.6	20.6	8.2	8.2	32.8		90.7	90.8	6.7	6.7	2.4	-	5 5			
			1		 	1.0	0.4	-	20.4		8.3		32.5		105.1		7.8		3.1	_	5			
					Surface	1.0	-	-	20.4	20.4	8.3	8.3	32.5		105.0	105.1	7.8	-	3.1	l	6			1
SR8	Cloudy	Moderate	17:48	4.6	Middle	-	-	-	-		-		-		-		-	7.8	-	3.5	-	6	820397	811635
SINO	Cibudy	Woutrale	17.40	4.0	IVIIUUIC	-	-	-	-	•	-	-	-		-		-	•	-	3.3	-	U	020331	011035
					Bottom	3.6	-	-	20.1	20.1	8.2	8.2	32.6	32.6	100.7	100.7	7.5	7.5	4.1		6			
						3.6	-	-	20.1		8.2		32.6		100.7		7.5		3.9		6			

Water Quality Monitoring
Water Quality Monitoring Results on

09 December 21 during Mid-Flood Tide

Water Qua	ity Monit	oring Resu	ilts on		09 December 21	during Mid-	Flood Ti	ide																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5 0.5	52 52	20.8	20.8	8.2	8.2	33.5 33.5	33.5	104.9 104.7	104.8	7.7		7.7 7.6	-	7			
C1	Fine	Calm	12:24	8.0	Middle	4.0	0.5	52	20.7	20.7	8.1	8.1	33.6		104.5	104.6	7.7	7.7	8.1	8.4	7	7	815600	804255
						4.0 7.0	0.5 0.5	52 52	20.7		8.1		33.6 33.6		104.6 105.1		7.7 7.7		8.2 9.4		7			
					Bottom	7.0	0.5	52	20.7	20.7	8.1	8.1	33.6	33.0	105.3	105.2	7.8	7.8	9.5		7			
					Surface	1.0	0.4	33 33	20.2	20.2	8.3	8.3	31.5 31.5		109.3 108.9	109.1	8.2	8.1	1.9 2.1	1	4			
C2	Fine	Moderate	13:32	12.6	Middle	6.3 6.3	0.4	35 35	20.1	20.1	8.3 8.3	8.3	31.7 31.7		106.1 105.9	106.0	8.0	0.1	4.5 4.8	4.1	4	4	825680	806945
					Bottom	11.6	0.4	38	20.1	20.1	8.3	8.3	31.8	31.8	105.5	105.5	7.9	7.9	5.7		5			
						11.6	0.4	41 227	20.1		8.3		31.7 32.6		105.5 96.7		7.9 7.3	7.0	5.6 4.8		5			
					Surface	1.0	0.3	232	20.0	20.0	8.2	8.2	32.6	32.6	96.7	96.7	7.3	7.3	4.9		7			
C3	Fine	Moderate	11:22	11.4	Middle	5.7 5.7	0.4	225 242	20.0	20.0	8.2	8.2	32.7 32.7	32.7	96.4 96.4	96.4	7.2 7.2		5.6 5.8	6.3	7	7	822096	817814
					Bottom	10.4	0.3	231	20.0	20.0	8.3	8.3	32.7	32.7	96.6	96.7	7.2	7.3	8.5		7			
					Surface	10.4 1.0	0.3	237 52	20.0	20.8	8.3 8.1	8.1	32.7 33.5		96.7 108.8	108.8	7.3 8.0		8.2 5.1		7 6			
						1.0	0.5	54	20.8	20.0	8.1	0.1	33.5	33.3	108.8	100.0	8.0	8.0	5.1		7			
IM1	Fine	Calm	12:42	4.8	Middle	-	-	-	-	-	Ė	-	-	-	-	-	-		-	5.4	-	7	817971	807115
					Bottom	3.8	0.5	52 52	20.5	20.5	8.1 8.1	8.1	33.6 33.6		107.8 107.7	107.8	8.0	8.0	5.6 5.7		7			
					Surface	1.0	0.3	16	20.7	20.7	8.2	8.2	33.5	33.5	105.1	105.1	7.7		7.9		8			
IM2	Fine	Calm	12:51	6.6	Middle	1.0 3.3	0.3	16 10	20.7	20.7	8.2	8.2	33.5 33.5		105.0 106.1	106.3	7.7 7.8	7.8	7.8 8.2	8.6	8	8	818156	806161
IIVIZ	rine	Calm	12.51	0.0	Milddle	3.3 5.6	0.2 0.2	10 10	20.6 20.3	20.1	8.2	0.2	33.6	33.0	106.4		7.9 8.0	•	8.1 9.7	0.0	8	٥	010100	000101
					Bottom	5.6	0.2	10	20.3	20.3	8.2	8.2	33.8 33.9		107.3 107.4	107.4	8.0	8.0	9.6		8			
					Surface	1.0	0.2	10 10	20.6	20.6	8.2	8.2	33.4 33.4		105.5 105.5	105.5	7.8 7.8		3.4		7			
IM3	Fine	Calm	12:57	7.0	Middle	3.5	0.3	355	20.4	20.4	8.1	8.1	33.5	33.5	105.8	105.9	7.8	7.8	4.4	4.4	7	7	818777	805590
					D. W	3.5 6.0	0.3	327 347	20.4	00.4	8.1		33.6 33.8		105.9 107.1	407.4	7.9 8.0	0.0	4.5 5.1		7 8			
					Bottom	6.0 1.0	0.3	319 12	20.0	20.1	8.1	8.1	33.9	33.0	107.6	107.4	8.0	8.0	5.2 5.2		8 5			
					Surface	1.0	0.4	12	20.7	20.7	8.2	8.2	33.2 33.2	33.2	107.2 107.0	107.1	7.9 7.9	7.9	5.0		6			
IM4	Fine	Calm	13:05	7.8	Middle	3.9	0.4	1	20.6	20.6	8.2	8.2	33.2 33.2	33.2	106.3 106.3	106.3	7.9 7.9	1.5	6.5 6.5	6.4	7	7	819741	804621
					Bottom	6.8	0.3	359	20.2	20.2	8.1	8.1	33.5	33.6	107.7	107.8	8.0	8.0	7.7		7			
						6.8 1.0	0.3	330	20.1		8.1		33.6 33.2		107.8 106.5		8.0 7.9		7.8 7.1		7			
					Surface	1.0	0.7	2	20.7	20.7	8.2	8.2	33.3	33.2	106.3	106.4	7.8	7.8	7.2		7			
IM5	Fine	Calm	13:13	8.2	Middle	4.1 4.1	0.6	359 330	20.6	20.6	8.2	8.2	33.3 33.3	33.3	105.1 105.2	105.2	7.8 7.8		8.8 8.9	8.5	7	7	820738	804847
					Bottom	7.2 7.2	0.4	1	20.7	20.7	8.2	8.2	33.3 33.3		106.2 106.5	106.4	7.8 7.9	7.9	9.7 9.6		7			
					Surface	1.0	0.1	95	20.9	20.9	8.2	8.2	32.9	33 N	114.3	114.1	8.4		7.1		7			
	_					1.0 3.6	0.1	100 80	20.9		8.2		33.0 33.4		113.8 107.3		8.4 7.9	8.2	7.1 8.4	١	7	_		
IM6	Fine	Calm	13:20	7.2	Middle	3.6	0.1	82	20.8	20.8	8.2	8.2	33.4	33.4	107.3	107.3	7.9		8.4	8.4	6	6	821068	805809
					Bottom	6.2	0.2	77 77	20.8	20.8	8.2	8.2	33.4 33.4		107.3 107.3	107.3	7.9 7.9	7.9	9.8 9.8	1	5 5			
					Surface	1.0 1.0	0.1 0.1	352 324	20.6 20.6	20.6	8.2 8.2	8.2	32.3 32.3	32.3	117.0 116.8	116.9	8.7 8.7		4.8 4.7		3			
IM7	Fine	Calm	13:27	8.4	Middle	4.2	0.1	34	20.5	20.5	8.2	8.2	32.4	32.4	113.6	111.7	8.4	8.5	5.7	5.8	4	4	821362	806842
	1 1110	Guin	10.27	0.1		4.2 7.4	0.1	34 40	20.5		8.2		32.5 32.5		109.7 109.1		8.2		5.7 6.9	0.0	4		021002	000012
					Bottom	7.4	0.2	40	20.5	20.5	8.2	8.2	32.5	32.5	109.1	109.1	8.1	8.1	7.0	1	5			
					Surface	1.0	0.3	277 289	20.2	20.2	8.3	8.3	31.3		110.6 110.4	110.5	8.3	0.0	1.8	1	6			
IM8	Fine	Moderate	13:03	7.6	Middle	3.8	0.3	258	20.0	20.0	8.3	8.3	31.5	31.5	107.2	105.6	8.1	8.2	3.2	3.3	5	5	821816	808151
					Bottom	3.8 6.6	0.3	276 266	20.0 19.9	19.9	8.3	8.3	31.5 31.5		104.0 103.2	103.2	7.9 7.8	7.8	3.5 4.7	t	5 4			
DA: Depth-Aver					BOROIT	6.6	0.3	266	19.9	13.3	8.3	0.5	31.5	31.3	103.1	103.2	7.8	1.0	4.8		4			

09 December 21 during Mid-Flood Tide

Water Qua	ity Monit	oring Resu	ilts on		09 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ar (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	266	20.2	20.2	8.3	8.3	32.0		103.5	103.4	7.8		3.1		6			
						1.0 3.6	0.3	282 260	20.2	-	8.3 8.3		32.0 32.0		103.3 101.6		7.8 7.6	7.7	3.2		6			
IM9	Fine	Moderate	12:56	7.2	Middle	3.6	0.3	282	20.1	20.1	8.3	8.3	32.0		101.6	101.5	7.6		3.3	3.4	6	6	822100	808806
					D. III.	6.2	0.3	253	20.0	20.0	8.3		32.0		100.6	400.0	7.6	7.0	3.7		7			
					Bottom	6.2	0.3	269	20.0	20.0	8.3	8.3	32.0	32.0	100.5	100.6	7.6	7.6	3.8		7			
					Surface	1.0	0.3	255	20.1	20.1	8.2	8.2	32.3	32.3	101.8	101.3	7.7		3.6		6			
					Odridoc	1.0	0.3	263	20.0	20.1	8.2	0.2	32.3		100.7	101.5	7.6	7.4	3.9		6			
IM10	Fine	Moderate	12:48	8.0	Middle	4.0	0.2	255	20.0	20.0	8.2	8.2	32.4		96.2	96.2	7.2		4.8	4.7	5	5	822382	809783
						4.0 7.0	0.2	261 241	20.0		8.2 8.2		32.4 32.4		96.1 96.3		7.2 7.2		5.0 5.5		5			
					Bottom	7.0	0.3	251	20.0	20.0	8.2	8.2	32.4		96.3	96.3	7.2	7.2	5.5		5			
					0(1.0	0.4	268	20.1	00.4	8.2		32.6		99.8	00.0	7.5		3.0		8			
					Surface	1.0	0.4	294	20.1	20.1	8.2	8.2	32.6		99.7	99.8	7.5	7.5	3.1		8			
IM11	Fine	Moderate	12:38	7.3	Middle	3.7	0.4	269	20.1	20.1	8.2	8.2	32.6		99.2	99.2	7.4	1.5	3.5	3.6	7	7	822069	811481
	1 1110	moderate	12.00	7.0	Middle	3.7	0.4	293	20.1	20.1	8.2	0.2	32.6		99.2	00.2	7.4		3.7	0.0	7	,	OLLOGO	011101
					Bottom	6.3	0.4	277	20.1	20.1	8.2	8.2	32.6		99.0	99.0	7.4	7.4	4.0		7			
						6.3 1.0	0.4	292 272	20.1		8.2		32.6		99.0		7.4		4.0 6.1		7			
					Surface	1.0	0.4	275	20.1	20.1	8.2	8.2	32.6 32.6		97.5 97.5	97.5	7.3 7.3		6.6		3			
						4.3	0.4	241	20.1		8.2		32.6		97.2		7.3	7.3	11.1		4			
IM12	Fine	Moderate	12:31	8.6	Middle	4.3	0.4	262	20.1	20.1	8.2	8.2	32.6		97.3	97.3	7.3		11.3	9.9	3	4	821471	812069
					Bottom	7.6	0.3	279	20.1	20.1	8.2	8.2	32.6		97.5	97.6	7.3	7.3	12.2		5			
					Dottom	7.6	0.3	288	20.1	20.1	8.2	0.2	32.6		97.7	37.0	7.3	7.0	12.2		5			
					Surface	1.0	-	-	20.1	20.1	8.2	8.2	32.7	32.7	97.2	97.1	7.3		5.3		9			
						1.0	-	-	20.1		8.2		32.7		97.0		7.3	7.3	5.5		- 8			
SR1A	Fine	Moderate	11:59	5.1	Middle	2.6 2.6	-	-	-	-	-	-	-	-	-	-	-		-	5.9	-:-	8	819981	812660
					_	4.1	-	-	20.0		8.2		32.7		96.7		7.3		6.5		8			
					Bottom	4.1	-	-	20.0	20.0	8.2	8.2	32.7		96.8	96.8	7.3	7.3	6.5		8			
					Surface	1.0	0.2	228	20.1	20.1	8.3	8.3	32.6	32.6	97.5	97.5	7.3		6.5		7			
					Odridoc	1.0	0.2	232	20.1	20.1	8.3	0.5	32.6	32.0	97.5	31.5	7.3	7.3	6.8		7			
SR2	Fine	Moderate	11:44	4.3	Middle	-	-	-	-		-	-	-	-	-	-	-		-	7.0	-	6	821458	814144
						-	-	- 261	-		- 0.2		- 22.6		- 07.5		- 70		- 70		-			
					Bottom	3.3	0.3	261 264	20.0	20.0	8.3	8.3	32.6 32.7		97.5 97.5	97.5	7.3 7.3	7.3	7.3 7.4		5 6			
					Surface	1.0	0.3	67	20.5		8.3		31.1		116.0		8.7		1.3		3			
					Surface	1.0	0.3	72	20.5	20.5	8.3	8.3	31.1		115.8	115.9	8.7	8.5	1.3		4			
SR3	Fine	Moderate	13:09	8.8	Middle	4.4	0.4	55	20.0	20.0	8.3	8.3	31.4	31.4	110.4	110.1	8.3	0.0	2.8	2.8	4	4	822134	807556
0.10	1 1110	moderate	10.00	0.0	Middle	4.4	0.4	59	20.0	20.0	8.3	0.0	31.4		109.8		8.3		3.0	2.0	4		OLL 101	001000
					Bottom	7.8	0.4	41 41	20.0	20.0	8.3	8.3	31.5		104.4		7.9 7.9	7.9	4.2		4			
						7.8 1.0	0.4	80	20.0		8.1		33.5	1	104.4		7.9		4.3		11			
					Surface	1.0	0.2	83	20.7	20.7	8.1	8.1	33.5	33.5	104.9	105.0	7.7		4.3		11			
0044	F1	0.1	40.00	0.0	AC-LIII.	4.8	0.2	67	20.6	20.0	8.2	0.0	33.5	00.5	104.1	404.4	7.7	7.7	5.6		14	40	047470	007040
SR4A	Fine	Calm	12:03	9.6	Middle	4.8	0.2	72	20.6	20.6	8.2	8.2	33.5	33.5	104.1	104.1	7.7		5.6	5.5	14	12	817179	807818
					Bottom	8.6	0.2	60	20.6	20.6	8.2	8.2	33.5		104.8	104.9	7.7	7.7	6.7		12			
					Bottom	8.6	0.2	64	20.6	20.0	8.2	0.2	33.5		104.9	101.0	7.7	•••	6.6		12			
					Surface	1.0 1.0	0.1	328 340	20.9	20.9	8.2	8.2	33.6 33.6	33.6	107.6 107.7	107.7	7.9 7.9		5.1		6			
						1.0	0.1	340	20.0		0.2		33.0		107.7		7.9	7.9	5.1		-			
SR5A	Fine	Calm	11:47	4.6	Middle	-	-	-		-		-		-	-	-	-		-	5.6		6	816574	810697
					D. W	3.6	0.1	4	20.7	00.7	8.2	0.0	33.7	00.7	108.0	400.0	8.0		6.0		6			
					Bottom	3.6	0.1	4	20.6	20.7	8.2	8.2	33.7	33.7	108.0	108.0	8.0	8.0	6.1		6			
					Surface	1.0	0.0	264	20.9	20.9	8.1	8.1	33.6		107.4	107.4	7.9		5.8		7			
						1.0	0.0	277	20.9		8.1		33.6		107.4		7.9	7.9	5.8		6			
SR6A	Fine	Calm	11:22	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	5.9	-	6	817943	814724
						3.2	0.0	296	20.9		8.1		33.6		107.0		7.9		5.9		- 6			
					Bottom	3.2	0.0	322	20.9	20.9	8.1	8.1	33.6		107.0	107.0	7.9	7.9	5.9		6			
						1.0	0.4	188	20.2		8.2		32.7		94.1		7.0		4.3		6			
					Surface	1.0	0.4	195	20.2	20.2	8.2	8.2	32.7	32.7	94.1	94.1	7.0	7.1	4.4	İ	6			
SR7	Fine	Moderate	10:52	16.4	Middle	8.2	0.5	191	20.2	20.2	8.2	8.2	32.7	32.7	94.5	94.5	7.1		4.8	4.2	6	6	823634	823747
0		.viouorus6			middio	8.2	0.5	204	20.2	20.2	8.2	U.L	32.7		94.5	00	7.1		4.5		6		020004	320.47
					Bottom	15.4	0.4	202	20.1	20.2	8.2	8.2	32.7		94.6	94.6	7.1	7.1	3.7	-	7			
						15.4 1.0	0.4	214	20.2		8.2		32.7		94.6 99.6		7.1		3.7		7			1
					Surface	1.0	-		20.1	20.1	8.3	8.3	32.4 32.4		98.9	99.3	7.5 7.4		3.2	1	4			
SR8	F:	Madaget	10:04	4.6	Madella	-	-	-	-		-		-		-		-	7.5	-	2.0	-	6	020200	811599
SNS	Fine	Moderate	12:24	4.6	Middle	-	-	-	-	1 -	-	1 -	-	1 -	-	1 -	-		-	3.0	-	0	820386	011599
					Bottom	3.6	-	-	20.1	20.1	8.3	8.3	32.1	32.1	97.5	97.4	7.3	7.3	2.9		7			
					Dottom	3.6	-	-	20.1	20.1	8.3	0.0	32.1	JZ. 1	97.2	31.4	7.3	1.0	2.8		7			

11 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resi	lits on		11 December 21	during Mid-		•															
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dept	th (m)	Current Speed	Current Direction		emperature (°C)	pН	+	linity (ppt)		aturation (%)	Disso	gen	Turbidity(·	Suspende (mg	/L)	Coordinate HK Grid	Coordinate HK Grid
Otation	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value Avera			Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	204 217	20.4	20.4	8.3	32.2		99.4	99.3	7.4		5.4 5.3	ı	5			
C1	Misty	Calm	19:48	8.0	Middle	4.0	0.1	222	20.3	20.3	8.3 8.3	32.3		98.5	98.6	7.4	7.4	6.3	6.5	6	5	815616	804240
01	iviisty	Callii	19.40	0.0	ivildule	4.0	0.1	225	20.3	20.3	8.3	32.3	3	98.6	90.0	7.4		6.3	0.5	5	3	013010	004240
					Bottom	7.0	0.1	242 258	20.3	20.3	8.3 8.3	32.3		99.5 99.7	99.6	7.4 7.5	7.5	7.9 7.8	ı	6 5			
					Surface	1.0	0.1	228	20.8	20.8	8.2	31.8	31.8	115.5	115.5	8.6		3.1		4			
					Ouriaco	1.0 4.6	0.1	236	20.8		8.2	31.8	3	115.5		8.6	8.6	3.1 4.0	ı	3 4			
C2	Fine	Rough	21:16	9.1	Middle	4.6	0.1	217 226	20.8	20.8	8.2 8.2	31.9		114.3	114.3	8.5 8.5		3.9	4.5	3	4	825664	806954
					Bottom	8.1	0.1	209	20.8	20.8	8.2	32.4	32.4	109.1	109.1	8.1	8.1	6.6	ı	4			
						8.1 1.0	0.1	220 88	20.8		8.2	32.4		109.1		8.1 7.8		6.6 4.1	$\overline{}$	3			
					Surface	1.0	0.2	90	20.8	20.8	8.2	33.0	33.0	105.3	105.4	7.8	7.8	4.1	ı	4			
C3	Fine	Rough	19:19	12.1	Middle	6.1	0.2	84	20.8	20.8	8.2	33.0		105.0	105.0	7.8	7.0	4.1	4.8	3	3	822087	817793
						6.1 11.1	0.2	92 61	20.8		8.2	33.0		105.0		7.8		4.1 6.3	ĺ	2			
					Bottom	11.1	0.1	65	20.8	20.8	8.1	33.1	33.1	104.1	104.1	7.7	7.7	6.3		3			
					Surface	1.0	0.1	127 136	20.6	20.6	8.3	32.1		103.5	103.5	7.7		4.0	ı	3			
IM1	Misty	Calm	19:26	4.6	Middle	-	-	-	-			- 32.1	_	-		-	7.7	4.1	5.0	-	4	817934	807122
IIVI	iviisty	Cairii	19.20	4.0	Wilddle	-	-		-	-	-	-		-	-	-		-	5.0	-	4	01/934	00/122
					Bottom	3.6 3.6	0.1	126 133	20.5	20.5	8.3 8.3	32.1		103.0	103.0	7.7	7.7	5.8 5.9	ĺ	4 5			
					Surface	1.0	0.4	345	20.3	20.3	8.3 8.3	31.9		99.1	99.1	7.4		4.2		5			
					Ouriaco	1.0	0.4	317 344	20.3	20.0	8.3	31.9)	99.0	33.1	7.4	7.4	4.2	ı	4			
IM2	Misty	Calm	19:19	6.4	Middle	3.2 3.2	0.4	316	20.2	20.2	8.3 8.3	32.0		98.1 98.1	98.1	7.4 7.4		5.5 5.6	5.9	5 4	4	818163	806178
					Bottom	5.4	0.4	352	20.2	20.2	8.3	32.1	32.1	99.4	99.5	7.5	7.5	7.9	ı	3			
						5.4 1.0	0.5	354 324	20.2		8.3	32.1	<u> </u>	99.5		7.5 7.5		7.9 3.5	_	3			
					Surface	1.0	0.2	324	20.2	20.2	8.3	31.8		99.9	100.0	7.5	7.5	3.7	ĺ	3			
IM3	Misty	Calm	19:11	6.8	Middle	3.4 3.4	0.2	323	20.3	20.3	8.3 8.3	32.0		98.3	98.3	7.4 7.4	7.5	5.6	5.2	3 4	3	818804	805593
						5.8	0.3	354 320	20.3		8.3	32.0		98.3 99.5		7.4		5.6 6.3	ı	3			
					Bottom	5.8	0.2	332	20.3	20.3	8.3	32.1	32.1	99.5	99.5	7.4	7.4	6.4	Щ_	4			
					Surface	1.0 1.0	0.2	238 249	20.3	20.3	8.3	31.9		100.8	100.7	7.6 7.5		1.4	ı	<2 <2			
IM4	Misty	Calm	19:02	8.6	Middle	4.3	0.1	202	20.2	20.2	8.3 8.3	32.1		99.0	99.1	7.4	7.5	2.5	2.5	3	2	819707	804624
IIVI	iviisty	Callii	19.02	0.0	ivildule	4.3	0.1	222	20.2	20.2	8.3	32.1		99.1	33.1	7.4		2.5	2.5	2	- 2	019707	004024
					Bottom	7.6 7.6	0.2	240 240	20.2	20.2	8.3 8.3	32.1		99.8	99.9	7.5 7.5	7.5	3.4	ĺ	3 2			
					Surface	1.0	0.4	252	20.3	20.3	8.3	32.0	32.0	98.4	98.4	7.4		6.1		11			
						1.0 3.9	0.4	263 235	20.3		8.3	32.0)	98.4 98.6		7.4 7.4	7.4	6.2 7.9	ı	10 10			
IM5	Misty	Calm	18:53	7.8	Middle	3.9	0.4	244	20.3	20.3	8.3	32.0		98.7	98.7	7.4		7.8	7.4	9	10	820741	804886
					Bottom	6.8	0.3	250	20.3	20.3	8.3	32.0		99.1	99.1	7.4	7.4	8.3	ı	10			
					0	6.8 1.0	0.3	252 268	20.3	00.0	8.3	32.0		99.1	107.0	7.4 8.1		8.1 1.2	_	9			
					Surface	1.0	0.5	285	20.3	20.3	8.3	31.4	31.3	106.8	107.0	8.0	8.0	1.2	ı	4			
IM6	Misty	Calm	18:46	7.2	Middle	3.6 3.6	0.5 0.5	262 283	20.2	20.2	8.3 8.3	31.4		105.6	105.6	7.9 7.9		1.4	1.6	4	4	821080	805819
					Bottom	6.2	0.4	269	20.2	20.2	8.3	31.4		105.4	105.5	7.9	7.9	2.2	ı	3			
					Bottom	6.2	0.5	281	20.2	20.2	8.3	31.4		105.5	105.5	7.9	1.5	2.2	ь—	3			
					Surface	1.0	0.5 0.5	214	20.3	20.3	8.3 8.3	31.3		108.1	108.1	8.1 8.1		1.1	ı	4			
IM7	Misty	Calm	18:41	8.0	Middle	4.0	0.4	219	20.2	20.2	8.3	31.4	31./	106.3	106.3	8.0	8.1	1.2	1.4	5	4	821363	806834
	,					4.0 7.0	0.4	229 226	20.2		8.3	31.4 31.5		106.3		8.0		1.2	1	4 5			
					Bottom	7.0	0.4	239	20.2	20.2	8.3	31.4		106.1	106.1	8.0	8.0	1.9	ı	4			
					Surface	1.0	0.4	21	20.9	20.9	8.2 8.2	32.2		113.6		8.4		4.6		4			
						1.0 4.3	0.4	22 25	20.8		8.2	32.2	!	113.4 112.5		8.4 8.3	8.4	4.7 4.9	l	5 3			
IM8	Fine	Rough	20:52	8.6	Middle	4.3	0.3	26	20.8	20.8	8.2	32.3	32.3	112.5	112.5	8.3		5.0	5.2	4	4	821806	808154
					Bottom	7.6	0.3	22	20.8	20.8	8.2 8.2	32.3 32.3		110.8	110.8	8.2 8.2	8.2	6.1 6.1	ı	3 2			
DA: Denth-Aver			1			7.6	0.3	22	20.8		6.2	32.3)	110.8	L	8.2		0.1		Z			1

11 December 21 during Mid-Ebb Tide

Martin M	Water Qual					11 December 21	during Mid-	Current	9	T		T .				DO S	aturation	Disso	olved			Suspende	d Solids		T
Marche M	Monitoring	Weather	Sea	Sampling	Water	Sampling Dent	th (m)			Water Te	emperature (°C)	ı	pН	Salir	nity (ppt)					Turbidity	(NTU)			Coordinate HK Grid	Coordinate HK Grid
Mary Property Pr	Station	Condition	Condition	Time	Depth (m)	Ouriping Depi	()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		(Easting)
Mary Property Pr							1.0	0.2	23	20.9		8.2		32.3		113.5		8.4		4.1		3			
March Paul						Suпасе	1.0	0.2	23	20.9	20.9		8.2	32.3	32.3	113.4	113.5	8.4	8.4	4.2					
Mary Mary	IM9	Fine	Rough	20:47	8.2	Middle					20.8		8.2		32.3		112.6				5.4		3	822103	808827
Mary Mary																									
Mode Proper Rough Proper Proper Rough Prope						Bottom					20.8		8.2		32.3		112.2		8.3						
Mode Five Rough 20-ab 7-4 Mode 3-7 0-2						Surface					20.8		8.2		1		112.4					3			
Miles Marie Mari						Ounacc					20.0		0.2				112.4		8.3						
Martin	IM10	Fine	Rough	20:40	7.4	Middle					20.8		8.2				110.9				4.4		3	822379	809790
						D-#					20.0		0.0				100 F		0.4						
Mile Five Rough 2030 79 Model 10 0.4 601 207						Bottom	6.4	0.2	45	20.8	20.8	8.2	8.2	32.3	02.0		109.5	8.1	8.1	4.5					
Mile Fre Rough 20.0 7.9 Mode 4.0 0.3 69 20.7						Surface					20.7		8.2		32.3		111.8								
Five Node 20,00																			8.3						
Button B	IM11	Fine	Rough	20:30	7.9	Middle					20.7		8.2		32.3		110.4				3.9		3	822045	811446
Marie Mari						Bottom	6.9	0.4	44	20.7	20.7	8.2	8.2	32.4		108.1	108.1	8.0	8.0	4.0		2			
Miles Fixe Rough 2022 8.6 Mided 4.3 0.1 1.1 2.0 2.0 1.1 2.0 2.0 1.1 2.0 2.						Dottom					20.7		0.2				100.1		0.0						
Michael Free Rough 20 22 8.8 Michael 4.3 6.1 1.1 20 26 20 8 2.7 32 5 32 5 0.5 0.08 31 0.5 0.						Surface					20.7		8.2				109.1								
Fire Rough	11440	F1	D	00.00							00.0		0.0				400.5		8.1					004404	040040
Second Fig. Surface Fig. Surfa	IM12	Fine	Rough	20:22	8.6	Middle	4.3	0.1	125	20.6	20.6	8.2	8.2	32.5	32.3		108.5	8.1		5.6	5.3	3	3	821464	812048
Second S						Bottom					20.6		8.2				108.3		8.0						
SRIA Fine Moderate 19-56 4-2 Moderate 19-56 4-2 Moderate 19-56 4-1 Moderate 19-56 Moderate																									
Second Fire Moderate 19-26 4-2 Mode 2-1 - - - - - - - - -						Surface					20.8		8.2				105.8								
Second S	SP1A	Fine	Moderate	10.56	12	Middle	2.1				_		_				_		7.8		4.1		3	810070	812665
Second S	011111	1 1110	moderate	10.00		Middle															****		Ü	010010	0.2000
SR2 Fine Moderate 19.42 4.3 Surface 1.0 0.2 62 207 207 82 82 82 82 82 82 82 82 82 82 82 82 82						Bottom		-	-		20.8		8.1		32.8		105.3		7.8						
Second Fire Moderate 19-42 4.3 Mode						0(0.2	62		00.7		0.0		00.5		400.0								
Second Fire Moderate 1942 4.3 Middle						Suпасе		0.3			20.7		8.2		32.5		108.3		8.0	4.8		3			
Bottom Simple Bottom Simple Bottom Simple S	SR2	Fine	Moderate	19:42	4.3	Middle	-		-	-	-		-				-	-	0.0	-	5.2	-	3	821473	814145
Second S									- 61			-													
SR3 Fine Rough 20.56 8.3 Surface 1.0						Bottom					20.7		8.2		32.6		107.7		8.0						
SR3 Fine Rough 20:56 8.3 Middle 42 0.3 216 208 208 82 32 32 32 1132 132 84 5 5.0 6 6 6 4 4 82141 8075 8075 8075 8075 8075 8075 8075 8075						Surface					20.8		8.2				114 9								
Section Fine Rough August Bottom August Bottom August Aug						Gundoo					20.0		0.2				111.0		8.5						
Bottom	SR3	Fine	Rough	20:56	8.3	Middle					20.8		8.2				113.2				6.6		4	822141	807587
Second Part Second Part Second Part P						D. II.					00.0		0.0				444.0		0.0						
SRAA Misty Calm 2007 9.0 Middle 4.5 0.1 70 20.5 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2						DOLLOTT					20.6		0.2				111.0		0.3						
SRAA Misty Calm 20.07 9.0 Middle 4.5 0.1 70 20.5 20.5 8.2 8.2 8.2 32.0 30. 98.4 7.3 7. 7. 3.4 3.4 3.5 5. 5 817205 8078 Bottom 8.0 0.1 66 20.5 20.5 8.3 8.3 32.0 30. 98.6 98.4 7.3 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.						Surface		0.2			20.5		8.3	32.0	32.0		98.8	7.4							
SR6A Misty Calm 20.07 9.0 Mindle 4.5 0.1 73 20.5 20.5 8.2 8.2 32.0 32.0 88.3 89.4 73 3.5 3.5 5 817.20 807.8 80.0 1 8.0 0.1 66 20.5 8.3 8.3 32.0 32.0 88.6 87.7 74 74 4.2 5 5 817.20 807.8 80.0 1 8.0 0.1 67 20.5 8.3 8.3 32.0 32.0 88.7 87.7 75 8.1 75 817.20 807.8 80.0 1.0 8.0 20.7 8.3 8.3 32.3 32.3 32.3 32.3 32.3 32.3 3																			7.4						
SR5A Misty Calm 20:21 4.8 Surface 1.0 0.1 67 20.5 8.3 8.3 8.3 32.0 32.0 8.8 8.7 7.4 7.4 4.2 5 7.7 7.7 5.1 7.7 7.7 6.9 7.7 7.7 6.9 8.3 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	SR4A	Misty	Calm	20:07	9.0	Middle					20.5		8.2				98.4				3.2		5	817205	807806
SRSA Misty Calm 20:21 4.8 Middle 10: 0.1 67 20.5 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3						Bottom					20.5		8.3		32.0		98.7		7.4						
SR5A Misty Calm 20.23 4.0 Middle 1. 1. 20.1 87 20.7 20.7 8.3 8.3 8.3 32.3 9.3 103.8 103.6 7.7 7.7 5.1 5.1 6.0 1. 8 16578 8107 Bottom 3.0 0.1 86 20.7 20.7 8.3 8.3 8.3 32.3 103.9 104.0 17.7 7.7 6.9 8.8 8 16578 8107 SR6A Misty Calm 20.21 4.8 Middle 1. 1. 0.1 226 20.7 20.7 8.3 8.3 8.3 32.3 104.0 104.0 7.7 7.7 7.6 6.8 8 8 107 SR6A Misty Calm 20.21 4.8 Middle 1. 1. 1. 0.1 226 20.7 20.7 8.3 8.3 8.3 32.3 104.0 104.0 7.7 7.7 7.7 6.9 8.8 8 16578 8107 SR6A Misty Calm 20.21 4.8 Middle 1. 1. 1. 0.1 226 20.7 20.7 8.3 8.3 8.3 32.3 104.0 104.0 7.7 7.7 7.7 6.9 8.8 8 16578 8107 SR6A Misty Calm 20.21 4.8 Middle 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.																						5			
SR5A Misty Calm 20.23 4.0 Middle						Surface					20.7		8.3		32.3		103.8					8			
Bottom Surface Surfa	SP5A	Miety	Calm	20.23	4.0	Middle					_						_		7.7		6.0		8	816578	810715
SR6A Misty Calm 2021 4.8 Surface Surface 1.0 0.1 226 20.7 20.7 8.3 8.3 32	ONOA	wiioty	Callii	20.20	4.0	Wildelic			-		_	-	_			-	_				0.0		o	010070	010713
SR6A Misty Calm 20:21 4.8 Surface 1.0 0.1 226 20.7 20.7 8.3 8.3 8.3 32.3 32.3 104.2 104.2 7.7 7.7 7.7 4.2 4.9 4.9 10.0 10.0 1.0 0.1 231 20.7 10.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.						Bottom					20.7		8.3		32.3		104.0		7.7						
SR6A Misty Calm 20:21 4.8 Middle 1.0 0.1 231 20.7 20.7 8.3 8.3 32.3 104.2 104.2 7.7 7.7 4.2 4.0 4.9 10 10 10 10 10 10 10 10 10 10 10 10 10																									
SR6A Misty Calm 20:21 4.8 Middle - - - - - - - - -						Surface					20.7		8.3				104.2		77						
Bottom 3.8 0.1 214 207 20.7 8.3 8.3 8.3 32.3 103.9 103.9 17.7 7.7 5.5 7.7 5.7 7.7 7	SR6A	Misty	Calm	20:21	4.8	Middle					-		-				-		1.7		4.9		9	817970	814717
SR7 Fine Moderate 18:44 16.6 Surface 1.0 0.4 36 20.9 20.9 8.1 8.1 8.1 33.5 33.5 99.5 99.5 7.3 7.3 4.3 3 4.3 3 4.5 99.5 99.5 7.3 7.3 4.3 3 4.3 3 7.3 4.3 3 7.3 4.3 3 7.3 4.3 7.		,										- 0.2													
SR7 Fine Moderate 18.44 16.6 Middle						Bottom					20.7		8.3	32.3	32.3		103.9		7.7						
SR7 Fine Moderate 18:44 16.6 Middle 8.3 0.2 358 20.9 20.9 8.1 8.1 33.5 99.6 90.6 7.3 7.3 4.3 3.7 3.7 4.3 3.6 90.6 90.6 90.6 90.6 90.6 90.6 90.6 90						Surface					20.0		8.1		33.5		99.5								
RR Fine Moderate 20:14 3.7 Middle 8.3 0.2 329 20.9 20.9 8.1 0.1 33.5 90.6 99.0 7.3 3.7 4.3 4.4 4 623037 6237 6237 6237 6237 6237 6237 6237 62						Ounace					20.0		0.1		55.5		33.3		7.3						
Bottom 15.6 0.3 307 20.9 20.9 8.1 8.1 3.5 33.5 38.5 98.7 7.2 7.2 4.9 3 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9	SR7	Fine	Moderate	18:44	16.6	Middle					20.9		8.1		33.5		99.6				4.3		4	823657	823757
SR8 Fine Moderate 20:14 3.7 Middle 2.77 - 20.9 21.0 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2						D-#					20.0		0.4		22.5		00.7		7.0		ł				
SR8 Fine Moderate 20:14 3.7 Middle 1.0 - 1.21.2 21.2 8.2 0.2 32.6 0.5 106.5 100.9 7.8 7.8 3.9 5. Bottom 2.7 - 1.20.9 21.0 8.2 8.2 8.2 32.6 105.0 105.1 1						Bottom	15.6	0.3		20.9	20.9	8.1	8.1	33.5	33.3	98.7	98.7	7.2	1.2	4.9	<u> </u>	4			
SR8 Fine Moderate 20:14 3.7 Middle 21.2 8.2 32.6 105.5 7.8 7.8 3.9 5 5 7.8 3.9 5 7.0 5 7.8 3.9 5 7.0 5 7.8 3.9 5 7.0 5 7.8 3.9 5 7.0 5 7.8 3.9 5 7.0 5 7.0 5 7.8 3.9 5 7.0 5 7						Surface			-		21.2		8.2				106.5								
SN8 Fine Moderate 2U:14 3.7 Middle							1.0		-			8.2		32.6		106.5			7.8	3.9					
Bottom 2.7 21.0 21.0 8.2 8.2 32.5 32.5 105.1 105.1 7.8 7.8 3.9 3	SR8	Fine	Moderate	20:14	3.7	Middle	-		-		-	-	-	-	† -	-	-			-	3.9		4	820383	811599
2.7 21.0 8.2 32.5 105.2 7.8 3.9 3						Bottom			-		21.0		8.2				105.1		7.8		1				
DA: Depth-Averaged	DA: D " A						2.7	-	-	21.0		8.2		32.5		105.2		7.8		3.9	<u> </u>	3			

11 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ılts on		11 December 21	during Mid-	Flood Ti	ide																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	pl	+	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average		Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	24 24	20.2	20.2	8.3	8.3	31.1		107.8 107.7	107.8	8.1	0.4	5.5 5.5		9 10			
C1	Misty	Calm	13:44	7.8	Middle	3.9 3.9	0.3	31 33	20.2	20.2	8.3 8.3	8.3	31.1 31.1	31.1	107.0 106.9	107.0	8.1 8.1	8.1	6.9 6.8	6.5	10 11	10	815598	804233
					Bottom	6.8	0.3	28	20.2	20.2	8.3	8.3	31.1	31.1	106.5	106.5	8.0	8.0	7.1		10			
					Surface	6.8 1.0	0.3	30 68	20.2	21.3	8.3 8.3	8.3	31.1		106.4 124.7	124.7	8.0 9.2		7.1		11 4			
						1.0 5.1	0.1 0.1	69 31	21.3 20.9		8.3 8.2		31.8 32.1	-	124.6 112.2		9.2 8.3	8.8	3.3 3.8		3 4			
C2	Sunny	Rough	12:46	10.2	Middle	5.1	0.1	31	20.9	20.9	8.2	8.2	32.1	32.1	111.9	112.1	8.3		3.8	4.6	3	4	825676	806925
					Bottom	9.2 9.2	0.1 0.1	31 34	20.8	20.8	8.2	8.2	32.3 32.3	32.3	109.9 109.9	109.9	8.1 8.1	8.1	6.7 6.8		4 5			
					Surface	1.0	0.3	267 268	21.1	21.1	8.2	8.2	33.2	33.2	108.2 108.0	108.1	7.9 7.9		3.3		5 6			
C3	Sunny	Rough	14:44	11.8	Middle	5.9 5.9	0.3	250 261	20.9	20.9	8.2	8.2	33.4 33.4		100.7 100.6	100.7	7.4 7.4	7.7	5.5 5.5	5.5	5	5	822091	817793
					Bottom	10.8	0.3	252	20.9	20.9	8.2	8.2	33.3	22.2	100.7	100.8	7.4	7.4	7.6		5			
					Surface	10.8 1.0	0.3	258 353	20.9	20.2	8.2 8.3	8.3	33.3 31.1		100.8 108.5	108.5	7.4 8.2		7.7 3.8		6			
						1.0	0.1	325	20.2		8.3	0.3	31.1		108.4	100.5	8.2	8.2	3.8		5			
IM1	Misty	Calm	14:05	4.2	Middle	-	-	-	-	-	-	•	-	-	-	-	-		-	4.2	-	6	817930	807130
					Bottom	3.2 3.2	0.1 0.1	341 342	20.2	20.2	8.3	8.3	31.1 31.1	31.1	108.2 108.3	108.3	8.2 8.2	8.2	4.6 4.6		5 6			
					Surface	1.0	0.2	18 19	20.2	20.2	8.3	8.3	31.1		107.7 107.7	107.7	8.1 8.1	8.1	3.4		6 7			
IM2	Misty	Calm	14:13	6.2	Middle	3.1 3.1	0.3	11 11	20.2	20.2	8.3 8.3	8.3	31.1 31.1		107.6 107.6	107.6	8.1 8.1	0.1	4.9 4.9	4.7	6 7	7	818173	806186
					Bottom	5.2	0.2	358	20.2	20.2	8.3	8.3	31.0	31.0	108.0	108.0	8.2	8.2	5.6		7			
					Surface	5.2 1.0	0.2	329 343	20.2	20.2	8.3	8.3	31.0 31.1		108.0 107.1	107.1	8.2 8.1		5.6 4.6		5			
						1.0 3.2	0.2	349 340	20.2		8.3 8.3		31.1 31.1		107.0 106.6		8.1 8.1	8.1	4.6 5.0	1	6	_		
IM3	Misty	Calm	14:20	6.4	Middle	3.2 5.4	0.3 0.2	313 322	20.2	20.2	8.3 8.3	8.3	31.1 31.1	31.1	106.5 106.0	106.6	8.0		5.0 6.3	5.3	5 5	5	818801	805579
					Bottom	5.4	0.2	329	20.2	20.2	8.3	8.3	31.1	31.1	105.8	105.9	8.0	8.0	6.3		5			
					Surface	1.0	0.5 0.6	2 2	20.2	20.2	8.3	8.3	31.1		107.6 107.6	107.6	8.1	8.1	4.8 5.0		5			
IM4	Misty	Calm	14:29	8.2	Middle	4.1 4.1	0.5 0.5	354 326	20.2	20.2	8.3 8.3	8.3	31.1 31.1		107.3 107.3	107.3	8.1 8.1	0.1	6.3 6.3	6.1	5 4	5	819730	804595
					Bottom	7.2 7.2	0.3	340 313	20.2	20.2	8.3	8.3	31.1	21.1	107.1	107.2	8.1	8.1	7.0		6			
					Surface	1.0	0.4	347	20.2	20.2	8.3	8.3	31.1	21.1	107.9	107.9	8.1		6.5		7			
IM5	Minter	Calm	14:37	7.4	Middle	1.0 3.7	0.4	319 346	20.2		8.3 8.3	8.3	31.1 31.1		107.8 107.3	107.3	8.1 8.1	8.1	6.4 7.1	7.2	8	8	820748	804850
CIVII	Misty	Calm	14.37	7.4		3.7 6.4	0.5 0.4	350 355	20.2 20.2	20.2	8.3 8.3		31.1 31.0		107.2 106.7		8.1 8.1		7.0 8.2	1.2	8	٥	020740	004050
					Bottom	6.4	0.4	327	20.2	20.2	8.3	8.3	31.0	31.0	106.7	106.7	8.1	8.1	8.2		8			
					Surface	1.0	0.1 0.1	262 270	20.2 20.2	20.2	8.3	8.3	31.1 31.1	31.1	108.2 108.2	108.2	8.2 8.2	8.2	2.2		7 8			
IM6	Misty	Calm	14:45	6.8	Middle	3.4 3.4	0.1	268 282	20.2	20.2	8.3	8.3	31.1		108.3	108.3	8.2	0.2	3.5	3.4	7	8	821065	805807
					Bottom	5.8 5.8	0.1 0.1	326 354	20.3	20.3	8.3 8.3	8.3	31.1 31.1	21.1	108.8 108.9	108.9	8.2 8.2	8.2	4.4 4.5	1	8			
					Surface	1.0	0.2	162	20.2	20.2	8.3	8.3	31.1		108.3	108.3	8.2		1.3		7			
IM7	Misty	Calm	14:54	7.6	Middle	1.0 3.8	0.2 0.1	163 195	20.2	20.2	8.3 8.3	8.3	31.1 31.1		108.2 108.5	108.6	8.2 8.2	8.2	1.4 2.2	2.4	6	6	821347	806829
livi/	iviisty	Callii	14.04	7.0		3.8 6.6	0.1	207 268	20.2		8.3 8.3		31.1 31.1		108.6 108.9		8.2 8.2		2.2 3.6	2.4	5 5	U	02134/	000029
					Bottom	6.6	0.1	281	20.2	20.2	8.3	8.3	31.1	31.1	108.9	108.9	8.2	8.2	3.6		6			
					Surface	1.0	0.2 0.2	267 287	21.3 21.3	21.3	8.3	8.3	32.0 32.0	32.0	125.0 124.8	124.9	9.2 9.2	8.9	3.1 3.1		6			
IM8	Sunny	Rough	13:10	8.6	Middle	4.3	0.3	255 267	21.0 21.0	21.0	8.2	8.2	32.3 32.3		116.2 116.2	116.2	8.6 8.6	0.0	3.6	3.6	6	6	821815	808133
					Bottom	7.6 7.6	0.3	256 274	20.9	21.0	8.2	8.2	32.3 32.3	32.3	110.4	110.4	8.2 8.1	8.2	3.9	1	5			
DA: Depth-Aver					1	7.0	U.3	2/4	∠1.U	l	0.2		ა∠.პ	1	110.4		0.1		4.0	1	0	l		

11 December 21 during Mid-Flood Tide

Water Qua	ity Monit	toring Resu	ılts on		11 December 21	during Mid-	Flood Ti	de																
Monitoring	Weather	Sea	Sampling	Water	0	b ()	Current Speed	Current	Water Te	emperature (°C)	-	рН	Salir	nity (ppt)		aturation (%)		olved /gen	Turbidity	(NTU)	Suspende (mg/		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	n (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Surface	1.0	0.2	269	21.0	21.0	8.2	8.2	32.4	32.4	112.5	112.5	8.3		4.0		5			<u> </u>
						1.0 3.9	0.2	271 253	21.0		8.2		32.4		112.4		8.3	8.2	4.1 4.5		6			
IM9	Sunny	Moderate	13:16	7.8	Middle	3.9	0.2	253	20.9	20.9	8.2	8.2	32.5 32.5	32.5	109.0	109.0	8.1	+	4.5	4.5	6 5	5	822113	808812
					Bottom	6.8	0.1	236	20.8	20.8	8.2	8.2	32.5	32.5	108.3	108.3	8.0	8.0	5.0		4			
					Dottom	6.8	0.2	255	20.8	20.0	8.2	0.2	32.5	02.0	108.3	100.0	8.0	0.0	5.1		5			
					Surface	1.0 1.0	0.4	305 318	21.1	21.1	8.2	8.2	32.3	32.3	116.4 116.3	116.4	8.6	+	3.4	-	6 5			
IM10	Sunny	Moderate	13:23	8.2	Middle	4.1	0.3	295	20.7	20.7	8.2	8.2	32.5	32.5	107.9	107.9	8.0	8.3	5.6	4.9	6	5	822390	809781
IIVITO	Suriny	Woderate	13.23	0.2	iviidule	4.1	0.3	311	20.7	20.7	8.2	0.2	32.5	32.3	107.9	107.9	8.0		5.6	4.5	5	3	022390	009761
					Bottom	7.2 7.2	0.2	294 309	20.7	20.7	8.2	8.2	32.5 32.5	32.5	106.7	106.7	7.9	7.9	5.7 5.8		5 5			
					Surface	1.0	0.3	285	21.2	21.2	8.2	8.2	32.6	32.6	118.7	118.7	8.7		3.7		7			
					Sunace	1.0	0.3	286	21.2	21.2	8.2	0.2	32.6	32.0	118.6	110.7	8.7	8.6	3.7		6			
IM11	Sunny	Moderate	13:35	7.8	Middle	3.9 3.9	0.4	287 300	21.0 21.0	21.0	8.2 8.2	8.2	32.6 32.6	32.6	113.7	113.7	8.4 8.4	1	4.0	4.3	6	6	822037	811459
					Bottom	6.8	0.4	305	20.9	20.9	8.2	0.0	32.9	32.9	108.9	100.0	8.0	0.0	5.3		6			
					DOLLOITI	6.8	0.4	308	20.9	20.9	8.2	8.2	32.9	32.9	108.8	108.9	8.0	8.0	5.4		6			
					Surface	1.0 1.0	0.4	286 310	21.0 21.0	21.0	8.2	8.2	32.9 32.9	32.9	110.0	110.0	8.1	1	4.7		6			
1140	0		40.44	0.4	A.C.1.0.	4.1	0.4	294	20.9	00.0	8.2	0.0	33.0	00.0	109.9	100.0	8.0	8.1	5.4		5 5	_	004440	040000
IM12	Sunny	Moderate	13:44	8.1	Middle	4.1	0.4	308	20.9	20.9	8.2	8.2	33.0	33.0	108.6	108.6	8.0		5.4	5.5	5	5	821449	812023
					Bottom	7.1 7.1	0.3	315 336	20.9	20.9	8.2 8.2	8.2	33.0	33.0	107.4	107.4	7.9 7.9	7.9	6.4		5 4			
						1.0	0.3	336	21.4		8.2		32.7		115.6		8.5		4.0		5			
					Surface	1.0	-	-	21.4	21.4	8.2	8.2	32.7	32.7	115.6	115.6	8.5	8.5	4.1		6			
SR1A	Sunny	Moderate	14:10	5.1	Middle	2.6	-	-	-		-	-	-	-	-	-	-	0.5	- 1	4.7	-	5	819973	812660
						2.6 4.1	-	-	21.3		8.2		32.8		114.5		8.4		5.3	-	5			
					Bottom	4.1	-		21.3	21.3	8.2	8.2	32.8	32.8	114.5	114.5	8.4	8.4	5.3		4			
					Surface	1.0	0.1	7	21.0	21.0	8.2	8.2	32.8	32.8	112.6	112.6	8.3		4.0		5			
	_					1.0	0.1	7	21.0		8.2		32.8		112.5		8.3	8.3	4.0		4			
SR2	Sunny	Moderate	14:24	4.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-	t	-	4.2	-	5	821477	814168
					Bottom	3.7	0.0	57	20.9	20.9	8.2	8.2	32.8	32.8	109.7	109.7	8.1	8.1	4.4		4			
						3.7 1.0	0.0	62 23	20.9		8.2 8.3		32.8 31.9		109.7 121.3		8.1 9.0		4.4 3.5		5 4			
					Surface	1.0	0.1	23	21.0	21.0	8.3	8.3	32.0	31.9	121.0	121.2	9.0	8.8	3.5	1	4			
SR3	Sunny	Rough	13:06	9.1	Middle	4.6	0.1	25	20.9	20.9	8.2	8.2	32.1	32.1	116.4	116.3	8.6	0.0	3.9	4.6	4	4	822154	807569
	,					4.6 8.1	0.1	25 28	20.9		8.2 8.2		32.1 32.2		116.2 113.0		8.6 8.4		3.9 6.5		5 4			
					Bottom	8.1	0.2	29	20.9	20.9	8.2	8.2	32.2	32.2	112.9	113.0	8.4	8.4	6.5		5			
					Surface	1.0	0.6	237	20.2	20.2	8.3	8.3	31.1	31.1	107.8	107.8	8.1		4.1		13			
						1.0 4.3	0.6	239 235	20.2		8.3 8.3		31.1		107.7 107.2		8.1 8.1	8.1	4.2		14 12			
SR4A	Misty	Calm	13:23	8.6	Middle	4.3	0.6	249	20.2	20.2	8.3	8.3	31.1	31.1	107.2	107.2	8.1	t	4.6	4.9	13	13	817199	807823
					Bottom	7.6	0.5	234	20.2	20.2	8.3	8.3	31.1	31.1	107.3	107.3	8.1	8.1	5.7		12			
						7.6 1.0	0.6	242 282	20.2		8.3		31.1		107.3		8.1 8.1		5.7 4.1		11 5			
					Surface	1.0	0.3	287	20.2	20.2	8.3	8.3	31.1	31.1	108.1	108.1	8.1	8.1	4.2		4			
SR5A	Misty	Calm	13:07	4.2	Middle		-	-	-		-		-		-		-	0.1	-	4.6	-	5	816615	810703
	,					3.2	0.3	282	20.3		8.3		31.1		108.2		8.2		- 5.1		5			
					Bottom	3.2	0.3	309	20.3	20.3	8.3	8.3	31.1	31.1	108.2	108.2	8.2	8.2	5.0		6			
					Surface	1.0	0.0	274	20.2	20.2	8.3	8.3	31.1	31.1	106.6	106.5	8.0		4.4		7			
						1.0	0.0	276	20.2		8.3		31.1	-	106.4		8.0	8.0	4.6	-	- 6			
SR6A	Misty	Calm	12:41	4.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-	l	-	5.3	-	7	817961	814743
					Bottom	3.0	0.0	287	20.2	20.2	8.3	8.3	31.1	31.1	105.5	105.5	8.0	8.0	6.1		6			
						3.0 1.0	0.0	288 236	20.2		8.3 8.1		31.1		105.4 97.3		8.0 7.1		6.1 3.8		7			1
					Surface	1.0	0.1	237	21.2	21.2	8.1	8.1	33.6	33.6	97.3	97.3	7.1	7.1	3.8	1	6			
SR7	Sunny	Rough	15:15	15.9	Middle	8.0	0.0	213	21.1	21.2	8.1	8.1	33.6	33.5	97.1	97.1	7.1	7.1	3.9	3.9	5	5	823658	823748
	,	-5				8.0 14.9	0.0	231 329	21.2		8.1		33.5 33.5		97.1		7.1		4.0 4.1	1	4			
					Bottom	14.9	0.5	329	21.2	21.2	8.1 8.1	8.1	33.5	33.5	97.3 97.3	97.3	7.1	7.1	4.1	ł	5			
			Ì		Surface	1.0	-	-	21.7	21.7	8.2	8.2	32.5	32.5	115.3	115.3	8.4		3.9		3			
						1.0	-	-	21.6		8.2	0.2	32.5	02.0	115.2		8.4	8.4	4.0	1	3			
SR8	Sunny	Moderate	13:52	4.9	Middle	-	-	-	-	-	-	-	-	- 1	-	- 1	-	ł	-	4.0	-	3	820374	811606
					Bottom	3.9	-	-	21.3	21.3	8.2	8.2	32.5	32.5	113.9	113.9	8.4	8.4	4.1	1	3			
					Bottom	3.9	-	-	21.3	21.3	8.2	0.2	32.5	32.0	113.9	110.8	8.3	0.4	4.1		4			

14 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	lits on		14 December 21	during Mid-		•															
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction		emperature (°C)	pН		nity (ppt)	-	aturation (%)	Disso Oxy	gen	Turbidity		Suspende (mg	/L)	Coordinate HK Grid	Coordinate HK Grid
Otation	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5 0.5	126 128	20.7	20.7	8.2 8.2	30.8	30.8	114.4	114.4	8.6 8.6		8.4 8.4		7			
C1	Fine	Moderate	09:45	8.4	Middle	4.2	0.3	120	20.7	20.8	8.2 8.2	31.1	31.1	110.6	110.6	8.3	8.5	7.5	8.1	8	8	815629	804227
Ci	rine	woderate	09.45	0.4	Middle	4.2	0.4	125	20.8	20.6	8.2	31.1		110.6	110.6	8.3		7.5	0.1	9	0	013029	004221
					Bottom	7.4	0.1	174 187	20.9	20.9	8.2 8.2	31.4		108.7	108.8	8.2	8.2	8.5 8.3		9			
					Surface	1.0	0.4	140	21.0	21.0	8.2 8.2	32.7		114.3	114.2	8.4		2.3		6			
					Surface	1.0	0.5	143	21.0	21.0	8.2	32.8		114.1	114.2	8.4	8.2	2.3		5			
C2	Fine	Calm	10:34	11.8	Middle	5.9 5.9	0.4	135 144	21.1	21.1	8.2 8.2	33.0		109.5	109.6	8.0 8.1		3.6	3.8	6	6	825705	806948
					Bottom	10.8	0.3	140	20.8	20.8	8.2 8.2	33.0	33.0	112.1	112.4	8.3	8.3	5.4		7			
						10.8	0.3	153 109	20.7		8.2	33.0		112.7		8.3 7.4		5.4 1.0		7			
					Surface	1.0	0.2	117	21.0	21.0	8.1	33.4		101.3	101.4	7.4	7.4	1.0		6			
C3	Fine	Calm	08:30	13.0	Middle	6.5	0.1	111	21.1	21.1	8.1	33.5		99.2	99.4	7.3	7.4	1.9	1.9	9	8	822098	817796
						6.5 12.0	0.1	116 87	21.1		8.1	33.5 33.4		99.5 101.2		7.3 7.4		1.9 2.8		8			
					Bottom	12.0	0.1	91	21.0	21.1	8.1	33.4		101.5	101.4	7.4	7.4	2.8		9			
					Surface	1.0	0.3	175	20.9	20.9	8.2	31.4		112.8	112.8	8.5		9.2		10			
						1.0	0.3	176	20.9		8.2	31.4		112.8		8.5	8.5	9.3		10			
IM1	Fine	Moderate	10:05	5.2	Middle	-	-	-	-		-	-	-	-	-	-		-	9.1	-	10	817926	807114
					Bottom	4.2	0.2	163	20.8	20.8	8.2	31.4		112.6	112.7	8.5	8.5	9.0		9			
						4.2 1.0	0.3	163 125	20.8		8.2	31.4		112.7 112.5		8.5 8.5		9.1 5.6		10			
					Surface	1.0	0.4	129	20.8	20.8	8.2	31.1		112.5	112.5	8.5	8.5	5.8		6			
IM2	Fine	Moderate	10:13	6.8	Middle	3.4 3.4	0.1	76 77	20.7	20.7	8.2 8.2	31.1	31.1	111.4	111.4	8.4 8.4	0.0	8.2 8.3	7.0	7 6	6	818143	806167
					D. #	5.8	0.1	158	20.7	00.7	8.2	31.1		111.4	111.0	8.4	0.4	7.2		6			
					Bottom	5.8	0.0	172	20.7	20.7	8.2	31.1	31.1	111.8	111.8	8.4	8.4	7.2		7			
					Surface	1.0	0.2	58 60	20.8	20.8	8.2 8.2	31.1	31.1	112.2	112.2	8.4 8.4		7.5 7.7		7 8			
IM3	Fine	Moderate	10:20	7.1	Middle	3.6	0.2	116	20.7	20.7	8.2 8.2	31.0	31.0	111.6	111.6	8.4	8.4	8.0	8.5	6	7	818778	805612
liviS	riile	Woderate	10.20	7.1	Wilde	3.6	0.2	119	20.7	20.1	8.2	31.0		111.6	111.0	8.4		8.6	0.5	7	,	010770	003012
					Bottom	6.1	0.1	120 129	20.7	20.7	8.2 8.2	31.0		111.8	111.8	8.4 8.4	8.4	9.9 9.5		6 7			
					Surface	1.0	0.1	130	20.7	20.7	8.2	31.1	31.1	111.0	111.0	8.4		8.4		6			
					Gundoo	1.0 4.1	0.1 0.1	130 133	20.7	20.7	8.2	31.1		111.0		8.4	8.4	8.5		5			
IM4	Fine	Moderate	10:30	8.1	Middle	4.1	0.1	133	20.7	20.7	8.2 8.2	31.1	31.1	109.8	109.8	8.3		9.8	9.5	6 5	5	819724	804613
					Bottom	7.1	0.2	164	20.7	20.7	8.2	31.1		109.9	109.9	8.3	8.3	10.6		4			
						7.1 1.0	0.2	180 333	20.7		8.2	31.1		109.9 112.6		8.3 8.5		10.5 5.7		5			
					Surface	1.0	0.1	335	20.8	20.8	8.2	31.1		112.6	112.6	8.5	0.5	5.8		6			
IM5	Fine	Moderate	10:38	8.1	Middle	4.1	0.2	338	20.7	20.7	8.2	31.1		111.6	111.6	8.4	8.5	9.6	7.7	6	5	820733	804887
					_	4.1 7.1	0.2	311 264	20.7		8.2	31.1		111.6 112.0		8.4 8.4		9.5 7.9		5			
					Bottom	7.1	0.3	282	20.7	20.7	8.2	31.1		112.2	112.1	8.5	8.5	7.8		4			
					Surface	1.0	0.5 0.5	120	20.9	20.9	8.2 8.2	31.3	31.3	112.0 111.8	111.9	8.4		6.1		5 4			
						1.0 3.7	0.5	121 165	20.9		0.1	31.3 31.4		109.2		8.4 8.2	8.3	6.1		5	_		
IM6	Fine	Moderate	10:45	7.3	Middle	3.7	0.2	171	20.8	20.8	8.1	31.4		109.2	109.2	8.2		6.0	6.3	5	5	821068	805813
					Bottom	6.3	0.2	138 142	20.8	20.8	8.1 8.1	31.4		109.0	109.0	8.2	8.2	6.8		7			
					Surface	1.0	0.1	165	20.9	20.9	0.1	31.4		109.2	109.2	8.2		9.6		5			
					Surface	1.0	0.1	170	20.9	20.9	8.1	31.4		109.2	109.2	8.2	8.2	9.6		4			
IM7	Fine	Moderate	10:54	8.4	Middle	4.2 4.2	0.0	165 171	20.8	20.8	8.1 8.1	31.4		108.6 108.6	108.6	8.1 8.1		10.1	10.8	6 7	6	821351	806837
					Bottom	7.4	0.3	129	20.8	20.8	8.2 8.2	31.4	31.4	108.7	108.7	8.2	8.2	12.8		6			
					DOMOIT	7.4	0.3	138	20.8	20.0	8.2	31.4		108.7	100.7	8.2	0.2	12.1		7			1
					Surface	1.0	0.1	130 140	20.8	20.8	8.2 8.2	32.6 32.6		113.5 113.4	113.5	8.4		2.6		5 6			
IM8	Fine	Calm	10:07	7.6	Middle	3.8	0.1	112	20.8	20.8	8.2	32.6	32.6	112.6	112.5	8.3	8.4	3.7	3.5	4	5	821847	808160
		- Cuiii			madio	3.8 6.6	0.1 0.1	113 119	20.8		8.2 0.2	32.6 32.7		112.4 111.3		8.3 8.2		3.7 4.1	0.5	5 4	Ŭ	02.0.7	555.50
					Bottom	6.6	0.1	119	20.8	20.8	8.2	32.7		111.3	111.3	8.2	8.2	4.1	1	5			
DA: Denth-Aver			·								 												

14 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	toring Resu	ılts on		14 December 21	during Mid-	Ebb Tide	e																
Monitoring	Weather	Sea	Sampling	Water	0	t. ()	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)		aturation (%)		olved /gen	Turbidity	(NTU)	Suspende (mg		Coordinate	
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	n (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Surface	1.0	0.2	82	20.8	20.8	8.2	8.2	32.6	32.6	110.5	110.5	8.2		4.0		5			Ť
						1.0 3.6	0.2	85 96	20.8		8.2 8.2		32.6 32.6		110.4 110.0		8.2 8.1	8.2	3.9 4.3	-	4			
IM9	Fine	Calm	10:01	7.2	Middle	3.6	0.2	97	20.8	20.8	8.2	8.2	32.6	32.6	110.0	110.0	8.1		4.5	4.9	5	4	822114	808833
					Bottom	6.2	0.2	100	20.8	20.8	8.2	8.2	32.7	32.7	109.9	109.9	8.1	8.1	6.2		3			
						6.2 1.0	0.2	105 112	20.8		8.2		32.7 32.6		109.9		8.1 8.1		6.2 2.1		3			+
					Surface	1.0	0.4	115	20.8	20.8	8.2	8.2	32.6	32.6	109.3	109.3	8.1	8.1	2.1		4			
IM10	Fine	Calm	09:53	7.2	Middle	3.6 3.6	0.4	110 119	20.8	20.8	8.2	8.2	32.7 32.7	32.7	109.2	109.2	8.1 8.1		3.2	3.3	6 5	5	822380	809797
					Bottom	6.2	0.3	105	20.7	20.7	8.2	8.2	32.8	32.8	109.5	109.5	8.1	8.1	4.4	1	5			
					Bottom	6.2 1.0	0.4	114 107	20.6	20.7	8.2	0.2	32.8	32.0	109.5	100.0	8.1	0.1	4.5		6			
					Surface	1.0	0.2	107	20.9	20.9	8.2	8.2	32.7	32.7	110.3	110.2	8.1 8.1		1.3	-	6			
IM11	Fine	Calm	09:42	8.8	Middle	4.4	0.2	115	20.9	20.9	8.2	8.2	32.9	32.9	108.7	108.7	8.0	8.1	2.6	2.5	5	6	822059	811467
						4.4 7.8	0.2	122 40	20.9		8.2 8.2		32.9 32.9		108.7		8.0 8.1		2.6 3.6		6 5			
					Bottom	7.8	0.2	41	20.9	20.9	8.2	8.2	32.8	32.9	110.3	110.5	8.2	8.2	3.6		5			
					Surface	1.0	0.2	105	20.9	20.9	8.2	8.2	33.0	33.0	109.7	109.6	8.1		1.6		6			
						1.0 4.8	0.3	107 117	20.9		8.2 8.2		33.0		109.5 107.6		8.1 7.9	8.0	1.6 2.7		7 5	_		
IM12	Fine	Calm	09:35	9.6	Middle	4.8	0.2	120	21.0	21.0	8.2	8.2	33.0	33.0	107.5	107.6	7.9		2.7	2.7	6	6	821441	812032
					Bottom	8.6 8.6	0.2	105 109	21.0 21.0	21.0	8.2	8.2	33.1	33.1	108.1	108.3	8.0	8.0	3.8	-	5			
					Surface	1.0	-	-	21.0	21.0	8.2	8.2	32.9	32.9	110.4	110.4	8.1		3.8		5			_
					Sunace	1.0	-	-	21.0	21.0	8.2	0.2	32.9	32.9	110.3	110.4	8.1	8.1	3.8		6			
SR1A	Fine	Calm	09:08	5.0	Middle	2.5 2.5	-	-	-	-	-	-	-	-	-	-	-	+	-	4.1	-	5	819972	812661
					Bottom	4.0	-		21.0	21.0	8.2	8.2	33.0	32.9	110.1	110.3	8.1	8.1	4.5		4			
						4.0 1.0	0.2	108	21.0		8.2 8.2		32.9		110.4		8.1		4.4 2.1		5			
					Surface	1.0	0.2	112	20.9	20.9	8.2	8.2	33.1	33.1	108.0	108.0	8.0	8.0	2.2		7			
SR2	Fine	Calm	08:52	4.6	Middle	-	-	-	-		-	-	-	-	-	-	-	0.0	-	2.9	-	6	821453	814151
						3.6	0.2	114	20.9		8.2		33.1		108.6		8.0		3.6		- 5			
					Bottom	3.6	0.2	114	20.9	20.9	8.2	8.2	33.0	33.0	108.6	108.6	8.0	8.0	3.7		4			
					Surface	1.0	0.1	157 171	20.8	20.8	8.2	8.2	32.6 32.6	32.6	114.6	114.5	8.5 8.5	ļ	3.0	-	6 5			
SR3	Fine	Calm	10:13	9.0	Middle	4.5	0.1	143	20.8	20.8	8.2	8.2	32.6	32.6	111.6	111.5	8.3	8.4	4.1	4.3	4	5	822135	807556
SNS	Fille	Callii	10.13	5.0	iviidule	4.5 8.0	0.1	149 157	20.8	20.0	8.2	0.2	32.6	32.0	111.3	111.5	8.2		4.1 5.9	4.3	5	3	022133	807330
					Bottom	8.0	0.2	162	20.8	20.8	8.2	8.2	32.7	32.7	111.1	111.2	8.2	8.2	6.0		4			
					Surface	1.0	0.4	77	20.9	20.9	8.1	8.1	31.4	31.4	110.0	110.0	8.3		7.2		6			
						1.0 4.4	0.4	83 71	20.9		8.1 8.1		31.4 31.4		109.9		8.2 8.2	8.2	7.3 7.4		7			
SR4A	Fine	Moderate	09:20	8.7	Middle	4.4	0.3	75	20.8	20.8	8.1	8.1	31.4	31.4	109.2	109.2	8.2		7.5	7.9	6	6	817190	807832
					Bottom	7.7	0.2	72 76	20.7	20.7	8.1	8.1	31.4	31.4	108.9	108.9	8.2	8.2	9.2		4 5			
					Surface	1.0	0.2	2	20.7	20.9	8.1 8.1	8.1	31.4	31.4	108.9	111.2	8.2		9.0		5			
					Surface	1.0	0.1	2	20.9	20.9	8.1	0.1	31.4	31.4	111.2	111.2	8.3	8.3	6.9		4			
SR5A	Fine	Moderate	09:02	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-	ł	-	7.1	-	5	816579	810710
					Bottom	3.1	0.1	333	20.9	20.9	8.2	8.2	31.4	31.4	111.7	111.8	8.4	8.4	7.3		6			
						3.1 1.0	0.1	341 16	20.9		8.2		31.4		111.9		8.4		7.3 6.6		6			-
					Surface	1.0	0.1	16	21.2	21.2	8.1	8.1	31.5	31.5	110.0	110.0	8.2	8.2	6.6		5			
SR6A	Fine	Moderate	08:31	4.4	Middle	-	-	-	-		-	-	-		-		-	0.2	-	6.7	-	5	817967	814745
					D	3.4	0.1	50	21.2	04.0	8.1	0.4	31.4	04.4	109.9	100.0	8.2	0.0	6.8	-	5			
					Bottom	3.4	0.1	51	21.2	21.2	8.1	8.1	31.4	31.4	109.9	109.9	8.2	8.2	6.9		5			
					Surface	1.0	0.2	101 106	21.0 21.0	21.0	8.1	8.1	33.4 33.4	33.4	100.1 99.8	100.0	7.3 7.3	ļ	1.1	-	6 7			
SR7	Fine	Calm	08:29	16.0	Middle	8.0	0.2	96	21.2	21.2	8.0	8.0	33.5	33.5	97.8	97.8	7.2	7.3	2.1	2.1	4	5	823634	823744
OIN	TING	Cann	00.23	10.0	WIGGIG	8.0	0.2	96	21.2	21.2	8.0	0.0	33.5		97.8		7.2		2.2	2.1	5	,	023034	020744
					Bottom	15.0 15.0	0.2	108 109	21.1	21.1	8.0	8.0	33.5 33.5	33.5	99.4 99.6	99.5	7.3	7.3	3.1	ł	3			
					Surface	1.0	-	-	21.0	21.0	8.2	8.2	33.0	33.0	109.5	109.5	8.0		5.0		4			
						1.0	-	-	21.0		8.2		33.0		109.4		8.1	8.1	4.9	1	5			
SR8	Fine	Calm	09:27	5.0	Middle	-	-		-	-	-	_	-	_	Ė	_	-	<u>L</u>	-	5.1	-	5	820377	811606
					Bottom	4.0	-		20.8	20.8	8.2	8.2	33.2	33.2	109.6	109.7	8.1	8.1	5.4	1	5			
		l	1	l	1	4.0	-	-	20.8		8.2		33.2	1	109.7		8.1		5.3		4			

Water Quality Monitoring
Water Quality Monitoring Results on

14 December 21 during Mid-Flood Tide

Water Qua	ity Monit	oring Resu	ılts on		14 December 21	during Mid-	Flood Ti	ide																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	pH	ł	Salir	nity (ppt)		aturation %)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average		Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5 0.5	82 88	21.4	21.4	8.1	8.1	31.6 31.6	31.6	105.1 105.1	105.1	7.8		10.1 10.2		3			
C1	Cloudy	Moderate	15:53	8.2	Middle	4.1	0.5	72	21.4	21.4	8.2	8.2	31.6	31.6	104.6	104.7	7.7	7.8	11.3	11.4	5	5	815626	804259
					Bottom	4.1 7.2	0.5 0.5	77 63	21.4 21.3	21.3	8.2 8.2	8.2	31.6 31.6	31.6	104.7 106.0	106.1	7.7 7.9	7.9	11.3 12.6		6			
						7.2 1.0	0.5	67 335	21.3 21.2		8.2 8.2		31.6 32.9		106.1 120.8		7.9 8.9	1.5	12.7 2.8		5 5			
					Surface	1.0	0.2	342	21.1	21.2	8.2	8.2	32.9	32.9	120.3	120.6	8.8	8.5	2.8		6			
C2	Fine	Calm	14:26	12.8	Middle	6.4	0.2	335 339	21.1	21.1	8.2	8.2	32.9 32.9	32.9	111.8 111.7	111.8	8.2 8.2		3.1	4.2	6 7	6	825681	806930
					Bottom	11.8 11.8	0.3	346 318	21.1	21.1	8.2	8.2	33.1	33.1	105.0 105.7	105.4	7.7	7.7	6.4 6.7		6 7			
					Surface	1.0	0.4	299	21.3	21.3	8.1	8.1	33.7	33.7	101.0	100.9	7.4		2.1		5			
СЗ	Fine	Calm	16:20	12.6	Middle	1.0 6.3	0.4	314 300	21.3 21.1	21.1	8.1 8.1	8.1	33.7 33.9	33.9	100.7 101.3	101.7	7.3 7.4	7.4	2.1 3.3	3.4	6	6	822092	817788
03	Tillo	Callin	10.20	12.0		6.3 11.6	0.5	316 299	21.1		8.1 8.1		33.9 34.0		102.0 106.2		7.5 7.8		3.3 4.7	5.4	7	o	022032	017700
					Bottom	11.6	0.4	310	20.9	20.9	8.1	8.1	34.1		106.5	106.4	7.8	7.8	4.7		7			
					Surface	1.0	0.1 0.1	113 117	21.1 21.1	21.1	8.2	8.2	31.4 31.4		113.4 113.4	113.4	8.5 8.4	8.5	7.1 7.1		3			
IM1	Cloudy	Moderate	15:32	5.4	Middle	-	-	-	-	-	-	-	-	-	-	-	-	0.0	- :	8.5	-	3	817959	807153
					Bottom	4.4 4.4	0.1 0.1	14 14	20.8 20.8	20.8	8.2 8.2	8.2	31.4 31.4	31.4	108.1 108.2	108.2	8.1 8.1	8.1	9.9 9.9		3			
					Surface	1.0	0.2	8	21.0	21.0	8.2	8.2	31.0	31.0	111.6	111.5	8.4		8.3		3			
IM2	Cloudy	Moderate	15:25	7.3	Middle	1.0 3.7	0.2	8 348	21.0	20.9	8.2 8.2	8.2	31.0 31.1	31.1	111.4 109.0	109.0	8.3	8.3	8.3 8.6	9.1	3	3	818166	806182
IIVIZ	Cloudy	woderate	15.25	7.3		3.7 6.3	0.2	320 323	20.9 20.9		8.2 8.2		31.1 31.2		108.9 105.5		8.2 7.9		8.6 10.5	9.1	3	3	010100	000102
					Bottom	6.3	0.2	325	20.9	20.9	8.2	8.2	31.2	31.2	105.5	105.5	7.9	7.9	10.5		3			
					Surface	1.0	0.5 0.5	5 5	21.0 21.0	21.0	8.2	8.2	31.0	31.0	111.1	111.0	8.3	8.2	8.8		5 6			
IM3	Cloudy	Moderate	15:18	7.1	Middle	3.6 3.6	0.3 0.3	2 2	20.9 20.9	20.9	8.2 8.2	8.2	31.1 31.1	31.1	107.9 107.8	107.9	8.1 8.1	0.2	9.9 10.0	10.2	3 4	4	818770	805581
					Bottom	6.1	0.2	354	20.9	20.9	8.2	8.2	31.2	31.2	106.9	106.9	8.0	8.0	11.7		3			
					Surface	6.1 1.0	0.3 0.5	326 358	20.9	20.9	8.2	8.2	31.2 31.0	31.0	106.9 110.3	110.3	8.0		11.8 9.4		6			
						1.0 4.3	0.5 0.5	329 1	20.9		8.2 8.2		31.0 31.2		110.2 107.1		8.3	8.2	9.4 11.8		5 6	_		
IM4	Cloudy	Moderate	15:08	8.5	Middle	4.3	0.5	1	20.8	20.8	8.2	8.2	31.2	31.2	107.0	107.1	8.0		11.8	11.6	7	6	819738	804596
					Bottom	7.5 7.5	0.5 0.5	2 2	20.9	20.9	8.2	8.2	31.2 31.2		106.3 106.3	106.3	8.0	8.0	13.6 13.4		7 6			
					Surface	1.0	0.6	8	20.9	20.9	8.2	8.2	31.1	31.1	109.8 109.8	109.8	8.2		9.9 9.9		5			
IM5	Cloudy	Moderate	14:58	8.4	Middle	4.2 4.2	0.7	356	20.9	20.9	8.2	8.2	31.1	31.1	107.9 107.9	107.9	8.1 8.1	8.2	11.8 11.9	11.5	5	4	820755	804848
					Bottom	7.4	0.5	328 12	20.9 20.9	20.9	8.2	8.2	31.1 31.1	31.1	107.5	107.5	8.1	8.1	12.6		3			
					Surface	7.4 1.0	0.5	12 72	20.9	21.0	8.2	8.2	31.1		107.5 112.2	112.2	8.1 8.4		12.8 4.8		3			
						1.0 3.8	0.0	76 103	21.0 20.9		8.2 8.2		31.1 31.2	31.1	112.1 110.2		8.4 8.2	8.3	4.8 4.9		4			
IM6	Cloudy	Moderate	14:50	7.6	Middle	3.8	0.2	107	20.9	20.9	8.2	8.2	31.2	31.2	110.1	110.2	8.2		5.0	4.9	4	4	821054	805806
					Bottom	6.6	0.2	79 81	20.9	20.9	8.2	8.2	31.3	31.3	105.8 105.7	105.8	7.9 7.9	7.9	5.0		5 5			
					Surface	1.0	0.1 0.1	167 169	20.9	20.9	8.2 8.2	8.2	31.5 31.5	31.5	107.6 107.6	107.6	8.0		6.8 6.8		5 4			
IM7	Cloudy	Moderate	14:41	8.4	Middle	4.2	0.2	161	20.9	20.9	8.2	8.2	31.4	31.4	107.3	107.3	8.0	8.0	7.8	7.8	3	4	821346	806830
	,				Bottom	4.2 7.4	0.2	169 95	20.9	20.9	8.2 8.2	8.2	31.4 31.4		107.3 107.3	107.3	8.0	8.0	7.9 8.8		3			
						7.4 1.0	0.2	98 237	20.9		8.2 8.2		31.4 32.7		107.3 111.8		8.0	0.0	8.8 2.1		4			
					Surface	1.0	0.2	251	21.0	21.0	8.2	8.2	32.7	32.7	111.7	111.8	8.2	8.2	2.1		5			
IM8	Fine	Calm	14:49	7.8	Middle	3.9	0.2	229 248	21.0 21.0	21.0	8.2	8.2	32.7 32.7	32.7	110.7 110.6	110.7	8.2 8.1		3.4 3.8	3.4	5 4	5	821835	808137
					Bottom	6.8 6.8	0.2	239 252	21.0 21.0	21.0	8.2 8.2	8.2	32.7 32.7	32.7	110.3 110.2	110.3	8.1 8.1	8.1	4.5 4.5		5 6			
DA: Denth-Aver			<u> </u>		1	0.0	U.Z	202	_ ∠1.U	l	0.2		32.1		110.2		0.1		4.0		U			

14 December 21 during Mid-Flood Tide

Water Qua	lity Monit	toring Resu	ılts on		14 December 21	during Mid-	Flood Ti	de																
Monitorina	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)		Saturation (%)		olved /gen	Turbidity	(NTU)	Suspende (mg/		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	h (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	ř	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Surface	1.0	0.3	270	21.0	21.0	8.2	8.2	32.7	32.7	112.0	112.0	8.3		3.0		4			
					Cunado	1.0	0.3	275	21.0	21.0	8.2	0.2	32.7	OL.,	111.9	112.0	8.3	8.3	2.9		5			
IM9	Fine	Calm	14:55	7.4	Middle	3.7 3.7	0.2	278 286	21.0 21.0	21.0	8.2	8.2	32.7	32.7	111.7	111.7	8.2 8.2	1	4.9 5.0	4.3	4	4	822103	808807
					_	6.4	0.3	275	21.0		8.2		32.6		111.4		8.2		5.0		4			
					Bottom	6.4	0.3	296	21.0	21.0	8.2	8.2	32.6	32.6	111.2	111.3	8.2	8.2	5.0		4			
					Surface	1.0	0.5	309	21.0	21.0	8.2	8.2	32.8	32.8	109.7	109.6	8.1		4.0		2			
					Surface	1.0	0.6	311	21.0	21.0	8.2	0.2	32.8	32.0	109.5	109.0	8.1	8.1	4.0		3			
IM10	Fine	Calm	15:02	8.0	Middle	4.0	0.5	306	21.0	21.0	8.2	8.2	32.8	32.8	108.6	108.6	8.0	1	5.2	5.1	3	3	822393	809783
						4.0 7.0	0.5	311 298	21.0 21.0		8.2		32.8		108.5 108.0		8.0 7.9		5.2 6.2		3 4			
					Bottom	7.0	0.4	307	21.0	21.1	8.2	8.2	32.7	32.8	108.0	108.0	7.9	7.9	6.2		5			
					Curtons	1.0	0.4	307	21.2	21.2	8.2	8.2	32.9	32.9	122.1	122.0	9.0		3.4		5			
					Surface	1.0	0.4	336	21.2	21.2	8.2	8.2	32.9	32.9	121.9	122.0	8.9	8.7	3.6		5			
IM11	Fine	Calm	15:13	8.8	Middle	4.4	0.5	315	21.1	21.1	8.2	8.2	32.9	32.9	115.7	115.7	8.5	0	4.5	4.6	3	4	822074	811451
						4.4	0.5	325	21.1		8.2		32.9		115.7		8.5		4.6		4			
					Bottom	7.8 7.8	0.3	309 335	21.1	21.1	8.2 8.2	8.2	33.0 33.0	33.0	116.2 116.4	116.3	8.5 8.5	8.5	5.9 5.9		3			
						1.0	0.4	10	21.3		8.2		33.0		125.6		9.2		4.1		4			
					Surface	1.0	0.3	10	21.3	21.3	8.2	8.2	33.0	33.0	125.0	125.3	9.2	0.0	4.1		4			
IM12	Fine	Calm	15:20	8.4	Middle	4.2	0.1	350	21.2	21.2	8.2	8.2	33.0	33.0	116.5	116.4	8.5	8.9	4.1	4.7	3	4	821458	812053
IIVITZ	1 1110	Odilli	13.20	0.4	Wildelic	4.2	0.1	322	21.2	21.2	8.2	0.2	33.0	33.0	116.3	110.4	8.5		4.2	4.7	3	7	021430	012000
					Bottom	7.4 7.4	0.2	319	21.3	21.3	8.2	8.2	33.0	33.0	115.6	115.6	8.5 8.5	8.5	5.8		3			
			1			1.0	0.2	350	21.3		8.2		33.0 32.9		115.5		9.0		5.7 2.9		5			
					Surface	1.0	-	-	21.5	21.5	8.2	8.2	32.9	32.9	118.9	120.9	8.7		2.8	-	4			
SR1A	Fine	Calm	15:46	4.8	Middle	2.4	-	-	-		-		-		-		-	8.9	-	3.3	-	5	819975	812653
SKIA	rine	Calm	15.40	4.0	ivildale	2.4	-	-	-		-		-		-	-			-	3.3	-	5	019975	012000
					Bottom	3.8	-	-	21.4	21.4	8.2	8.2	32.9	32.9	117.9	117.9	8.6	8.6	3.8		5			
						3.8 1.0	0.0	306	21.4		8.2		32.9		117.9		8.6		3.9		4			
					Surface	1.0	0.0	330	21.3	21.3	8.2	8.2	33.2	33.2	113.7 113.6	113.7	8.3	ł	3.7		5			
						1.0	-	-	-		-		-		-		-	8.3	-	١	-			
SR2	Fine	Calm	15:59	5.2	Middle	-	-	-	-	-	-	-	-	-	-	1 -	-	İ	-	4.1	-	4	821453	814147
					Bottom	4.2	0.0	184	21.1	21.1	8.2	8.2	33.3	33.3	113.4	113.4	8.3	8.3	4.5		2			
						4.2	0.0	191	21.1		8.2		33.3		113.4		8.3		4.5		3			
					Surface	1.0	0.2	233 252	21.0	21.0	8.3	8.3	32.7	32.7	128.5 128.5	128.5	9.5 9.5	1	2.1		4			
						4.5	0.1	232	21.0		8.3		32.7		121.4		8.9	9.2	3.3		4			
SR3	Fine	Calm	14:44	9.0	Middle	4.5	0.2	253	21.0	21.0	8.3	8.3	32.7	32.7	121.2	121.3	8.9	1	3.4	3.2	4	5	822165	807580
					Bottom	8.0	0.1	265	21.0	21.0	8.3	8.3	32.7	32.7	120.2	120.1	8.9	8.9	4.2		6			
					Dottom	8.0	0.1	271	21.0	21.0	8.3	0.0	32.7	OL.,	119.9	120.1	8.8	0.0	4.1		6			
					Surface	1.0 1.0	0.1	65 66	21.1	21.1	8.2 8.2	8.2	31.1	31.1	112.8	112.8	8.4 8.4	ł	8.6		6			
						4.4	0.1	67	21.1		8.2		31.1		112.7 110.3		8.2	8.3	8.5 9.5		5 4			
SR4A	Cloudy	Moderate	16:14	8.8	Middle	4.4	0.2	67	21.1	21.1	8.2	8.2	31.2	31.2	110.2	110.3	8.2	Ì	9.6	9.6	5	5	817177	807803
					Bottom	7.8	0.1	66	21.1	21.1	8.2	8.2	31.2	31.2	109.9	109.9	8.2	8.2	10.6		5			
					Bottom	7.8	0.1	70	21.1	21.1	8.2	0.2	31.2	31.2	109.9	105.5	8.2	0.2	10.6		4			
					Surface	1.0	0.1	296	21.3	21.3	8.2	8.2	31.4	31.4	114.0	113.9	8.5		7.6		5			
						1.0	0.1	304	21.3		8.2		31.4		113.8		8.5	8.5	7.6		6			
SR5A	Cloudy	Moderate	16:29	3.5	Middle	-		-		-	-	-	-	-	-	-	-		-	7.8		6	816611	810707
					Bottom	2.5	0.1	286	21.2	21.2	8.2	8.2	31.4	31.3	112.0	112.0	8.3	8.3	8.1		6			
					Bottom	2.5	0.1	304	21.2	21.2	8.2	0.2	31.3	31.3	112.0	112.0	8.3	0.3	8.1		5			
					Surface	1.0	0.1	238	21.7	21.7	8.2	8.2	31.3	31.3	106.3	112.4	7.8		5.7		5			
						1.0	0.1	244	21.7		8.2		31.3		118.5		8.7	8.3	5.8		4			
SR6A	Cloudy	Moderate	16:56	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-	ł	-	6.2	-	4	817984	814760
					D. W	3.2	0.1	248	21.5	04.5	8.2	0.0	31.4	04.4	116.4	440.4	8.6	0.0	6.7		4			
					Bottom	3.2	0.1	251	21.5	21.5	8.2	8.2	31.4	31.4	116.4	116.4	8.6	8.6	6.7		3			
					Surface	1.0	0.2	108	21.4	21.4	8.1	8.1	33.7	33.7	97.1	97.1	7.1		3.2		3			
					- Curicio	1.0	0.3	118	21.4	2	8.1	0.1	33.7	00.,	97.1	0	7.1	7.1	3.1	1	3			
SR7	Fine	Calm	17:00	16.0	Middle	8.0 8.0	0.2	132 137	21.4 21.4	21.4	8.1 8.1	8.1	33.7	33.7	97.1 97.1	97.1	7.1 7.1	+	4.4	4.5	3	4	823630	823721
			1			15.0	0.2	137	21.4	4.1.1	8.1		33.7		97.1		7.1	-	5.8	1	4			1
					Bottom	15.0	0.1	155	21.4	21.4	8.1	8.1	33.7	33.7	97.4	97.4	7.1	7.1	5.8	1	5			
					Surface	1.0	-	-	21.3	21.3	8.2	8.2	32.8	32.8	116.6	116.4	8.5		3.2		3			
			1		Suriado	1.0	-	-	21.3	21.0	8.2	J.2	32.8	52.0	116.2		8.5	8.5	3.3	1	4			1
SR8	Fine	Calm	15:28	4.6	Middle		-	-	-	-	- :	-	-	-	-	-	-	1	-	3.7	-	3	820406	811608
			1			3.6	-	-	21.0		8.2		32.9		114.8		8.5		4.2	1	2			1
			1		Bottom	3.6		-	21.0	21.0	8.2	8.2	33.0	33.0	114.6	114.8	8.5	8.5	4.2	1	3			1
					<u> </u>	3.0					,		0.0											

16 December 21 during Mid-Ebb Tide

Water Qua	ity Monit	oring Resu	ilts on		16 December 21	during Mid-	Ebb Tide	9																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value		Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	227	21.5	21.5	8.2	8.2	32.3		106.4	106.4	7.9		7.6		4			
						1.0 4.3	0.4	233 205	21.5 21.6		8.2 8.2		32.3 32.6		106.4 102.6		7.9 7.5	7.7	7.6 6.6	1	4			
C1	Cloudy	Moderate	11:45	8.6	Middle	4.3	0.4	217	21.6	21.6	8.2	8.2	32.6		102.6	102.6	7.5		6.6	7.2	4	4	815643	804253
					Bottom	7.6	0.3	212	21.7	21.7	8.2	8.2	32.9		100.7	100.8	7.4	7.4	7.6	1	5			
					Bottom	7.6	0.3	230	21.7	21.7	8.2	0.2	32.9		100.8	100.0	7.4	7.4	7.4		5			
					Surface	1.0	0.3	192	21.3	21.3	8.2	8.2	32.9 32.9	32.9	115.6 115.1	115.4	8.5		4.4 4.4	1	4			
						1.0 5.8	0.3	203 206	21.3 21.3		8.2		33.1		107.0		8.4 7.8	8.1	4.4	1	7			
C2	Cloudy	Moderate	12:44	11.5	Middle	5.8	0.2	226	21.3	21.3	8.2	8.2	33.2		106.9	107.0	7.8		4.8	4.8	7	16	825662	806962
					Bottom	10.5	0.2	182	21.4	21.4	8.2	8.2	33.1		106.6	106.6	7.8	7.8	5.1		36			
					Dottom	10.5	0.2	188	21.4	2	8.2	0.2	33.1		106.6	100.0	7.8	7.0	5.0		37			
					Surface	1.0	0.2	85 90	21.4 21.4	21.4	8.0	8.0	33.6 33.6	33.6	101.4 101.4	101.4	7.4 7.4		3.3	-	6			
						6.5	0.2	91	21.4		8.0		33.7		95.1		6.9	7.2	3.6	1	4			
C3	Cloudy	Moderate	10:11	13.0	Middle	6.5	0.1	98	21.4	21.4	8.0	8.0	33.7	33.7	95.3	95.2	6.9		3.8	3.7	4	4	822089	817813
					Bottom	12.0	0.2	106	21.4	21.4	8.0	8.0	33.7		95.9	96.0	7.0	7.0	4.0		3			
					Dottom	12.0	0.2	109	21.4	2	8.0	0.0	33.7		96.0	00.0	7.0	7.0	4.0		3			
					Surface	1.0	0.2	184 187	21.7	21.7	8.2	8.2	32.9 32.9		116.8 116.8	116.8	8.6 8.6		8.3 8.4	-	5 6			
						1.0	0.2	107	21.7		0.2		32.9		110.0		0.0	8.6	0.4	1	-			
IM1	Cloudy	Moderate	12:05	5.5	Middle	-	-		-	-	-	-	-	-	-	-	-		-	8.3	-	5	817930	807152
					Bottom	4.5	0.1	187	21.6	21.6	8.2	8.2	32.9		116.6	116.7	8.6	8.6	8.1]	3			
					Bottom	4.5	0.1	187	21.6	21.0	8.2	0.2	32.9		116.7	110.7	8.6	0.0	8.2		4			
					Surface	1.0	0.2	197 199	21.6 21.6	21.6	8.2	8.2	32.6 32.6	32.6	116.5 116.5	116.5	8.6 8.6		4.7 4.9	-	6 5			
						3.8	0.2	134	21.5		8.2		32.6		115.4		8.5	8.6	7.3	١	8	_		
IM2	Cloudy	Moderate	12:13	7.5	Middle	3.8	0.1	140	21.5	21.5	8.2	8.2	32.6		115.4	115.4	8.5		7.4	6.1	8	8	818147	806178
					Bottom	6.5	0.1	146	21.5	21.5	8.2	8.2	32.6		115.7	115.8	8.5	8.5	6.3		9			
						6.5	0.1	160	21.5		8.2		32.6		115.8		8.5		6.3		9			
					Surface	1.0	0.1	177 184	21.6 21.6	21.6	8.2	8.2	32.6 32.6	32.6	116.2 116.2	116.2	8.5 8.5		6.6	-	4			
						4.1	0.1	155	21.5		8.2		32.5		115.6		8.5	8.5	7.1	1	5	_		
IM3	Cloudy	Moderate	12:20	8.1	Middle	4.1	0.2	162	21.5	21.5	8.2	8.2	32.5		115.6	115.6	8.5		7.8	7.7	5	5	818800	805589
					Bottom	7.1	0.2	133	21.5	21.5	8.2	8.2	32.5		115.8	115.8	8.5	8.5	9.0		5			
						7.1	0.2	145 201	21.5		8.2		32.5		115.8		8.5		8.6		5			
					Surface	1.0	0.4	207	21.5	21.5	8.2	8.2	32.6 32.6		115.0 115.0	115.0	8.5 8.5		7.5 7.6	1	4			
	01		40.00		A # 4 # .	4.2	0.2	149	21.5	04.5	8.2	0.0	32.6		113.8	440.0	8.4	8.5	9.0		5	-	040700	004040
IM4	Cloudy	Moderate	12:30	8.3	Middle	4.2	0.2	152	21.5	21.5	8.2	8.2	32.6		113.8	113.8	8.4		8.4	8.6	5	5	819723	804616
					Bottom	7.3	0.2	163	21.5	21.5	8.2	8.2	32.6		113.9	113.9	8.4	8.4	9.8		5			
						7.3 1.0	0.2	166 239	21.5 21.6		8.2		32.6		113.9		8.4		9.6 4.8		5 5			
					Surface	1.0	0.4	250	21.6	21.6	8.2	8.2	32.6 32.6		116.6 116.6	116.6	8.6 8.6		5.0		5			
IM5	Cloudy	Moderate	12:38	8.1	Middle	4.1	0.3	220	21.5	21.5	8.2	8.2	32.6		115.6	115.6	8.5	8.6	8.7	6.8	4	4	820727	804872
CIVII	Cloudy	woderate	12.30	0.1	Ivildale	4.1	0.3	224	21.5	21.5	8.2	0.2	32.6		115.6	115.0	8.5		8.6	0.0	4	4	020121	004072
					Bottom	7.1	0.2	174 176	21.5 21.5	21.5	8.2	8.2	32.6 32.6		116.0	116.1	8.5	8.6	7.0 7.0	1	4			
						7.1	0.2	241	21.5		8.2		32.8	-	116.2 116.0		8.6 8.5		5.2		2			
					Surface	1.0	0.3	251	21.7	21.7	8.2	8.2	32.8		115.8	115.9	8.5		5.2	1	2			
IM6	Cloudy	Moderate	12:45	6.9	Middle	3.5	0.1	232	21.6	21.6	8.2	8.2	32.9	32.9	113.2	113.2	8.3	8.4	5.1	5.4	3	3	821083	805830
IIVIO	Oloudy	Woderate	12.40	0.5	Wilduic	3.5	0.1	249	21.6	21.0	8.2	0.2	32.9		113.2	110.2	8.3		5.2	3.4	3	3	021000	000000
					Bottom	5.9	0.1	198	21.6	21.6	8.2	8.2	32.9		113.0	113.0	8.3	8.3	5.9	1	4			
						5.9 1.0	0.2	212 244	21.6		8.2		32.9 32.9		113.0 113.2		8.3 8.3		5.7 8.8		3			
					Surface	1.0	0.2	251	21.7	21.7	8.2	8.2	32.9		113.2	113.2	8.3		8.7		4			
IM7	Cloudy	Moderate	12:54	8.7	Middle	4.4	0.1	104	21.6	21.6	8.2	8.2	32.9		112.6	112.6	8.3	8.3	9.2	9.9	5	5	821348	806819
11017	Oloudy	Woderate	12.04	0.1	Wilduic	4.4	0.1	113	21.6	21.0	8.2	0.2	32.9		112.6	112.0	8.3		9.4	3.3	5	3	021040	000013
					Bottom	7.7	0.1	93	21.6	21.6	8.2	8.2	32.9		112.7	112.7	8.3	8.3	12.0	1	5			
						7.7 1.0	0.1	94 147	21.6		8.2		32.9 32.2	1	112.7 127.8		8.3 9.3		11.2 3.4	-	6			
					Surface	1.0	0.1	156	21.6	21.6	8.3	8.3	32.2		127.5	127.7	9.3		3.6	1	4			
IM8	Cloudy	Moderate	12:17	8.2	Middle	4.1	0.0	167	21.3	21.3	8.2	8.2	33.2		114.1	114.1	8.3	8.8	4.7	7.5	4	4	821837	808138
livio	Cibudy	wouciate	12.11	0.2	Middle	4.1	0.0	175	21.3	21.0	8.2	0.2	33.3		114.0	1 14.1	8.3		4.7	7.5	4	*	32 1037	000130
					Bottom	7.2	0.1	73	21.3	21.3	8.2	8.2	33.4		109.1	109.2	8.0	8.0	14.3	4	3			
					1	7.2	0.1	73	21.3	l	8.2		33.4	<u> </u>	109.3		8.0		14.3		3			l

16 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ılts on		16 December 21	during Mic	d-Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)	DO S	Saturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	th (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	1/	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Surface	1.0	0.2	97	21.4	21.4	8.2	8.2	32.8	32.8	122.6	122.1	9.0		5.8		4			
					Surface	1.0	0.3	106	21.3	21.4	8.2	0.2	32.9	32.0	121.6	122.1	8.9	8.4	6.3]	5			
IM9	Cloudy	Moderate	12:12	7.6	Middle	3.8	0.3	72 77	21.3	21.3	8.2	8.2	33.4 33.4	33.4	108.1	108.1	7.9 7.9		8.4 8.6	7.9	3	4	822093	808790
					Bottom	6.6	0.2	64	21.3	21.3	8.2	8.2	33.4	33.4	108.9	109.1	7.9	8.0	8.9		3			
						6.6 1.0	0.2	69 122	21.3		8.2		33.4 32.4		109.2		8.0 9.1		9.2		3			
					Surface	1.0	0.3	128	21.4	21.5	8.2	8.2	32.4	32.4	123.8	124.0	9.1	8.6	3.7	1	3			
IM10	Cloudy	Moderate	12:05	8.1	Middle	4.1	0.4	123	21.3	21.3	8.2	8.2	32.9	32.9	110.5	110.4	8.1	0.0	6.0	6.2	3	4	822402	809800
					Bottom	4.1 7.1	0.4	125 118	21.3 21.3	21.3	8.2	8.2	32.9 32.9	32.9	110.3	400.0	8.1	8.1	6.1 8.5	1	4			
					BOILOITI	7.1	0.2	119	21.3	21.3	8.2	0.2	32.9	32.9	109.9	109.9	8.1	0.1	9.1		4			
					Surface	1.0	0.4	123 133	21.4	21.4	8.2	8.2	32.7	32.7	122.5	122.1	9.0 8.9		3.9 4.0	1	3			
IM11	Cloudy	Moderate	11:54	8.6	Middle	4.3	0.3	111	21.3	21.3	8.2	8.2	33.0	33.0	108.7	108.7	8.0	8.5	4.4	4.3	3	3	822078	811463
	,					4.3 7.6	0.3	116 104	21.3		8.2	-	33.0 33.0		108.7 108.6		8.0 7.9		4.4 4.5	-	3	-		
					Bottom	7.6	0.2	105	21.3	21.3	8.2	8.2	33.0	33.0	108.7	108.7	8.0	8.0	4.5		4			
					Surface	1.0	0.4	128	21.4	21.4	8.2	8.2	32.6 32.6	32.6	121.1	121.1	8.9		3.8		3			
IM12	01		11:47	0.4	A# 1.0	1.0 4.7	0.4	136 127	21.4 21.3	04.0	8.2	0.0	33.1	00.4	121.1 109.6	109.5	8.9	8.5	3.9 5.4		3	•	004400	812032
IIVI12	Cloudy	Moderate	11.47	9.4	Middle	4.7	0.3	131	21.3	21.3	8.2	8.2	33.1	33.1	109.4	109.5	8.0		5.7	5.1	3	3	821439	012032
					Bottom	8.4 8.4	0.1	113 117	21.3	21.3	8.2	8.2	33.1	33.1	109.3	109.3	8.0	8.0	5.9 5.9	-	4			
					Surface	1.0	-	-	21.3	21.3	8.2	8.2	33.1	33.1	110.3	110.2	8.1		4.8		4			
						1.0 2.6	-		21.3	-	8.2		33.1		110.1		8.0	8.1	4.8	1	5			
SR1A	Cloudy	Moderate	10:47	5.2	Middle	2.6	-		-	-	-		-	-		-	-		-	4.8	-	4	819974	812660
					Bottom	4.2	-	-	21.3	21.3	8.2	8.2	33.1	33.1	109.2	109.2	8.0	8.0	4.8	-	4			
					Surface	1.0	0.2	45	21.4	21.4	8.2	8.2	33.1	33.1	111.1	111.0	8.1		5.4		6			
						1.0	0.3	48	21.4	21.4	8.2	0.2	33.1	33.1	110.9	111.0	8.1	8.1	5.5		5			
SR2	Cloudy	Moderate	10:35	5.8	Middle	-	-		-	-	-	-	-	-	-	-	-		-	5.6	-	6	821461	814154
					Bottom	4.8 4.8	0.2	43 43	21.3 21.3	21.3	8.2 8.2	8.2	33.1 33.1	33.1	109.7 109.5	109.6	8.0	8.0	5.8 5.9	1	6			
					Surface	1.0	0.2	177	21.7	21.7	8.2	8.2	32.3	32.3	124.0	124.0	9.0		3.7		3			
					Surface	1.0	0.2	187	21.7	21.7	8.2	0.2	32.3	32.3	123.9	124.0	9.0	8.5	3.8	1	3			
SR3	Cloudy	Moderate	12:23	8.8	Middle	4.4	0.1	186 190	21.2	21.2	8.2	8.2	33.1 33.1	33.1	109.5	109.4	8.0		6.7 6.8	6.3	3	4	822135	807580
					Bottom	7.8	0.1	100	21.6	21.7	8.2	8.2	33.0	32.9	108.8	108.8	7.9	7.9	8.3		4			
						7.8	0.1	108 57	21.7		8.2		32.9 32.9		108.8		7.9 7.5		8.3 6.3		4			
					Surface	1.0	0.1	57	21.7	21.7	8.1	8.1	32.9	32.9	101.9	102.0	7.5	7.5	6.4		5			
SR4A	Cloudy	Moderate	11:20	8.4	Middle	4.2	0.1	74 78	21.6 21.6	21.6	8.2	8.2	32.9 32.9	32.9	101.2	101.2	7.4		6.5 6.6	7.0	5 5	5	817201	807796
					Bottom	7.4	0.1	71	21.5	21.5	8.2	8.2	32.9	32.9	100.9	100.9	7.4	7.4	8.3		3			
						7.4 1.0	0.1	74 61	21.5		8.2		32.9 32.9		100.9		7.4 7.6		8.1 5.9		3			
					Surface	1.0	0.0	63	21.7	21.7	8.2	8.2	32.9	32.9	103.2	103.2	7.6	7.6	6.0		5			
SR5A	Cloudy	Moderate	11:02	3.8	Middle	-	-	-	-	-	-		-	-	-	-	-		-	6.2	-	4	816605	810691
					Bottom	2.8	0.0	168	21.7	21.7	8.2	8.2	32.9	32.9	103.7	103.8	7.6	7.6	6.4		4			
					Dottom	2.8	0.0	170 31	21.7	21.7	8.2	0.2	32.9	- JZ.J	103.9	100.0	7.6	7.0	6.4	<u> </u>	4			
					Surface	1.0	0.0	32	22.0 22.0	22.0	8.1	8.1	33.0 33.0	33.0	102.0	102.0	7.4	7.4	5.7 5.7	1	3			
SR6A	Cloudy	Moderate	10:31	4.2	Middle	-	-	-	-	-	-		-	-	-	-	-	7.4	-	5.8	-	5	817971	814754
					Bottom	3.2	0.0	263	22.0	22.0	8.1	8.1	32.9	32.9	101.9	101.9	7.4	7.4	6.0	1	- 6			
					BOLLOITI	3.2	0.0	287	22.0	22.0	8.1	0.1	32.9	32.9	101.9	101.9	7.4	1.4	6.0		6			
					Surface	1.0	0.1	89 91	21.4	21.4	8.1	8.0	33.6 33.6	33.6	95.7 95.5	95.6	7.0	- 7.0	3.6 3.6	1	2			
SR7	Cloudy	Moderate	09:39	16.6	Middle	8.3	0.1	75	21.4	21.4	8.0	8.0	33.7	33.7	94.2	94.2	6.9	7.0	4.1	4.0	3	3	823645	823741
						8.3 15.6	0.1	81 69	21.4		8.0		33.7 33.7		94.2 94.7		6.9	0.5	4.1 4.2	1	3			
					Bottom	15.6	0.2	74	21.4	21.4	8.0	8.0	33.7	33.7	94.7	94.7	6.9	6.9	4.2	1	4			
					Surface	1.0	-	-	21.6 21.5	21.6	8.2	8.2	33.1 33.1	33.1	112.5 112.4	112.5	8.2		6.3 6.4	1	3			
SR8	Cloudy	Moderate	11:39	4.2	Middle	-	-		-	-	-	-	-		-	_	-	8.2	-	7.3	-	3	820384	811633
	' '	-				3.2	-	-	21.3		8.2		33.0		107.5		7.9		8.2	1	3			
					Bottom	3.2			21.3	21.3	8.2	8.2	33.0	33.0	107.3	107.5	7.8	7.9	8.5		3			

Water Quality Monitoring
Water Quality Monitoring Results on

16 December 21 during Mid-Flood Tide

Water Qua	ity Monit	oring Resu	ılts on		16 December 21	during Mid-	Flood Ti	ide															
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	pН	Sali	nity (ppt)		aturation %)	Disso Oxyg		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	29 30	21.9 21.9	21.9	8.2 8.2	33.1	33.1	109.1 109.1	109.1	7.9 7.9		9.2		4			
C1	Cloudy	Moderate	16:28	8.1	Middle	4.1	0.3	30	21.9	21.9	8.2	33.1		108.6	108.7	7.9	7.9	10.4	10.5	4	4	815598	804266
					Bottom	4.1 7.1	0.3	32 37	21.9 21.8	21.8	8.2 8.2 8.2	33.1 33.1	33.1	108.7 110.0	110.1	7.9 8.0	8.0	10.5 11.8		4			
						7.1 1.0	0.2	39 215	21.8 21.6		8.2	33.1 32.0		110.1 133.1		8.0 9.7	0.0	11.8 3.8		4 5			
					Surface	1.0	0.3	224	21.6	21.6	8.3	32.1	32.0	132.3	132.7	9.7	9.0	3.9		4			
C2	Cloudy	Moderate	15:18	11.6	Middle	5.8 5.8	0.1	240 262	21.3 21.3	21.3	8.1 8.1	32.9 32.9	32.9	113.8 113.7	113.8	8.3		4.5 4.7	5.0	4	4	825663	806951
					Bottom	10.6 10.6	0.2	359 330	21.3 21.3	21.3	8.1 8.1	33.2 33.2	33.2	108.4 108.4	108.4	7.9 7.9	7.9	6.5 6.5		4			
					Surface	1.0	0.6	246	21.5	21.5	8.1	33.6	33.6	108.1	108.0	7.8		3.7		7			
СЗ	Cloudy	Moderate	17:23	12.1	Middle	1.0 6.1	0.6 0.5	262 249	21.5 21.5	21.5	8.1 8.1 8.1	33.6 33.6		107.9 100.0	100.1	7.8	7.6	3.8 5.1	4.7	7 6	6	822097	817802
03	Cioday	WOGGIAIC	17.25	12.1		6.1 11.1	0.5	263 245	21.5 21.5		8.1	33.6 33.6		100.1 102.2		7.3 7.4		5.1 5.3	4.7	6 5	o	022037	017002
					Bottom	11.1	0.4	267	21.5	21.5	8.0	33.6	33.0	102.6	102.4	7.4	7.4	5.3		5			
					Surface	1.0	0.2	12 13	21.6 21.6	21.6	8.2 8.2	32.9 32.9		117.4 117.4	117.4	8.6 8.6	8.6	6.2 6.3		6			
IM1	Cloudy	Moderate	16:07	5.4	Middle	-	-	-	-	-		-	-	-	-	-	0.0	-	7.6	-	7	817933	807152
					Bottom	4.4 4.4	0.2 0.2	1	21.3 21.3	21.3	8.2 8.2	32.9 32.9		112.1 112.2	112.2	8.3 8.3	8.3	9.0 9.0		7			
					Surface	1.0	0.2	338	21.5	21.5	8.2	32.5	32.5	115.6	115.5	8.5		7.4		6			
IM2	Cloudy	Moderate	16:00	7.9	Middle	1.0 4.0	0.2	311 9	21.5 21.4	21.4	8.2 8.2 8.2	32.5 32.6		115.4 113.0	113.0	8.5 8.3	8.4	7.4 7.7	8.3	6	6	818159	806162
IIVIZ	Cloudy	Woderate	10.00	7.5		4.0 6.9	0.3	9 356	21.4 21.4		8.2	32.6 32.7		112.9 109.5		8.3 8.1		7.8 9.7	6.3	6	Ü	010139	800102
					Bottom	6.9	0.2	328	21.4	21.4	8.2	32.7	32.7	109.5	109.5	8.1	8.1	9.6		5			
					Surface	1.0	0.4	348 355	21.5 21.5	21.5	8.2 8.2	32.5 32.5		115.1 114.9	115.0	8.5 8.5	8.4	7.9 7.9		6			
IM3	Cloudy	Moderate	15:53	8.2	Middle	4.1 4.1	0.3 0.4	341 314	21.4 21.4	21.4	8.2 8.2	32.6 32.6		111.9 111.8	111.9	8.3 8.2	0.4	9.0 9.2	9.3	6	6	818787	805574
					Bottom	7.2	0.3	325 343	21.4	21.4	8.2 8.2 8.2	32.7 32.7		110.9	110.9	8.2	8.2	10.9		6			
					Surface	1.0	0.6	350	21.4	21.4	8.2	32.5		114.3	114.3	8.4		8.5		5			
IM4	Cloudy	Moderate	15:43	8.5	Middle	1.0 4.3	0.7 0.6	356 336	21.4 21.3		8.2 8.2 8.2 8.2	32.5 32.7		114.2 111.1	111.1	8.4 8.2	8.3	8.6 11.0	10.7	6 7	7	819707	804605
IIVI4	Cloudy	woderate	15:43	8.5	Middle	4.3 7.5	0.6 0.4	309 2	21.3 21.4	21.3	8.2 8.2	32.7 32.7	32.1	111.0 110.3		8.2 8.1		10.9 12.7	10.7	7	′	819707	804605
					Bottom	7.5	0.4	2	21.4	21.4	8.2	32.7	32.1	110.3	110.3	8.1	8.1	12.5		7			
					Surface	1.0	0.8	0	21.4	21.4	8.2 8.2	32.6 32.6		113.8 113.8	113.8	8.4 8.4	8.4	9.0		7			
IM5	Cloudy	Moderate	15:33	8.4	Middle	4.2 4.2	0.6	10 10	21.4 21.4	21.4	8.2 8.2	32.6 32.6		111.9 111.9	111.9	8.3 8.3	8.4	10.9 11.0	10.6	7	7	820748	804849
					Bottom	7.4	0.5	25	21.4	21.4	8.2	32.6		111.5	111.5	8.2	8.2	11.7		7			
					Surface	7.4 1.0	0.5	27 161	21.4	21.5	8.2 8.2 8.2 8.2	32.6 32.6	32.6	111.5 116.2	116.2	8.2		11.9 3.9		6 5			
						1.0 3.8	0.1	161 82	21.5 21.4		8.2	32.6 32.7		116.1 114.2		8.6 8.4	8.5	3.9 4.1		4 6			
IM6	Cloudy	Moderate	15:25	7.6	Middle	3.8	0.2	88	21.4	21.4	8.2	32.7	32.7	114.1	114.2	8.4		4.1	4.0	6	6	821078	805832
					Bottom	6.6 6.6	0.2	104 108	21.4 21.4	21.4	8.2 8.2 8.2	32.8 32.8	32.8	109.8 109.7	109.8	8.1 8.1	8.1	4.1 4.2		8			
					Surface	1.0	0.1	289 305	21.4 21.4	21.4	8.2 8.2	33.0	33.0	111.6 111.6	111.6	8.2 8.2	0.0	5.9 5.9		7			
IM7	Cloudy	Moderate	15:16	8.1	Middle	4.1 4.1	0.2	87	21.4 21.4	21.4	8.2	32.9		111.3 111.3	111.3	8.2	8.2	6.9	6.9	6	6	821341	806857
					Bottom	7.1	0.3	90 99	21.4	21.4	8.2 8.2 8.2 8.2	32.9 32.9	32.0	111.3	111.3	8.2 8.2	8.2	7.0 7.9		6			
						7.1 1.0	0.3	99 282	21.4		8.2	32.9 32.4		111.3 131.4		8.2 9.6		7.9 3.9		5 7			
					Surface	1.0	0.3	285 265	21.7	21.7	8.3 8.2 8.2	32.4 32.7	32.4	131.3 122.1	131.4	9.6	9.3	4.0 5.2		8			
IM8	Cloudy	Moderate	15:42	7.5	Middle	3.8	0.3	283	21.5	21.5	8.2	32.7	32.1	122.2	122.2	8.9		5.5	6.2	6	6	821844	808147
					Bottom	6.5 6.5	0.2	264 275	21.3 21.3	21.3	8.2 8.2	33.2		110.8 111.1	111.0	8.1 8.1	8.1	9.3 9.4		5 4			
DΔ: Denth-Aver					*																		

16 December 21 during Mid-Flood Tide

Water Qua	lity Monit	toring Resu	ılts on		16 December 21	during Mid-	Flood Ti	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	pl	Н	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ar (iii)	(m/s)	Direction	Value	Average	Value /	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	240	21.7	21.7	8.2	8.2	32.3	32.3	132.6	132.5	9.7		3.7		8			
						1.0 3.7	0.3	248 250	21.7 21.5		8.2 8.2		32.3 32.8		132.4 124.2		9.7 9.1	9.4	3.7		7			
IM9	Cloudy	Moderate	15:49	7.4	Middle	3.7	0.3	272	21.4	21.5	8.2	8.2	32.8	32.8	123.7	124.0	9.0		4.0	6.7	7	7	822104	808829
					Bottom	6.4	0.3	262	21.4	21.4	8.2	8.2	32.9	32.9	113.0	113.2	8.3	8.3	12.4		4			
					Bottom	6.4	0.3	282	21.4	21.4	8.2	0.2	32.9	32.3	113.4	110.2	8.3	0.0	12.2		5			
					Surface	1.0	0.4	290 304	21.8	21.8	8.3	8.3	32.4	32.4	135.0 134.7	134.9	9.8		3.4 3.5		9			
IM10					Middle	4.1	0.4	295	21.5		8.2		32.7		121.7		8.9	9.3	4.3		7	_	822383	
IM10	Cloudy	Moderate	15:57	8.1	Middle	4.1	0.4	302	21.5	21.5	8.2	8.2	32.7	32.7	120.8	121.3	8.8		4.3	4.3	7	7	822383	809804
					Bottom	7.1 7.1	0.3	301 301	21.5 21.5	21.5	8.2	8.2	32.9 32.8	32.8	111.2	111.4	8.1 8.1	8.1	5.0		5 4			
						1.0	0.5	282	21.5		8.3		32.8		131.9		9.6		3.2		5			
					Surface	1.0	0.5	300	21.6	21.7	8.3	8.3	32.7	32.7	131.6	131.8	9.6	9.0	3.2		5			
IM11	Cloudy	Moderate	16:10	8.1	Middle	4.1	0.4	290	21.3	21.3	8.2	8.2	33.0	33.0	114.5	114.5	8.4	9.0	5.8	5.9	5	5	822075	811468
	,					4.1	0.4	313	21.3		8.2		33.0		114.4		8.4		6.1		5			
					Bottom	7.1 7.1	0.3	297 325	21.3 21.3	21.3	8.1	8.1	33.1		109.1	109.1	8.0	8.0	8.3 8.5		6 5			
					Surface	1.0	0.5	304	21.5	21.5	8.3	8.3	32.9	32.9	130.6	129.9	9.5		4.5		5			
					Surface	1.0	0.5	317	21.4	21.0	8.3	0.5	32.9	32.5	129.2	129.9	9.4	8.8	4.8		5			
IM12	Cloudy	Moderate	16:17	8.8	Middle	4.4 4.4	0.4	310 312	21.3	21.3	8.2	8.2	33.1	33.1	111.3	111.3	8.1 8.1		6.8 7.0	6.7	5 6	5	821441	812059
						7.8	0.4	300	21.3		8.1		33.1		111.4		8.1		8.4		5			
					Bottom	7.8	0.4	307	21.3	21.3	8.1	8.1	33.1	33.1	111.6	111.5	8.2	8.2	8.5		5			
					Surface	1.0	-	-	21.6	21.6	8.2	8.2	32.9	32.9	126.0	125.8	9.2		5.1		6			
						1.0 2.5	-	-	21.6		8.2		32.9		125.5		9.1	9.2	5.3		5			
SR1A	Cloudy	Moderate	16:44	4.9	Middle	2.5	-	-	1	-	-	-	-	-	-	-	-		-	7.0		5	819982	812664
					Bottom	3.9	-	-	21.6	21.6	8.2	8.2	33.0	33.0	115.9	115.9	8.4	8.4	8.2		4			
					Dottom	3.9 1.0	-	- 20	21.6	21.0	8.2	0.2	33.0	00.0	115.9	110.0	8.4	0.1	9.4		4			
					Surface	1.0	0.1	20	21.5 21.5	21.5	8.2	8.2	33.1	33.1	118.7 118.7	118.7	8.6 8.6		6.2		3			
SR2	Cloudy	Moderate	17:00	5.2	Middle	-	-		-	_	-		-		-		-	8.6	-	7.9	-	4	821466	814185
SKZ	Cioudy	Woderate	17.00	5.2	Wildule	-	-		-	-	-	-	-	-	-	-	-		-	1.5	-	4	021400	014103
					Bottom	4.2	0.1	31 31	21.5 21.5	21.5	8.1	8.1	33.1	33.1	113.5	113.4	8.3 8.2	8.3	9.7 9.6		5			
					Surface	1.0	0.1	258	21.6	04.0	8.2		32.6		129.3	129.1	9.4		3.9		6			
					Surface	1.0	0.3	272	21.6	21.6	8.2	8.2	32.6	32.6	128.8	129.1	9.4	9.0	4.3		5			
SR3	Cloudy	Moderate	15:37	8.9	Middle	4.5	0.2	266	21.4	21.4	8.2	8.2	33.1	33.1	117.1	116.9	8.5		6.7	6.9	4	5	822150	807587
					_	4.5 7.9	0.2	277 332	21.4		8.2 8.2		33.1 33.4		116.7 107.3		8.5 7.8		7.2 9.7		4			
					Bottom	7.9	0.1	346	21.3	21.3	8.2	8.2	33.4	33.4	107.6	107.5	7.9	7.9	9.7		4			
					Surface	1.0	0.0	344	21.6	21.6	8.2	8.2	32.6	32.6	104.8	104.8	7.7		7.8		4			
						1.0 4.6	0.0	355 223	21.6 21.6		8.2 8.2		32.6 32.7		104.7 102.3		7.7 7.5	7.6	7.6 8.7		4			
SR4A	Cloudy	Moderate	16:49	9.2	Middle	4.6	0.1	237	21.6	21.6	8.2	8.2	32.7	32.7	102.3	102.3	7.5		8.7	8.7	4	4	817207	807806
					Bottom	8.2	0.0	74	21.6	21.6	8.2	8.2	32.7	32.7	101.9	101.9	7.5	7.5	9.7		5			
					Bottom	8.2	0.0	81	21.6	21.0	8.2	0.2	32.7	OZ.,	101.9	101.0	7.5	7.0	9.7		5			
					Surface	1.0 1.0	0.1	318 331	21.8	21.8	8.2	8.2	32.9 32.9	32.9	106.0 105.8	105.9	7.7		6.7 6.7		6 7			
SR5A	Cloudy	Moderate	17:04	3.2	Middle	-	-	-	-		-		-		-		-	7.7	-	7.0	-	6	816597	810687
SKSA	Cloudy	woderate	17:04	3.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	7.0	-	0	010097	010007
					Bottom	2.2	0.1	320 338	21.7 21.7	21.7	8.2	8.2	32.9 32.8	32.8	104.0	104.0	7.6 7.6	7.6	7.2 7.2		5			
						1.0	0.0	22	22.2		8.3		32.8		110.5		8.0		4.9		5			
					Surface	1.0	0.0	24	22.2	22.2	8.3	8.3	32.8	32.8	110.5	110.5	8.0	8.0	4.9		4			
SR6A	Cloudy	Moderate	17:31	4.3	Middle	-	-	-	-		-		-	-	-	-	-	0.0	-	5.4	-	5	817968	814715
					_	3.3	0.0	338	22.0		8.3		32.9		108.4		7.9		5.8		- 6			
					Bottom	3.3	0.0	359	22.0	22.0	8.3	8.3	32.9	32.9	108.4	108.4	7.9	7.9	5.8		6			
					Surface	1.0	0.1	306	21.5	21.5	8.1	8.0	33.6	33.6	97.3	97.3	7.1		3.5		5			
						1.0 8.2	0.1	316 51	21.5 21.5		8.0		33.6 33.7		97.2 96.7		7.1 7.0	7.1	3.6 4.4	1	5 6			
SR7	Cloudy	Moderate	18:00	16.4	Middle	8.2	0.1	52	21.5	21.5	8.0	8.0	33.7	33.7	96.7	96.7	7.0		4.4	4.2	7	6	823616	823736
					Bottom	15.4	0.1	67	21.5	21.5	8.0	8.0	33.7	33.6	96.9	96.9	7.0	7.0	4.5		7			
			ļ		Solioni	15.4	0.1	71	21.5	21.0	8.0	0.0	33.6	55.0	96.9	55.5	7.0		4.5		7			
					Surface	1.0	-	-	21.7 21.6	21.7	8.3	8.3	32.5 32.6	32.5	126.7 126.3	126.5	9.2		4.2	-	5			
SR8	Classide	Modt-	16:05	4.2	Windle	1.0	-		- 21.0		-		32.0		-		9.2	9.2	4.3	44	-	5	820378	811633
SNS	Cloudy	Moderate	16:25	4.2	Middle	-	-	-	-	-	-	-	-	_	-	-	-		-	4.4	-	5	0203/8	011033
					Bottom	3.2	-	-	21.8	21.9	8.2	8.2	32.5	32.5	116.1	116.0	8.4	8.4	4.5 4.5		5			
			1		1	3.2	-	-	21.9		8.2		32.4	1	115.8		8.4		4.5		б		l	

18 December 21 during Mid-Ebb Tide

Water Qua	ity Monit	oring Resu	lits on		18 December 21	during Mid-)															
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dept	th (m)	Current Speed	Current Direction		emperature (°C)	pH		nity (ppt)	- 1	aturation (%)	Disso Oxy	gen	Turbidity		Suspende (mg	/L)	Coordinate HK Grid	Coordinate HK Grid
Otation	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	214 217	21.1	21.1	8.1 8.1	32.0 32.0	32.0	101.7 101.7	101.7	7.6 7.6		12.4 12.5		11			
C1	Cloudy	Moderate	12:03	8.4	Middle	4.2	0.4	231	21.1	21.1	8.1 8.1	32.0	32.0	101.7	101.3	7.5	7.6	13.6	13.7	10	11	815639	804254
Ci	Cloudy	woderate	12.03	0.4	Middle	4.2	0.4	247	21.1	21.1	8.1	32.0		101.3	101.3	7.5		13.6	13.7	11	- 11	013039	004234
					Bottom	7.4	0.4	232 245	21.0 21.0	21.0	8.1 8.1	32.0 32.0		102.6 102.7	102.7	7.6	7.7	14.9 15.0		11 12			
					Surface	1.0	0.4	31	20.9	20.9	8.2 8.2	32.9		105.2	105.2	7.8		9.5		9			
					Surface	1.0	0.4	31	20.9	20.9	8.2	32.9		105.2	103.2	7.7	7.7	9.8		10			
C2	Cloudy	Moderate	10:50	12.0	Middle	6.0	0.4	21	20.9	20.9	8.2 8.2	33.0		105.0 104.9	105.0	7.7		12.3 12.5	11.8	10 9	10	825692	806939
					Bottom	11.0	0.4	8	20.9	20.9	8.2	33.1	33.1	104.9	104.9	7.7	7.7	13.5		11			
						11.0 1.0	0.5	8 247	20.9		8.2	33.1 33.6		104.9 102.7		7.7		13.0 3.6		12			
					Surface	1.0	0.5	251	21.3	21.3	8.1	33.6	33.0	102.6	102.7	7.5	7.6	3.6		12			
C3	Cloudy	Moderate	12:45	11.7	Middle	5.9	0.5	249	21.2	21.2	8.1	33.7		104.1	104.3	7.6	7.0	4.2	4.1	12	12	822119	817779
						5.9 10.7	0.5	267 250	21.2		8.1	33.7 33.7		104.5 105.8		7.6		4.2 4.4		13 12			
					Bottom	10.7	0.4	261	21.2	21.2	8.1	33.7	33.7	106.3	106.1	7.8	7.8	4.5		12			
					Surface	1.0	0.1	287	20.8	20.8	8.1 8.1	31.8	31.8	110.0	110.0	8.2		9.4		15			
	01		44.40		A.F.L.E.	1.0	- 0.1	295	20.8		0.1	31.8		110.0		- 0.2	8.2	9.4	40.0	16	40	047050	007450
IM1	Cloudy	Moderate	11:42	5.2	Middle	-	-		-			-	-	-	-	-		-	10.8	-	16	817958	807150
					Bottom	4.2	0.1	253 255	20.5	20.5	8.1 8.1	31.8		104.7 104.8	104.8	7.9 7.9	7.9	12.2 12.2		15 16			
					Surface	1.0	0.1	200	20.7	20.7	8.1 8.1	31.4		104.8	108.1	8.1		10.5		16			
					Suriace	1.0	0.1	202	20.7	20.7	8.1	31.4		108.0	100.1	8.1	8.0	10.6		15			
IM2	Cloudy	Moderate	11:35	8.1	Middle	4.1 4.1	0.1	156 167	20.6 20.6	20.6	8.1 8.1	31.5 31.5		105.6 105.5	105.6	8.0 7.9		10.9 10.9	11.4	15 15	15	818157	806175
					Bottom	7.1	0.2	136	20.6	20.6	8.1	31.6		102.1	102.1	7.7	7.7	12.8		15			
					Bottom	7.1 1.0	0.2	141 208	20.6	20.0	8.1	31.6 31.4		102.1		7.7 8.1		12.8 11.1		15 15			
					Surface	1.0	0.0	219	20.7	20.7	8.1	31.4		107.7	107.6	8.1	8.0	11.1		14			
IM3	Cloudy	Moderate	11:28	7.4	Middle	3.7	0.2	163	20.6	20.6	8.1 8.1	31.5		104.5	104.5	7.9	8.0	12.2	12.5	15	16	818764	805608
	,					3.7 6.4	0.3	172 156	20.6		8.1	31.5 31.6		104.4 103.5		7.9 7.8		12.3 14.0		16 17			
					Bottom	6.4	0.3	156	20.6	20.6	8.1	31.6		103.5	103.5	7.8	7.8	14.1		16			
					Surface	1.0	0.7	220	20.6	20.6	8.1	31.4		106.9	106.9	8.1		11.7		15			
						1.0 4.2	0.7 0.6	237 206	20.6		8.1	31.4 31.5		106.8 103.7		8.1 7.8	8.0	11.7 14.1		16 15			
IM4	Cloudy	Moderate	11:18	8.4	Middle	4.2	0.6	211	20.5	20.5	8.1	31.5	31.5	103.6	103.7	7.8		14.1	13.9	16	16	819703	804589
					Bottom	7.4	0.5	205 216	20.6	20.6	8.1 8.1	31.6		102.9 102.9	102.9	7.8	7.8	15.9 15.7		17 16			
					Surface	1.0	0.4	236	20.6	20.6	8.1 8.1	31.4		106.4	106.4	8.0		12.2		15			
					Suriace	1.0	0.4	242	20.6	20.0	8.1	31.4		106.4	100.4	8.0	8.0	12.2		16			
IM5	Cloudy	Moderate	11:08	8.0	Middle	4.0	0.3	225 245	20.6	20.6	8.1 8.1	31.5		104.5 104.5	104.5	7.9 7.9		14.1	13.8	16 17	16	820733	804860
					Bottom	7.0	0.3	229	20.6	20.6	8.1	31.5	31.5	104.1	104.1	7.8	7.8	14.9		17			
					Bottom	7.0 1.0	0.3	242	20.6		8.1	31.5		104.1		7.8	7.0	15.0		16			
					Surface	1.0	0.4	216 217	20.7	20.7	8.1 8.1	31.5 31.5	31.5	108.8 108.7	108.8	8.2		7.1 7.1		18 17			
IM6	Cloudy	Moderate	11:00	7.6	Middle	3.8	0.4	223	20.6	20.6	8.1 8.1	31.6		106.8	106.8	8.0	8.1	7.2	7.2	16	16	821040	805815
	,					3.8 6.6	0.4	228 209	20.6 20.6		8.1	31.6 31.6		106.7 102.4		8.0 7.7		7.3 7.3		17 12			
					Bottom	6.6	0.3	214	20.6	20.6	8.1	31.7		102.3	102.4	7.7	7.7	7.3		13			
					Surface	1.0	0.1	225	20.6	20.6	8.1	31.8		104.2	104.2	7.8		9.1		13			
						1.0 4.2	0.1	241 177	20.6 20.6		8.1	31.8 31.8		104.2 103.9		7.8	7.8	9.1 10.0		13 14			
IM7	Cloudy	Moderate	10:51	8.4	Middle	4.2	0.1	187	20.6	20.6	8.1	31.8		103.9	103.9	7.8		10.1	10.1	15	14	821355	806825
					Bottom	7.4	0.1	152	20.6	20.6	8.1 8.1	31.8		103.9	103.9	7.8	7.8	11.1		15			
					0(7.4 1.0	0.1	153 56	20.6	00.0	8.1	31.8		103.9	100.0	7.8		6.6	 	15 11			
					Surface	1.0	0.3	56	20.8	20.8	8.2	33.1	33.1	106.3	106.3	7.8	7.8	6.7		11			
IM8	Cloudy	Moderate	11:14	8.8	Middle	4.4	0.3	67 67	20.8	20.8	8.2 8.2	33.1		105.9 105.9	105.9	7.8		7.5 7.5	7.9	11	10	821822	808136
					Bottom	7.8	0.3	79	20.8	20.8	8.2	33.1		107.3	107.4	7.9	7.9	9.8	1	9			
DA: Denth-Aver					Dottom	7.8	0.3	84	20.8	20.0	8.2	33.1	JJ. I	107.4	107.4	7.9	1.5	9.1		10			

Water Quality Monitoring
Water Quality Monitoring Results on 18 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ilts on		18 December 21	during Mid-	Ebb Tide	9																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)	pН		Salin	ity (ppt)		aturation (%)	Disso	lved gen	Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)		,	(m/s)	Direction	Value	Average		erage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0 1.0	0.2	55 60	21.0 21.0	21.0	8.2	8.2	33.0	33.0	106.4 106.4	106.4	7.8 7.8		4.4 4.5		10 10			
IM9	Cloudy	Moderate	11:19	8.4	Middle	4.2	0.2	48	20.9	20.9	8.2	8.2	33.0	33.0	106.9	107.0	7.9	7.9	5.2	5.3	12	11	822082	808810
	,					4.2 7.4	0.2	52 27	20.9		8.2		33.0 33.1		107.1 108.0		7.9 8.0		5.3 6.0		11			
					Bottom	7.4	0.1	28	20.9	20.9	8.2	8.2	33.0	33.0	108.4	108.2	8.0	8.0	6.2		12			
					Surface	1.0 1.0	0.3	60 63	20.9	20.9	8.2	8.2	33.0 33.0	33.0	106.3 106.4	106.4	7.8 7.8		5.7 5.7		11 12			
IM10	Cloudy	Moderate	11:26	7.6	Middle	3.8	0.4	62	20.9	20.9	8.2	8.2	33.0	33.0	106.9	107.0	7.9	7.9	6.0	6.9	11	12	822389	809797
IIVITO	Cioudy	Woderate	11.20	7.0	ivildule	3.8 6.6	0.4	63	20.9	20.9	8.2	0.2	33.0	33.0	107.0	107.0	7.9		6.1	0.5	12	12	022309	009797
					Bottom	6.6	0.2	46 50	20.9	20.9	8.2	8.2	33.0 33.0	33.0	109.2 109.5	109.4	8.0 8.1	8.1	9.1 8.9		13 12			
					Surface	1.0	0.2	161	21.1	21.1	8.2	8.2	33.3	33.3	104.9	104.9	7.7		5.0		13			
						1.0 4.1	0.3	171 99	21.1		8.2	-	33.3		104.9 105.6		7.7	7.7	5.0 5.1		12 10			
IM11	Cloudy	Moderate	11:37	8.2	Middle	4.1	0.1	104	21.0	21.1	8.2	8.2	33.3	33.3	105.8	105.7	7.8		5.0	5.0	11	11	822066	811478
					Bottom	7.2 7.2	0.2	177 187	21.0 21.0	21.0	8.2	8.2	33.3	33.3	107.8	107.9	7.9 7.9	7.9	5.0		10 11			
					Surface	1.0	0.2	159	21.0	21.0	8.2	8.2	33.2	33.2	106.4	106.5	7.8		5.0		10			
					Ouriaco	1.0	0.2	165	21.0	21.0	8.2	0.2	33.2		106.5		7.8	7.9	5.1		11			
IM12	Cloudy	Moderate	11:43	9.0	Middle	4.5 4.5	0.2	149 156	21.0 21.0	21.0	8.2	8.2	33.3 33.3	33.3	107.6 107.8	107.7	7.9 7.9		5.3 5.4	5.3	10 11	11	821478	812043
					Bottom	8.0	0.2	137	21.0	21.0	8.2	8.2	33.3	33.3	108.5	108.7	8.0	8.0	5.4		13			
						8.0 1.0	0.2	142	21.0		8.2		33.3		108.8		8.0		5.4 4.9		12 10			
					Surface	1.0	-		20.9	20.9	8.2	8.2	33.0	33.0	110.3	110.1	8.1	8.1	4.9		9			
SR1A	Cloudy	Moderate	12:11	4.4	Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-	4.8	-	10	819982	812659
					Bottom	3.4	-		20.8	20.8	8.2	8.2	33.0	33.0	112.8	113.2	8.3	8.5	4.6		10			
						3.4 1.0	0.2	- 75	20.8		8.2	_	32.9 33.3		113.6 109.7		8.6	0.5	4.7 4.8		11 13			
					Surface	1.0	0.2	82	21.1	21.1	8.2	8.2	33.3	33.3	109.8	109.8	8.1	8.1	4.8		14			
SR2	Cloudy	Moderate	12:24	4.7	Middle	-	-		-			-					-	0.1	-	5.1	-	14	821482	814163
					D-#	3.7	0.2	79	21.1	24.4	8.2	0.0	33.3	33.3	111.1	111.2	8.1	8.2	5.1		14			
					Bottom	3.7	0.2	85	21.1	21.1	8.2	8.2	33.3	33.3	111.3	111.2	8.2	8.2	5.6		15			
					Surface	1.0	0.2	92 96	20.8	20.8	8.2	8.2	32.8 32.8	32.8	107.6 107.6	107.6	7.9 7.9		6.7 7.1		14 15			
SR3	Cloudy	Moderate	11:09	8.5	Middle	4.3	0.2	92	20.7	20.7	8.2	8.2	33.1	33.1	107.3	107.4	7.9	7.9	13.8	9.4	12	13	822165	807563
						4.3 7.5	0.2	98 91	20.7		8.2	-	33.1		107.5 108.6		7.9 8.0		14.0 7.2		14 12			
					Bottom	7.5	0.1	98	20.7	20.7	8.2	8.2	33.1	33.1	108.8	108.7	8.0	8.0	7.6		12			
					Surface	1.0	0.1	253 277	20.8	20.8	8.1	8.1	31.5 31.5	31.5	97.4 97.3	97.4	7.3		10.9 10.8		10 9			
SR4A	Cloudy	Moderate	12:24	9.2	Middle	4.6	0.1	252	20.8	20.8	0.1	8.1	31.6	31.6	94.9	94.9	7.1	7.2	11.8	11.9	10	10	817167	807794
SNAM	Cioudy	Woderate	12.24	5.2	Wildle	4.6	0.1	266	20.8	20.0	8.1	0.1	31.6	31.0	94.8	34.3	7.1		11.9	11.5	9	10	017107	007794
					Bottom	8.2 8.2	0.0	282 305	20.8	20.8	8.1	8.1	31.6 31.6	31.6	94.5 94.5	94.5	7.1 7.1	7.1	12.9 12.9		10			
					Surface	1.0	0.0	340	21.0	21.0	8.1	8.1	31.8	31.8	98.6	98.5	7.4		9.9		8			
						1.0	0.0	343	21.0		8.1		31.8		98.4		7.3	7.4	9.9		8 -	_		
SR5A	Cloudy	Moderate	12:39	3.6	Middle		-		-	-	-	-	-	-	-	-	-		-	10.1	-	9	816583	810719
					Bottom	2.6	0.1	8	20.9	20.9	8.1	8.1	31.7	31.7	96.6 96.6	96.6	7.2	7.2	10.4 10.4		10 10			
					Surface	1.0	0.1	35	21.4	21.4	8.1	8.1	31.7	31.7	103.1	103.1	7.6		8.1		12			
						1.0	0.1	37	21.4	21	8.1	0.1	31.7	01	103.1	100.1	7.6	7.6	8.1		11			
SR6A	Cloudy	Moderate	13:06	4.2	Middle	-	-	- :	-	-	-	-	-	-	-	-	-		-	8.5	-	11	817974	814749
					Bottom	3.2	0.0	252	21.2	21.2	8.2	8.2	31.8	31.8	101.0	101.0	7.5	7.5	9.0		11			
					2	3.2 1.0	0.0	265 56	21.2	04.0	8.2	0.4	31.8	00.7	101.0 99.1	00.4	7.5 7.2		9.0 4.8		11 14			
					Surface	1.0	0.2	56	21.2	21.2	8.1	8.1	33.7	33.7	99.1	99.1	7.2	7.2	4.8		13			
SR7	Cloudy	Moderate	13:13	17.4	Middle	8.7 8.7	0.2	54 56	21.2 21.2	21.2	8.1	8.1	33.8 33.8	33.8	99.3 99.4	99.4	7.2 7.2		5.0 5.0	5.0	12 13	12	823613	823759
					Bottom	16.4	0.2	45	21.2	21.2	8.1	8.1	33.8	33.8	100.4	100.5	7.3	7.3	5.0		10			
<u> </u>			1			16.4	0.2	48	21.2		8.1		33.8 32.9		100.5		7.3 8.0		5.1 6.6		9			
					Surface	1.0	-		21.1	21.1	8.3	8.3	32.9	32.9	108.8	108.8	8.0	8.0	6.9		11			
SR8	Cloudy	Moderate	11:52	4.4	Middle	-	-		-	-	-	-	-	-	-	-	-	0.0	-	5.6	-	10	820377	811616
					Bottom	3.4	-	-	21.0	21.0	0.5	0.5	32.8	22.0	108.7	108.8	8.0	0.0	4.5		10			
					Bottom	3.4	-	-	21.0	21.0	8.6	8.5	32.8	32.8	108.8	108.8	8.0	8.0	4.5		7			

18 December 21 during Mid-Flood Tide

1	Water Qual	ity Monit	oring Resu	lts on		18 December 21	during Mid-	Flood Ti	de																
Mathematical Registration Mathematical Registration	Monitoring	Weather	Sea	Sampling	Water	Samulian Dank	h ()		Current	Water Te	mperature (°C)	-	рН	Salin	nity (ppt)					Turbidity	(NTU)				
Marcha M	Station	Condition	Condition	Time	Depth (m)	Sampling Dept	i (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
Class						Surface					20.7		8.1		31.2		109.0								
Month Mont																			8.1						
County C	C1	Cloudy	Moderate	07:55	8.7	Middle	4.4	0.2	56	20.8	20.8	8.1	8.1	31.5	31.5	105.2	105.2	7.9		9.8	10.4	11	11	815596	804232
Class						Bottom					20.9		8.1		31.8		103.4		7.7						
Marie Mari						Curtana					24.0		0.0		20.7		106.7								
County C						Suriace	1.0	0.2	329	21.0	21.0	8.2	0.2	32.7	32.1	106.6	100.7	7.8	7.8	7.4		14			
Moderate Moderate	C2	Cloudy	Moderate	09:05	11.7	Middle					21.0		8.2		33.0		106.0				8.5		12	825682	806959
Check Chec						Bottom	10.7	0.1	10	21.0	21.0	8.2	8.2	33.0	33.0	106.8	107.0	7.8	79	9.3		11			
Case Close						Dottom													7.0						
Class						Surface					21.1		8.0		33.6		101.4		7.0						
Moderate Moderate	С3	Cloudy	Moderate	06:54	12.5	Middle					21.1		8.0		33.7		95.2		1.2		3.7		6	822093	817806
Moderate Moderate		-																							
Maria Mari						Bottom	11.5	0.4	70	21.1	21.1	8.0	8.0	33.7	33.7	96.0	96.0	7.0	7.0	4.0		6			
Mile						Surface					20.9		8.1		31.8		109.4								
Moderate Moderate	18.41	Cloudy	Modorato	00:15	E 4	Middle													8.2		11.4		0	017050	907144
M2 Poutly Moderate 08-20 Poutly Moderate 08-20 Poutly Moderate 08-20 Poutly Moderate 08-20 Poutly Po	IIVI	Cloudy	Woderate	06.15	5.4	Middle		1			-	-	•	-	-	-	-			-	11.4		9	01/950	007144
Moderate OB.20 According to the part of the part						Bottom					20.8		8.1		31.8		109.3		8.2						
Marcial Marc						Surface	1.0	0.0	273	20.8	20.8	8.1	8.1	31.5	31.5	109.1	109.1	8.2		8.0		8			
Moderate Moderate																			8.2						
May Moderate Moderate May Moderate Mod	IM2	Cloudy	Moderate	08:23	8.2	Middle					20.7		8.1		31.5		108.0				9.3		9	818151	806171
Moderate Moderate						Bottom					20.7		8.1		31.5		108.4		8.2						
Moderate Part Moderate Part																									
Miles Mile						Surface	1.0	0.1	311	20.8	20.8	8.1	8.1	31.4	31.4	108.8	108.8	8.2	8.2	9.9		9			
Botton B	IM3	Cloudy	Moderate	08:30	7.6	Middle					20.7		8.1		31.4		108.2				10.8		9	818768	805604
Moderate Moderate						Bottom					20.7		8.1		31 /		108.4		8.2						
Marting Mart						Bottom					20.7		0.1		31.4		100.4		0.2						
Mide Moderate Mo						Surface					20.7		8.1		31.4		107.6		0.4						
Bottom B	IM4	Cloudy	Moderate	08:40	8.3	Middle					20.7	8.1	8.1		31.5	106.4	106.4	8.0	8.1		11.8		8	819716	804593
Moderate Moderate		,				_																			
MS Cloudy Moderate O8.48 F.6 Middle O8.48 F.6 Middle O8.48 O.1						Bottom	7.3	0.1	328	20.7	20.7	8.1	8.1	31.5	31.5	106.5	106.5	8.0	8.0	12.8		9			
Moderate Moderate						Surface					20.8		8.1		31.4		109.2								
Mide Mide	11.45	01		00.40	7.0	A# 4.0					00.7		0.4		04.5		100.0		8.2		40.0		40	000745	004070
Moderate Moderate	IMS	Cloudy	woderate	08:48	7.6	Middle	3.8	0.1	28	20.7	20.7	8.1	8.1	31.5	31.5	108.2	108.2	8.1			10.0	10	10	820715	804876
M6 Cloudy Moderate Modera						Bottom					20.7		8.1		31.5		108.7		8.2						
Moderate Moderate						Surface	1.0	0.1	279	20.9	20.9	8.1	8.1	31.7	31.7	108.6	108.5	8.1		8.4		11			
Middle M						Gundoo							0.1						8.0						
Bottom B	IM6	Cloudy	Moderate	08:55	7.5	Middle					20.8		8.1		31.8		105.8				8.6		9	821063	805822
Moderate No. Moderate No.						Bottom			153		20.8		8.1		31.8		105.6		7.9						
Moderate Part Moderate Part	-																								
Middle M						Surface	1.0	0.1	288	20.9	20.9		8.0	31.8	31.8		105.8	7.9	79	11.9					
Bottom 7.2 0.1 98 20.8 20.8 8.1 8.1 8.1 31.8 31.8 105.3 105.	IM7	Cloudy	Moderate	09:04	8.2	Middle					20.8		8.1		31.8		105.2				13.0		10	821368	806817
Moderate Moderate						Dettern					20.0		0.4		24.0		105.2		7.0						
IM8 Cloudy Moderate 08:37 7.2 Middle 1.0 0.2 60 21.0 21.0 8.2 8.2 33.0 33.0 104.6 104.6 7.7 7.7 7.7 5.5 4 4 6 821818 808137						DOLLOITI				20.8	20.0	8.1	0.1	31.8	31.0	105.3	105.3	7.9	1.9	14.4		12			
M8 Cloudy Moderate 08:37 7.2 Middle 3.6 0.2 42 21.0 21.0 8.2 82 33.0 33.0 105.0 105.1 7.7 1.7 5.9 5.8 4 6 821818 808137						Surface					21.0		8.2		33.0		104.6				ł				
8.1 Bottom 6.2 0.2 54 21.0 8.2 82 33.0 105.2 1.7 5.9 4 10.0 8.2 8.2 33.0 105.2 1.7 5.9 4 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	IM8	Cloudy	Moderate	08:37	7.2	Middle	3.6	0.2	42	21.0	21.0	8.2	8.2	33.0	33.0	105.0	105.1	7.7	7.7	5.9	5.8	4	6	821818	808137
		O.Cuay	.nouoraib	00.07																	0.0			52.0.0	000.07
						Bottom	6.2	0.2	55	21.0	21.0	8.2	8.2	33.0	33.0	105.9	106.0	7.8	7.8	6.5	1	3			

18 December 21 during Mid-Flood Tide

Water Qual	ity Monit	toring Resu	ılts on		18 December 21	during Mid-	Flood Ti	de																
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)		aturation		olved /gen	Turbidity	(NTU)	Suspende (mg		Coordinate	
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	h (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value		Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Surface	1.0	0.3	56	21.0	21.0	8.2	8.2	33.0	33.0	105.6	105.6	7.8		6.4		10			
						1.0 3.5	0.3	61 56	21.0		8.2 8.2		33.0 33.0		105.6 105.6		7.8 7.8	7.8	6.5 7.0		11			
IM9	Cloudy	Moderate	08:31	7.0	Middle	3.5	0.2	59	20.9	20.9	8.2	8.2	33.0	33.0	105.6	105.6	7.8	ł	7.0	7.2	10 9	9	822085	808833
					Bottom	6.0	0.2	42	20.9	20.9	8.2	8.2	33.0	33.0	106.0	106.1	7.8	7.8	8.2		7			
						6.0 1.0	0.2	44 285	20.9		8.2 8.2		33.0		106.2		7.8		8.2 9.6		8			
					Surface	1.0	0.6	293	21.1	21.1	8.2	8.2	33.1	33.1	105.9	105.9	7.8	7.8	9.6		7			
IM10	Cloudy	Moderate	08:24	8.4	Middle	4.2 4.2	0.4	284 293	21.1	21.1	8.2 8.2	8.2	33.1	33.1	105.7 105.7	105.7	7.8	7.0	9.8 9.7	10.0	9	9	822397	809780
					Bottom	7.4	0.5	293	21.1	21.1	8.2	8.2	33.1	33.1	105.7	105.6	7.7	7.7	10.6	-	10			
					Bollom	7.4	0.4	313	21.1	21.1	8.2	0.2	33.1	33.1	105.6	105.6	7.7	1.1	10.8		11			
					Surface	1.0 1.0	0.4	262 282	21.1	21.1	8.2	8.2	33.2	33.2	104.8	104.8	7.7	ł	7.1 7.2	-	11 12			
IM11	Cloudy	Moderate	08:14	7.6	Middle	3.8	0.3	254	21.1	21.1	8.2	8.2	33.2	33.2	104.8	104.8	7.7	7.7	7.9	7.7	9	10	822070	811457
IIVI I	Cioday	Woderate	00.14	7.0	Wildelic	3.8	0.3	262	21.1	21.1	8.2	0.2	33.2	33.2	104.8	104.0	7.7		7.9	1.7	10	10	022070	011437
					Bottom	6.6 6.6	0.3	267 269	21.0 21.0	21.0	8.2 8.2	8.2	33.2 33.2	33.2	105.2 105.4	105.3	7.7	7.7	8.1 8.0	-	10 9			
					Surface	1.0	0.4	279	21.0	21.0	8.2	8.2	33.2	33.2	104.1	104.1	7.6		8.0		11			
						1.0 4.3	0.4	297 283	21.0 21.0		8.2 8.2		33.2		104.0		7.6 7.6	7.6	8.1 8.8		10 9			
IM12	Cloudy	Moderate	08:05	8.5	Middle	4.3	0.4	307	21.0	21.0	8.2	8.2	33.2	33.2	104.1	104.2	7.7		8.9	9.0	10	9	821453	812036
					Bottom	7.5	0.4	281	21.0	21.0	8.2	8.2	33.2	33.2	105.4	105.5	7.7	7.8	10.6		5			
						7.5 1.0	0.4	288	21.0		8.2 8.2		33.2		105.5		7.8		9.8		10			1
					Surface	1.0	-	-	21.0	21.0	8.2	8.2	33.0	33.0	104.3	104.2	7.7	7.7	4.3		11			
SR1A	Cloudy	Moderate	07:35	4.2	Middle	2.1 2.1	-	-	-	-	-	-	-	-	-	-	-		-	4.3	-	11	819974	812662
					Bottom	3.2		-	20.9	20.9	8.2	8.2	33.0	33.0	104.7	104.8	7.7	7.7	4.3	-	12			
					Bollom	3.2	-	-	20.9	20.9	8.2	0.2	33.0	33.0	104.9	104.6	7.7	1.1	4.3		11			
					Surface	1.0 1.0	0.5 0.6	301 329	21.1 21.1	21.1	8.2 8.2	8.2	33.1	33.1	107.4	107.4	7.9 7.9	ł	7.6 7.6		10 9			
SR2	Cloudy	Moderate	07:18	4.0	Middle		-	-	-		-	_	-		-		-	7.9	-	7.7	-	9	821446	814177
	,					3.0	0.4	302	21.1		8.2		33.1		107.4		7.9		7.7		7	-		
					Bottom	3.0	0.4	307	21.1	21.1	8.2	8.2	33.1	33.1	107.4	107.4	7.9	7.9	7.7	-	8			
					Surface	1.0	0.3	88	21.0	21.0	8.2	8.2	32.7	32.7	106.3	106.2	7.8		5.0		6			
						1.0 4.9	0.4	89 66	21.0 21.1		8.2 8.2		32.8 32.9		106.1 106.1		7.8 7.8	7.8	5.3 8.7		7			
SR3	Cloudy	Moderate	08:45	9.7	Middle	4.9	0.3	66	21.1	21.1	8.2	8.2	32.9	32.9	106.1	106.1	7.8		9.0	7.8	6	6	822168	807555
					Bottom	8.7 8.7	0.3	44 45	21.1	21.1	8.2	8.2	32.9	32.9	106.9	107.0	7.9	7.9	9.5 9.1		5 6			
					Surface	1.0	0.3	85	20.9	20.9	8.0	8.0	31.8	31.8	104.6	104.6	7.8		9.5		12			_
					Sunace	1.0	0.3	86	20.9	20.9	8.0	6.0	31.8	31.0	104.5	104.0	7.8	7.8	9.6		13			
SR4A	Cloudy	Moderate	07:30	8.6	Middle	4.3 4.3	0.2	80 83	20.8	20.8	8.0	8.0	31.8	31.8	103.8	103.8	7.8	+	9.7 9.7	10.2	11	12	817166	807794
					Bottom	7.6	0.1	86	20.7	20.7	8.0	8.0	31.8	31.8	103.5	103.5	7.8	7.8	11.5		11			
						7.6 1.0	0.1	91 96	20.7		8.0		31.8		103.5		7.8		11.3 9.0		10			-
					Surface	1.0	0.1	103	20.9	20.9	8.0	8.0	31.8	31.8	105.8	105.8	7.9	7.9	9.2		12			
SR5A	Cloudy	Moderate	07:12	4.1	Middle		-	-	-		-	-	-		-		-	1.5	-	9.3	-	11	816609	810682
	-					3.1	0.1	83	20.9		8.1		31.8		106.3		8.0		9.6		11			
					Bottom	3.1	0.1	86	20.9	20.9	8.1	8.1	31.8	31.8	106.5	106.4	8.0	8.0	9.6		11			
					Surface	1.0 1.0	0.0	191 199	21.2	21.2	8.0	8.0	31.8	31.8	104.6 104.6	104.6	7.8	ł	8.9 8.9	-	12 12			
SR6A	Cloudy	Moderate	06:41	4.4	Middle	-	-	-	-		-		-		-		-	7.8	-	9.0	-	11	817954	814747
SNOA	Cioudy	Woderate	00.41	4.4	ivildule	-	-	-	-		-	-	-				-		-	5.0	-		017934	014747
					Bottom	3.4 3.4	0.0	10 10	21.2	21.2	8.0	8.0	31.8	31.8	104.5	104.5	7.8	7.8	9.1 9.2	-	10			
					Surface	1.0	0.6	102	21.2	21.2	8.0	8.0	33.6	33.6	97.0	97.0	7.1		4.6		6			
						1.0 8.7	0.6	102 117	21.2 21.2		8.0		33.6 33.6		97.0 97.0		7.1 7.1	7.1	4.6 5.4	1	5			
SR7	Cloudy	Moderate	06:26	17.4	Middle	8.7	0.5	124	21.2	21.2	8.0	8.0	33.6	33.6	97.0	97.0	7.1	İ	5.5	5.4	6	6	823625	823720
					Bottom	16.4	0.3	136	21.2	21.2	8.0	8.0	33.7	33.7	97.5	97.5	7.1	7.1	6.0		6			
					0	16.4 1.0	0.4	141	21.2	00.	8.0 8.2		33.7	00.5	97.5 107.1	107.5	7.1 7.9		6.1		6			+
					Surface	1.0	-	-	21.1	21.1	8.2	8.2	32.9	32.9	107.2	107.2	7.9	7.9	6.3		8			
SR8	Cloudy	Moderate	07:58	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-	1	-	6.3	-	7	820404	811640
					Bottom	3.3		-	21.1	21.1	8.2	8.2	32.9	32.9	107.6	107.7	7.9	7.9	6.4	j	6			
					Bottom	3.3	-	-	21.1	21.1	8.2	0.2	32.9	32.3	107.7	101.7	7.9	1.9	6.3		5			

21 December 21 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	ilts on		21 December 21	during Mid-	Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value		Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	216 235	19.1 19.1	19.1	8.2	8.2	32.6 32.6		90.9	90.9	6.9		5.6 5.7		12 12			
						4.0	0.2	218	19.1		8.2		32.6		90.8		6.9	6.9	6.7	١	11			
C1	Rainy	Moderate	13:32	8.0	Middle	4.0	0.1	230	19.1	19.1	8.2	8.2	32.6		90.8	90.8	6.9		6.7	6.5	11	11	815623	804233
					Bottom	7.0	0.1	248	19.1	19.2	8.2	8.2	32.6		90.8	90.8	6.9	6.9	7.0		9			
						7.0	0.1	262 105	19.2		8.2		32.6		90.8		6.9 7.4		7.0 5.3		9			
					Surface	1.0	0.2	109	19.9	19.9	8.2	8.2	33.1	33.1	98.8	98.8	7.4		5.3		7			
C2	Rainy	Rough	12:34	11.8	Middle	5.9	0.2	127	19.9	19.9	8.2	8.2	33.1	33.1	98.3	98.3	7.4	7.4	5.4	6.6	6	7	825700	806947
02	Rally	Rougii	12.34	11.0	Wilde	5.9	0.2	133	19.9	19.9	8.2	0.2	33.1		98.3	50.3	7.4		5.5	0.0	6	,	623700	000547
					Bottom	10.8	0.2	133 138	19.8 19.8	19.8	8.2	8.2	33.3		98.1 98.1	98.1	7.4 7.4	7.4	9.0		6			
						1.0	0.2	66	20.5		8.1		33.7		95.9		7.1		3.5		6			
					Surface	1.0	0.3	72	20.5	20.5	8.1	8.1	33.7	33.7	95.9	95.9	7.1	7.1	3.4		6			
C3	Rainy	Rough	14:34	11.8	Middle	5.9	0.2	74	20.5	20.5	8.1	8.1	33.7	33.7	95.5	95.5	7.1	7.1	3.6	3.6	5	5	822126	817825
	,					5.9 10.8	0.3	74 77	20.5		8.1 8.2		33.7 33.8		95.5 95.8		7.1 7.1		3.7		5 4			
					Bottom	10.8	0.1	79	20.5	20.5	8.2	8.2	33.8		95.8	95.8	7.1	7.1	3.6	1	4			
					Surface	1.0	0.1	111	19.2	19.2	8.2	8.2	32.8		90.6	90.7	6.9		4.5		11			
					Gundoo	1.0	0.1	115	19.2	10.2	8.2	0.2	32.7	OL.,	90.7	00.7	6.9	6.9	4.8		11			
IM1	Rainy	Moderate	13:14	4.6	Middle		-	-	-	-	-	-	-	-	-	-	-		-	5.3	-	12	817949	807140
					D. W	3.6	0.1	123	19.2	40.0	8.2		32.6	00.0	91.1	04.4	6.9	0.0	6.0		12			
					Bottom	3.6	0.1	127	19.2	19.2	8.2	8.2	32.6		91.1	91.1	6.9	6.9	5.9		12			
					Surface	1.0	0.2	158	19.2	19.2	8.2	8.2	32.6	32.6	91.2	91.2	6.9		5.1		11			
						1.0 3.3	0.2	167 155	19.2 19.2		8.2		32.6 32.6		91.2 91.2		6.9	6.9	5.1 6.2	-	10 9			
IM2	Rainy	Moderate	13:09	6.6	Middle	3.3	0.2	158	19.2	19.2	8.2	8.2	32.6		91.2	91.2	6.9		6.1	6.4	9	10	818171	806149
					Bottom	5.6	0.3	166	19.2	19.2	8.2	8.2	32.6		91.2	91.2	6.9	6.9	7.9		9			
					Dottom	5.6	0.3	170	19.2	10.2	8.2	0.2	32.6		91.2	012	6.9	0.0	7.9		9			
					Surface	1.0	0.2	199 217	19.2 19.2	19.2	8.2	8.2	32.6 32.6	32.6	91.9 92.0	92.0	7.0 7.0		4.7		8			
IM3	Rainy	Moderate	13:00	6.8	Middle	3.4	0.2	197	19.0	19.0	8.2	8.2	32.7	32.7	92.1	92.1	7.0	7.0	5.1	5.5	10	9	818780	805599
IIVIO	really	Woderate	13.00	0.0	Wildelie	3.4	0.2	216	19.0	13.0	8.2	0.2	32.7		92.0	32.1	7.0		5.0	5.5	10	3	010700	000000
					Bottom	5.8 5.8	0.2	178 187	19.0 19.0	19.0	8.2	8.2	32.7 32.6		91.7 91.6	91.7	7.0	7.0	6.8	1	10 10			
					0(1.0	0.2	198	19.2	40.0	8.2	0.0	32.7		91.0	04.0	6.9		4.1		10			
					Surface	1.0	0.2	204	19.2	19.2	8.2	8.2	32.7	32.1	91.0	91.0	6.9	6.9	4.1		10			
IM4	Rainy	Moderate	12:53	8.0	Middle	4.0	0.2	168	19.2	19.2	8.2	8.2	32.7		91.1	91.1	6.9	0.0	5.2	5.4	10	11	819733	804587
						4.0 7.0	0.2	180 179	19.2 19.0		8.2 8.2		32.7 32.7		91.1		6.9 6.9		5.3 6.8		10 12			
					Bottom	7.0	0.2	180	19.0	19.0	8.2	8.2	32.6		91.2	91.2	6.9	6.9	6.7		13			
					Surface	1.0	0.3	200	19.0	19.0	8.2	8.2	32.7	32.7	91.0	91.0	6.9		5.0		9			
						1.0 3.9	0.3	200 188	19.0 19.0		8.2 8.2		32.7 32.7		91.0 91.1		6.9	6.9	5.1 6.3		10 10			
IM5	Rainy	Moderate	12:46	7.8	Middle	3.9	0.2	206	19.0	19.0	8.2	8.2	32.8		91.1	91.2	6.9		6.3	6.2	10	10	820730	804884
					Bottom	6.8	0.3	188	19.2	19.2	8.2	8.2	32.8	22.7	91.3	91.4	7.0	7.0	7.3		11			
					Dottom	6.8	0.3	189	19.2	10.2	8.2	0.2	32.7		91.4	01	7.0	7.0	7.3		10			
					Surface	1.0	0.2	200 206	19.2 19.2	19.2	8.2	8.2	32.5 32.5		91.8 91.7	91.8	7.0 7.0		5.1 5.1	-	8			
11.40	D.::		40.40	7.0	No. 1.0	3.6	0.2	187	19.2	40.0	8.2		32.5		91.6	91.6	7.0	7.0	6.4		9	9	004075	005000
IM6	Rainy	Moderate	12:42	7.2	Middle	3.6	0.2	203	19.2	19.2	8.2	8.2	32.5	32.5	91.6	91.6	7.0		6.2	6.3	9	9	821075	805830
					Bottom	6.2	0.2	182	19.2	19.2	8.2	8.2	32.4		91.4	91.4	7.0	7.0	7.7		10			
						6.2 1.0	0.2	193 211	19.2 19.2		8.2		32.2 32.7		91.4		7.0 6.9		7.6 5.1		10 9			
					Surface	1.0	0.2	230	19.2	19.2	8.2	8.2	32.7	32.7	90.7	90.7	6.9	6.9	5.0	1	9			
IM7	Rainy	Moderate	12:36	8.4	Middle	4.2	0.1	164	19.2	19.2	8.2	8.2	32.8		90.7	90.7	6.9	6.9	6.3	6.2	9	10	821327	806834
	,					4.2	0.1	174	19.2		8.2		32.8		90.7		6.9		6.3		10			
					Bottom	7.4	0.2	136 142	19.2 19.2	19.2	8.2	8.2	32.6 32.6		90.9	90.9	6.9	6.9	7.5 7.2	1	10 11			
					Surface	1.0	0.2	107	19.8	19.8	8.2	8.2	33.2	33.2	98.1	98.1	7.4		6.0	Ì	7			
					Suriace	1.0	0.2	117	19.8	15.0	8.2	0.2	33.2		98.1	30.1	7.4	7.4	6.0		7			
IM8	Rainy	Rough	13:00	7.3	Middle	3.7 3.7	0.3	104 105	19.8 19.8	19.8	8.2	8.2	33.3		97.8 97.8	97.8	7.3 7.3		6.7 6.8	7.6	8	8	821823	808119
					D-#	6.3	0.3	100	19.6	10.6	8.2	0.0	33.7		97.5	07.6	7.3	7.0	10.1	ł	9			
					Bottom	6.3	0.3	103	19.6	19.6	8.2	8.2	33.7		97.6	97.6	7.3	7.3	10.1		9			

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 21 December 21 during

21 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ılts on		21 December 21	during Mid-	Ebb Tide	e																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water To	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Оатріпу Бер		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	107 114	19.8 19.8	19.8	8.2	8.2	33.1		98.7 98.7	98.7	7.4		6.1		9			
						3.6	0.3	114	19.8		8.2		33.1 33.1		98.7		7.4 7.4	7.4	6.1 6.5	-	9			
IM9	Rainy	Rough	13:06	7.2	Middle	3.6	0.2	118	19.8	19.8	8.2	8.2	33.1		98.2	98.2	7.4		6.6	6.7	9	9	822093	808804
					Bottom	6.2	0.1	134	19.8	19.8	8.2	8.2	33.2	33.2	98.3	98.4	7.4	7.4	7.4	1	9			
					Bottom	6.2	0.1	142	19.8	15.0	8.2	0.2	33.2	33.2	98.4	30.4	7.4	7.4	7.3		9			
					Surface	1.0	0.2	55	19.7	19.7	8.2	8.2	33.4	33.4	98.1	98.1	7.4		5.1		7			
						1.0	0.2	59 37	19.7		8.2		33.4		98.1		7.4	7.4	5.2	4	6			
IM10	Rainy	Rough	13:13	7.8	Middle	3.9	0.3	37	19.7 19.7	19.7	8.2	8.2	33.4 33.4		97.9 97.9	97.9	7.4		5.3 5.3	5.7	6	6	822362	809775
					- · ·	6.8	0.3	62	19.8		8.2		33.5		97.5		7.3		6.5	1	6			
					Bottom	6.8	0.4	63	19.8	19.8	8.2	8.2	33.5		97.6	97.6	7.3	7.3	6.5		6			
					Surface	1.0	0.1	56	20.1	20.1	8.2	8.2	33.6		97.8	97.8	7.3		4.9		8			
					Ouriace	1.0	0.1	56	20.1	20.1	8.2	0.2	33.6		97.8	37.0	7.3	7.3	5.0		7			
IM11	Rainy	Rough	13:24	8.0	Middle	4.0	0.2	54	20.1	20.1	8.2	8.2	33.6		97.6	97.6	7.3		5.2	5.0	6	7	822046	811442
						4.0	0.2	55	20.1		8.2		33.6		97.6		7.3		5.2	1	6			
					Bottom	7.0 7.0	0.3	92 96	20.1	20.1	8.2	8.2	33.6 33.6		97.6 97.6	97.6	7.3	7.3	4.9 5.0	-	6			
						1.0	0.1	261	20.1		8.2		33.6	1	97.4		7.3		5.7		7			
					Surface	1.0	0.1	275	20.1	20.1	8.2	8.2	33.6		97.4	97.4	7.3	7.0	5.8	i	7			
IM12	Rainy	Rough	13:30	9.2	Middle	4.6	0.0	203	20.1	20.1	8.2	8.2	33.6	33.6	97.3	97.3	7.3	7.3	5.8	6.0	7	7	821473	812068
IIVITZ	reality	rtougn	15.50	3.2	Wilduic	4.6	0.0	208	20.1	20.1	8.2	0.2	33.6		97.3	31.5	7.3		5.8	0.0	6	,	021475	012000
					Bottom	8.2	0.2	173	20.1	20.1	8.2	8.2	33.6		97.4	97.4	7.3	7.3	6.6		6			
						8.2 1.0	0.2	189	20.1		8.2		33.6		97.4		7.3		6.6 5.2		6			
					Surface	1.0	-	-	19.7 19.7	19.7	8.2	8.2	33.4 33.4	33.4	95.2 95.3	95.3	7.2		5.2	4	8			
						2.6		-	-		0.2		-		33.3		1.2	7.2	3.1	١	-			
SR1A	Rainy	Moderate	14:00	5.1	Middle	2.6	-	-	-	-	-	-	-	-		-			-	5.1	-	7	819979	812665
					Bottom	4.1	-	-	19.7	19.7	8.2	8.2	33.4	33.4	95.9	96.0	7.2	7.2	5.2	ĺ	6			
					Bottom	4.1	-	-	19.7	15.7	8.2	0.2	33.4		96.0	30.0	7.2	1.2	5.1		6			
					Surface	1.0	0.1	348	20.2	20.2	8.2	8.2	33.6	33.6	97.3	97.3	7.2		4.5		7			
						1.0	0.1	356	20.2		8.2		33.6		97.3		7.2	7.2	4.6	1	7			
SR2	Rainy	Rough	14:13	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.9	-	6	821451	814167
						3.5	0.1	15	20.1		8.2		33.6		97.3		7.2		5.2	ł	6			
					Bottom	3.5	0.1	15	20.1	20.1	8.2	8.2	33.6		97.3	97.3	7.2	7.2	5.1	i	5			
					Surface	1.0	0.4	97	19.7	19.7	8.2	8.2	33.2		98.9	98.9	7.4		7.1		8			
					Guildoo	1.0	0.4	103	19.7	10.7	8.2	0.2	33.2		98.9	00.0	7.4	7.4	7.0		8			
SR3	Rainy	Rough	12:53	8.7	Middle	4.4	0.4	87	19.6	19.6	8.2	8.2	33.6		98.6	98.6	7.4		12.1	11.4	8	8	822151	807558
						4.4 7.7	0.5	88 157	19.6 19.6		8.2 8.2		33.6 33.6		98.6 98.5		7.4		12.2 15.1	4	9			
					Bottom	7.7	0.4	165	19.6	19.6	8.2	8.2	33.7		98.5	98.5	7.4	7.4	15.1	1	8			
					Surface	1.0	0.4	78	19.2	19.2	8.2	8.2	32.7	1	90.8	90.8	6.9		4.2		10			
					Surface	1.0	0.4	84	19.2	19.2	8.2	0.2	32.7	32.7	90.8	90.0	6.9	7.0	4.2		10			
SR4A	Rainy	Moderate	13:54	9.0	Middle	4.5	0.3	100	19.2	19.2	8.2	8.2	32.7	32.7	90.9	90.9	7.0	7.0	5.1	5.3	9	9	817191	807794
						4.5	0.3	109	19.1		8.2		32.7		90.9		7.0		5.1		10			
					Bottom	8.0 8.0	0.4	104 109	19.1 19.1	19.1	8.2	8.2	32.7	32.7	90.9	90.9	6.9	6.9	6.6 6.5	4	8			
						1.0	0.4	111	19.1		8.2		32.6		90.9		7.0		5.5		12			
					Surface	1.0	0.3	119	19.3	19.3	8.2	8.2	32.6		90.8	90.9	6.9	7.0	5.4		12			
SR5A	Rainy	Moderate	14:05	3.6	Middle	-	-	-	-		-		-		-			7.0	-	5.7	-	11	816573	810715
SKSA	Rally	woderate	14.05	3.0	Middle	-	-	-	-	-	-		-	-	-	-	-		-	5.7	-	- "	010073	610715
					Bottom	2.6	0.2	123	19.3	19.3	8.2	8.2	32.6		90.8	90.8	6.9	6.9	6.0		10			
						2.6	0.2	129	19.2		8.2		32.6		90.8		6.9		6.0		10			
					Surface	1.0	0.0	51 54	19.2 19.3	19.3	8.2	8.2	32.6 32.6		90.7	90.8	6.9		5.0 5.1	-	9			
						-	-	-	-		- 0.2		-		-		-	6.9	-	1	-			
SR6A	Rainy	Moderate	14:51	4.0	Middle	-	-	-	-	-	-	-	-	-		-			-	5.7	-	9	817959	814739
					Bottom	3.0	0.0	110	19.3	19.3	8.2	8.2	32.6		90.8	90.8	6.9	7.0	6.4		8			
					Bottom	3.0	0.0	118	19.3	13.3	8.2	0.2	32.6		90.8	30.0	7.0	7.0	6.4		8			
					Surface	1.0	0.1	114	20.4	20.4	8.1	8.1	33.7		95.0	95.0	7.0	. –	4.0	↓ _	5			
						1.0 7.9	0.1	120 162	20.4		8.1 8.1	1	33.7 33.7		95.0 94.5		7.0	7.0	4.1 4.5	4	5			1
SR7	Rainy	Rough	15:02	15.8	Middle	7.9	0.1	163	20.5	20.5	8.1	8.1	33.7	33.7	94.5	94.5	7.0	}	4.5	4.4	5	5	823633	823760
					D.::	14.8	0.1	147	20.5	00 -	8.1		33.7	00 -	94.5	0.15	7.0		4.6	1	5			
					Bottom	14.8	0.1	152	20.5	20.5	8.1	8.1	33.7		94.6	94.6	7.0	7.0	4.6	1	5			1
					Surface	1.0	-		20.1	20.1	8.2	8.2	33.4	33./	98.9	98.8	7.4		5.7		8			
					Guilace	1.0	-	-	20.0	20.1	8.2	0.2	33.4	30.4	98.7	30.0	7.4	7.4	5.6	1	8			
SR8	Rainy	Rough	13:39	5.0	Middle	-	-	-	-	-	-	-	-	ļ -	-	- 1	-		-	6.8	-	7	820411	811634
						4.0	-	-	19.9		8.2		33.5		97.7	-	7.3		7.9	1	7			
					Bottom	4.0			19.9	19.9	8.2	8.2	33.5	33.5	97.7	97.8	7.3	7.3	7.9	1	6			
					1	7.0			10.0		, J.2						7.0							

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

21 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ilts on		21 December 21	during Mid-	Flood T	ide																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	F	Н	Salir	nity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average		Average			Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.6	64 65	18.9 19.0	19.0	8.2	8.2	33.0 33.1	33.1	92.7 92.7	92.7	7.1 7.1		7.8 7.9	1	13 13			
C1	Rainy	Rough	09:42	7.8	Middle	3.9	0.3	19	19.0	19.0	8.2	8.2	33.1	33.1	93.1	93.2	7.1	7.1	8.7	8.5	12	12	815632	804252
					Bottom	3.9 6.8	0.3	19 31	19.0 19.0	19.0	8.2 8.2	8.2	33.1 33.1	33.1	93.2 94.6	94.7	7.1 7.2	7.2	8.6 9.0		11			
						6.8 1.0	0.9	32 10	19.0 19.9		8.2 8.1		33.1 33.0		94.8 98.8		7.2 7.4	1.2	9.0 4.5		11 6			
					Surface	1.0	0.4	10	19.9	19.9	8.1	8.1	33.0		98.8	98.8	7.4	7.4	4.5		6			
C2	Rainy	Rough	10:17	11.9	Middle	6.0	0.3	8	20.0	20.0	8.1	8.1	33.1 33.1	33.1	98.1 98.0	98.1	7.3 7.3		5.4 5.5	7.3	9	9	825663	806922
					Bottom	10.9 10.9	0.4	15 15	20.2	20.2	8.1 8.1	8.1	33.2 33.2	33.2	97.7 97.7	97.7	7.3 7.3	7.3	11.7 11.8		13 13			
					Surface	1.0	0.5	224	20.2	20.2	8.1	8.1	33.6	33.6	97.4	97.4	7.2		4.7		5			
СЗ	Rainy	Rough	08:14	11.7	Middle	1.0 5.9	0.5	228 234	20.2	20.2	8.1 8.1	8.1	33.6 33.6		97.4 97.2	97.2	7.2	7.2	4.7 4.9	5.5	5 7	7	822123	817816
C3	Rainy	Rougn	06.14	11.7		5.9 10.7	0.5 0.3	250 239	20.2		8.1 8.1		33.6 33.6		97.2 96.9		7.2 7.2		4.9 6.9	5.5	7 9	,	022123	617616
					Bottom	10.7	0.4	245	20.2	20.2	8.1	8.1	33.6	33.0	96.9	96.9	7.2	7.2	6.7		8			
					Surface	1.0	0.1	35 37	19.0 19.0	19.0	8.2	8.2	33.0 33.0		92.3 92.3	92.3	7.0	7.0	7.1 7.1	1	15 14			
IM1	Rainy	Moderate	09:57	4.2	Middle	- :	-	-	-	-	-	-	-	-	-	-	-	7.0		7.7	-	14	817927	807118
					Bottom	3.2	0.1	58	18.9	18.9	8.2	8.2	33.1		92.4	92.4	7.0	7.0	8.3		13			
					Surface	3.2 1.0	0.1	62 23	18.9 19.0	19.0	8.2 8.2	8.2	33.1 32.9		92.4 93.0	93.1	7.0		8.3 5.3		13 15			
						1.0 3.1	0.3	24 12	19.0 19.0		8.2 8.2		32.9 32.9		93.1 93.4		7.1 7.1	7.1	5.4 6.6	1	15 13			
IM2	Rainy	Moderate	10:05	6.2	Middle	3.1	0.2	12	19.0	19.0	8.2	8.2	32.9	32.9	93.5	93.5	7.1		6.6	6.3	13	13	818143	806170
					Bottom	5.2 5.2	0.2	6	19.0 19.0	19.0	8.2	8.2	32.9 32.9		96.0 96.2	96.1	7.3	7.3	7.0 7.0		11			
					Surface	1.0	0.3	326 355	19.0 19.0	19.0	8.2	8.2	32.9 32.9		92.8 92.8	92.8	7.1 7.1		8.5 8.5		9			
IM3	Rainy	Moderate	10:12	6.4	Middle	3.2	0.3	341	19.0	19.0	8.2	8.2	32.9	32.9	92.7	92.8	7.1	7.1	9.1 9.2	9.2	10	10	818801	805613
					Bottom	3.2 5.4	0.3	314 353	19.0 19.0	19.0	8.2 8.2	8.2	32.9 32.9	32.0	93.6	93.7	7.1	7.2	10.0		10 12			
						5.4 1.0	0.4	325 93	19.0 19.0		8.2 8.2		32.9 32.7		93.7 93.7		7.2 7.1	1.2	10.0 4.2		12			
					Surface	1.0	0.3	99	19.0	19.0	8.2	8.2	32.7	32.1	94.1	93.9	7.2	7.2	4.2		8			
IM4	Rainy	Moderate	10:25	8.2	Middle	4.1 4.1	0.2	112 118	19.2 19.2	19.2	8.2 8.2	8.2	32.7 32.7	32.1	95.5 95.8	95.7	7.3 7.3		5.3 5.3	5.5	8 9	9	819740	804607
					Bottom	7.2	0.3	91 91	19.2 19.2	19.2	8.2	8.2	32.6 32.6		97.6 98.2	97.9	7.4 7.5	7.5	6.9 7.0		10 11			
					Surface	1.0 1.0	0.2	243 258	19.2 19.2	19.2	8.2 8.2	8.2	32.7 32.7	32.7	91.4 91.4	91.4	7.0 7.0		5.3 5.3		7			
IM5	Rainv	Moderate	10:30	7.4	Middle	3.7	0.0	278	19.2	19.2	8.2	8.2	32.7		91.5	91.6	7.0	7.0	6.0	6.2	9	9	820756	804885
	,				B.#	3.7 6.4	0.0	285 190	19.2 19.2		8.2 8.2		32.7 32.6		91.6 92.1	92.2	7.0	7.0	6.0 7.2	-	8 10	-		
					Bottom	6.4 1.0	0.2	206 73	19.2 19.0	19.2	8.2	8.2	32.6 32.6	32.0	92.2 91.4		7.0 7.0	7.0	7.1 4.8	1	10 10			
					Surface	1.0	0.2	79	19.0	19.0	8.2	8.2	32.6	32.0	91.4	91.4	7.0	7.0	4.9		10			
IM6	Rainy	Moderate	10:35	6.8	Middle	3.4 3.4	0.2	16 17	19.0 19.2	19.1	8.2	8.2	32.6 32.6		91.4 91.4	91.4	7.0		5.6 5.6	5.7	8	9	821050	805827
					Bottom	5.8 5.8	0.1	89 90	19.2 19.2	19.2	8.2 8.2	8.2	32.6 32.6		91.4 91.5	91.5	7.0 7.0	7.0	6.6 6.5		8			
					Surface	1.0	0.2	70	19.2	19.2	8.2	8.2	32.5		92.2	92.3	7.0		3.4		9			
IM7	Point	Madarat-	10:41	0.2	Middle	1.0 4.1	0.2	71 325	19.1 19.2		8.2 8.2		32.5 32.5		92.3 92.5	92.6	7.0 7.0	7.0	3.4 4.4	4.2	9	10	821335	806840
IIVI7	Rainy	Moderate	10:41	8.2		4.1 7.2	0.1	342 353	19.2 19.2	19.2	8.2 8.2	8.2	32.5 32.4	32.5	92.6 93.2		7.1 7.1		4.4 5.1	4.3	10 10	10	021333	000040
					Bottom	7.2	0.2	353	19.0	19.1	8.2	8.2	32.4	32.4	93.3	93.3	7.1	7.1	5.1		11			
			7		Surface	1.0	0.1	351 323	19.8 19.8	19.8	8.2	8.2	33.5 33.5		97.9 97.9	97.9	7.3	72	7.0 7.0		16 16			
IM8	Rainy	Rough	09:50	7.4	Middle	3.7	0.1	136 142	19.8	19.8	8.2	8.2	33.5 33.5	33.5	97.8 97.8	97.8	7.3	7.3	7.4	7.7	11	13	821851	808142
					Bottom	6.4	0.1	20	19.7	19.7	8.2	8.2	33.5	33.5	97.5	97.5	7.3	7.3	8.6		11			
DA: Denth-Aver					Dolloni	6.4	0.1	21	19.7		8.2	U.L	33.5	00.0	97.5	07.0	7.3		8.7		11			

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 21 December 21 during

21 December 21 during Mid-Flood Tide

Water Quar	ity worm	oring Resu	iits Oii		21 December 21	during Mid-		lue	1		T								1					
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)		aturation (%)		olved gen	Turbidity	(NTU)	Suspended (mg/		Coordinate	Coordinate
Station					Sampling Dept	th (m)		Direction		_						` ′							HK Grid	HK Grid
	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	269	19.7	19.7	8.2	8.2	33.5	33.5	96.9	96.9	7.3		7.7		16			
						1.0	0.3	288	19.7		8.2	V	33.5		96.9		7.3	7.3	7.8		16			
IM9	Rainy	Rough	09:44	7.1	Middle	3.6	0.2	265	19.7	19.7	8.2	8.2	33.5	33.5	96.8	96.8	7.3		8.5	9.7	14	14	822089	808810
	,					3.6 6.1	0.2	268 256	19.7 19.7		8.2 8.2		33.5 33.5		96.8 96.9		7.3 7.3		8.5 12.8		14 12			
					Bottom	6.1	0.2	256	19.7	19.7	8.2	8.2	33.5	33.5	96.9	96.9	7.3	7.3	12.8		13			
						1.0	0.5	300	19.7		8.2		33.5		97.9		7.3		8.9		16			-
					Surface	1.0	0.6	303	19.8	19.8	8.2	8.2	33.5	33.5	97.9	97.9	7.3		9.0		15			
						4.2	0.5	298	19.8		8.2		33.5		97.7		7.3	7.3	9.6		14			
IM10	Rainy	Rough	09:37	8.4	Middle	4.2	0.5	322	19.8	19.8	8.2	8.2	33.5	33.5	97.7	97.7	7.3	İ	9.4	9.9	14	14	822366	809814
					Bottom	7.4	0.5	298	19.8	19.8	8.2	8.2	33.5	33.5	97.2	97.2	7.3	7.3	11.2		12			
					Dottom	7.4	0.5	306	19.8	13.0	8.2	0.2	33.5	33.3	97.2	37.2	7.3	7.5	11.1		12			
					Surface	1.0	0.5	272	19.9	19.9	8.2	8.2	33.6	33.6	97.7	97.7	7.3		12.3		23			
						1.0	0.5	291	19.9		8.2		33.6		97.7		7.3	7.3	12.6		24			
IM11	Rainy	Rough	09:26	8.5	Middle	4.3	0.4	273	19.9	19.9	8.2	8.2	33.6	33.6	97.6	97.6	7.3		8.7	11.6	22	21	822052	811465
						4.3 7.5	0.5 0.4	300 278	19.9 19.9		8.2 8.2		33.6 33.6		97.6 97.4		7.3 7.3		8.7 13.6		22 16			
					Bottom	7.5	0.4	295	19.9	19.9	8.2	8.2	33.6	33.6	97.4	97.4	7.3	7.3	13.6		16			
						1.0	0.6	280	19.9		8.2		33.6		98.2		7.3		10.7		16			
					Surface	1.0	0.6	293	19.9	19.9	8.2	8.2	33.6	33.6	98.2	98.2	7.3		10.7		17			
IM12	Daine	Rough	09:20	9.0	Middle	4.5	0.6	276	19.9	19.9	8.2	8.2	33.6	33.6	97.9	97.9	7.3	7.3	9.7	11.7	23	21	821439	812031
IIVI 12	Rainy	Rougn	09.20	9.0	Middle	4.5	0.6	301	19.9	19.9	8.2	0.2	33.6	33.0	97.9	97.9	7.3	Ì	10.1	11.7	23	21	021439	012031
					Bottom	8.0	0.5	283	19.9	19.9	8.2	8.2	33.6	33.6	97.7	97.7	7.3	7.3	14.5		25			
					Bottom	8.0	0.5	309	19.9	15.5	8.2	0.2	33.6	33.0	97.7	91.1	7.3	1.3	14.4		24			
					Surface	1.0		-	19.7	19.7	8.1	8.1	33.3	33.3	96.3	96.3	7.2		4.1		11			
						1.0	-	-	19.7		8.1		33.4		96.3		7.2	7.2	4.1		11			
SR1A	Rainy	Moderate	08:48	4.9	Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-	4.7	-	10	819977	812659
						2.5 3.9	-	-	19.7		- 0.4		- 22.4		- 00.4		- 7.0		-		-			
					Bottom	3.9	-	-	19.7	19.7	8.1 8.1	8.1	33.4 33.4	33.4	96.1 96.2	96.2	7.2	7.2	5.2 5.2		8			
						1.0	0.1	213	19.9		8.2		33.6		98.0		7.3		15.6		25			
					Surface	1.0	0.1	228	19.9	19.9	8.2	8.2	33.6	33.6	98.0	98.0	7.3		15.6		24			
SR2	Rainy	Rough	08:34	4.1	Middle	-	-	-	-		-		-	-	-			7.3	-	16.2	-	24	821464	814157
SR2	rtainy	Rougn	06.34	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-		Ì	-	10.2	-	24	021404	614157
					Bottom	3.1	0.1	205	19.9	19.9	8.2	8.2	33.6	33.6	97.8	97.8	7.3	7.3	17.0		22			
					Dottom	3.1	0.1	207	19.9	10.0	8.2	0.2	33.6	00.0	97.8	07.0	7.3	7.0	16.7		24			
					Surface	1.0	0.2	68	19.9	19.9	8.1	8.1	33.1	33.1	98.2	98.2	7.4	ļ	5.8		12			
						1.0	0.2	74	19.9		8.1		33.1		98.2		7.4	7.4	5.8		11			
SR3	Rainy	Rough	09:57	8.8	Middle	4.4 4.4	0.1	91 99	19.9 19.9	19.9	8.1 8.1	8.1	33.1 33.0	33.0	97.9 97.9	97.9	7.3	ŀ	6.0	7.3	11 10	11	822151	807577
						7.8	0.1	346	19.9		8.1		33.2		97.0		7.3		9.9		10			
					Bottom	7.8	0.2	352	19.9	19.9	8.1	8.1	33.2	33.2	97.0	97.0	7.3	7.3	9.9		9			
					Surface	1.0	0.1	218	19.0	19.0	8.2	8.2	32.7	32.7	90.2	90.2	6.9		6.1		11			
					Surface	1.0	0.1	227	19.0	19.0	8.2	0.2	32.7	32.1	90.2	90.2	6.9	6.9	6.1		11			
SR4A	Rainy	Moderate	09:15	8.8	Middle	4.4	0.1	209	18.9	18.9	8.2	8.2	32.7	32.7	90.4	90.5	6.9	0.9	7.9	7.5	13	12	817179	807787
011111	- tuniy	Moderate	00.10	0.0	middio	4.4	0.1	228	18.9	10.0	8.2	0.2	32.7	02.7	90.5	00.0	6.9		8.0	7.0	13		011110	001101
					Bottom	7.8	0.4	210	18.9	18.9	8.2	8.2	32.7	32.7	92.4	92.6	7.1	7.1	8.6		13			
						7.8	0.5	210	18.9		8.2		32.7		92.8		7.1		8.6		13			
					Surface	1.0	0.1	288 307	18.9 18.9	18.9	8.2 8.2	8.2	32.6 32.6	32.6	94.7 94.8	94.8	7.2	ŀ	8.4 8.4		7			
						-	-	-	-		-		-		34.0		1.5	7.3	-		-			
SR5A	Rainy	Moderate	08:58	3.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	8.7	-	8	816591	810678
					D	2.2	0.1	298	18.9	18.9	8.2	0.0	32.6	00.0	97.7	98.2	7.5		9.0		8			
					Bottom	2.2	0.1	311	18.9	18.9	8.2	8.2	32.6	32.6	98.6	98.2	7.5	7.5	9.0		8			
					Surface	1.0	0.0	295	19.4	19.4	8.1	8.1	32.5	32.5	89.3	89.4	6.8		5.0		8			
					Cunaco	1.0	0.0	315	19.4	10.4	8.1	0.1	32.6	02.0	89.5	00.1	6.8	6.8	5.0		8			
SR6A	Rainy	Moderate	08:31	3.4	Middle	-	-	-	-	-	-	-	-	-	-	-			-	5.8	-	9	817970	814724
	,					-	-	-	-		-		-						-		-			
					Bottom	2.4	0.0	258 272	19.4 19.4	19.4	8.1 8.1	8.1	32.6 32.5	32.6	92.4 92.7	92.6	7.0	7.0	6.6 6.5		9			
						1.0	0.0	37	20.4		8.1		33.7		96.3		7.1		4.7		8			-
					Surface	1.0	0.3	40	20.4	20.4	8.1	8.1	33.7	33.7	96.3	96.3	7.1	·	4.7		8			
						7.7	0.2	9	20.4		8.1		33.7		96.5		7.1	7.1	5.1		7	_		
SR7	Rainy	Rough	07:47	15.3	Middle	7.7	0.2	9	20.4	20.4	8.1	8.1	33.7	33.7	96.5	96.5	7.1	İ	5.0	5.0	7	7	823622	823762
					Bottom	14.3	0.2	17	20.4	20.4	8.0	8.0	33.7	33.7	96.9	97.0	7.2	7.2	5.3		6			
					DOLLOITI	14.3	0.2	17	20.4	20.4	8.0	0.0	33.7	33.1	97.0	31.0	7.2	1.2	5.1		6			
					Surface	1.0	-	-	19.8	19.8	8.1	8.1	33.5	33.5	97.7	97.7	7.3		6.9		9			1
					22/1000	1.0	-	-	19.8		8.1		33.5	- 3.0	97.7		7.3	7.3	7.1		8			
SR8	Rainy	Moderate	09:12	4.8	Middle	- :	-	-	-	-		-		-	-	-	-	1	-	7.5	-	10	820383	811629
					-	3.8	-	-	19.8						-				8.0		- 11			
					Bottom	3.8	-	-	19.8	19.8	8.1 8.1	8.1	33.5 33.5	33.5	97.5 97.5	97.5	7.3	7.3	7.9		11			
			1		1	J.0			18.0		0.1		აა.ე		57.5		1.3		1.9		1 11			

Water Quality Monitoring
Water Quality Monitoring Results on

23 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	lts on		23 December 21	during Mid-	Ebb Tide)																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salini	ity (ppt)	DO S	aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspend (m		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sumpaning Sof		(m/s)	Direction	Value	Average	Value	Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.1	138	20.1	20.2	8.2	8.2	33.3	33.3	100.3	100.3	7.5		7.6		10 9			
						1.0 3.7	0.1	142 125	20.2		8.2 8.1		33.3 33.5		100.3 98.7		7.5 7.4	7.5	7.6 11.1	+	12			
C1	Sunny	Rough	14:51	7.4	Middle	3.7	0.0	137	20.0	20.0	8.1	8.1	33.5	33.5	98.7	98.7	7.4		11.0	10.2	12	12	815625	804248
					Bottom	6.4	0.0	190	20.0	20.0	8.1	8.1	33.6	33.6	98.2	98.2	7.3	7.3	12.0]	14			
					Dottom	6.4	0.0	198	20.0	20.0	8.1	0.1	33.6	00.0	98.2	00.2	7.3	1.0	12.1		14			
					Surface	1.0	0.3	166 174	19.7 19.6	19.7	8.2	8.2	32.1 32.1	32.1	91.4	91.4	6.9		3.5	+	4			
						6.0	0.3	154	19.6		8.2		32.1		91.4		6.9	6.9	5.0		4			
C2	Cloudy	Moderate	13:53	11.9	Middle	6.0	0.3	164	19.6	19.6	8.2	8.2	32.3	32.2	91.3	91.3	6.9		5.2	4.9	4	4	825660	806937
					Bottom	10.9	0.3	141	19.5	19.5	8.3	8.3	32.4	32.4	91.7	91.8	7.0	7.0	5.9]	4	:		
						10.9	0.3	154 111	19.5 19.6		8.3		32.4		91.8 89.1		7.0 6.7		5.9 2.4		3			
					Surface	1.0	0.3	118	19.6	19.6	8.2	8.2	32.9 32.9	32.9	89.0	89.1	6.7		2.4	1	4			
C3	Cloudy	Moderate	15:43	11.7	Middle	5.9	0.2	121	19.8	19.8	8.2	8.2	33.0	33.0	86.3	86.3	6.5	6.6	2.3	3.3	4	4	822100	817793
C3	Cloudy	Moderate	15.43	11.7	iviidale	5.9	0.2	125	19.8	19.0	8.2	0.2	33.0	33.0	86.3	00.3	6.5		2.5	3.3	4	. 4	022100	011193
					Bottom	10.7	0.2	128 129	19.8 19.8	19.8	8.2	8.2	33.0	33.0	87.3 87.5	87.4	6.6	6.6	5.0 5.4	1	3 4			
					1	1.0	0.2	129	20.4		8.1		33.8		101.4		7.5		6.4		7			
					Surface	1.0	0.0	130	20.4	20.4	8.1	8.1	33.8	33.8	101.4	101.4	7.5	7.5	6.4	†	8			
IM1	Sunny	Moderate	14:37	4.8	Middle	-	-		-				-		-	_	-	7.5	-	7.6	-	8	817944	807151
	Curry	modorato	11.07	1.0	Middle	-	-		-		-		-		-		-		-	1.0	-		011011	007101
					Bottom	3.8	0.0	252 255	20.0	20.0	8.1	8.1	33.9 33.9	33.9	97.9 97.9	97.9	7.3	7.3	8.7 8.7	+	8			
						1.0	0.0	139	20.0		8.1		33.7		99.7		7.4		8.9		11			
					Surface	1.0	0.1	144	20.2	20.2	8.1	8.1	33.6	33.6	99.7	99.7	7.4	7.4	9.0	Ť	12			
IM2	Sunny	Moderate	14:31	7.0	Middle	3.5	0.1	132	20.1	20.1	8.1	8.1	33.9	33.9	98.2	98.2	7.3	7.4	10.2	10.5	14	13	818185	806157
	,					3.5 6.0	0.1	140 264	20.1		8.1		33.9		98.2 97.3		7.3		10.2 12.2	1	13 14			
					Bottom	6.0	0.1	282	20.0	20.0	8.1	8.1	33.9 33.9	33.9	97.3	97.3	7.3	7.3	12.2	+	13			
					Surface	1.0	0.2	139	20.5	20.5	8.2	8.2	33.3	33.3	101.9	101.9	7.6		6.5		9			
					Surface	1.0	0.2	151	20.5	20.5	8.2	0.2	33.3	33.3	101.9	101.9	7.6	7.5	6.6]	10			
IM3	Sunny	Moderate	14:24	6.9	Middle	3.5 3.5	0.1	251 264	20.0	20.0	8.1	8.1	33.8 33.8	33.8	98.1 98.0	98.1	7.3 7.3		7.4 7.5	7.9	9	9	818797	805573
					_	5.9	0.1	269	20.0		8.1		33.9		97.6		7.3		9.7	1	9			
					Bottom	5.9	0.1	278	20.0	20.0	8.1	8.1	33.9	33.9	97.6	97.6	7.3	7.3	9.9	†	9			
					Surface	1.0	0.2	227	20.0	20.0	8.1	8.1	33.8	33.8	98.5	98.5	7.3		11.9		13			
						1.0 3.9	0.2	244 213	20.0		8.1 8.1		33.8		98.5 98.3		7.3 7.3	7.3	12.0 13.0	4	14 14			
IM4	Sunny	Moderate	14:10	7.8	Middle	3.9	0.2	213	20.0	20.0	8.1	8.1	33.8	33.8	98.3	98.3	7.3		12.9	13.4	15	14	819723	804611
					Bottom	6.8	0.2	284	20.0	20.0	8.1	8.1	33.9	33.9	98.0	98.0	7.3	7.3	15.4	1	15			
					Bollom	6.8	0.2	308	20.0	20.0	8.1	0.1	33.9	33.9	98.0	96.0	7.3	7.3	15.4		14	•		
					Surface	1.0	0.3	220	20.2	20.2	8.1	8.1	33.5 33.5	33.5	100.6	100.6	7.5		8.2	1	14			
						3.7	0.3	228 211	20.2		8.1 8.1		33.7		100.5 98.8		7.5 7.4	7.4	8.3 11.3	+	15 10			
IM5	Sunny	Moderate	14:03	7.3	Middle	3.7	0.2	213	20.1	20.1	8.1	8.1	33.7	33.7	98.8	98.8	7.3		11.3	10.6	11	12	820713	804859
					Bottom	6.3	0.2	232	20.1	20.1	8.1	8.1	33.8	33.8	98.1	98.1	7.3	7.3	12.4	1	10			
						6.3 1.0	0.2	250 286	20.1		8.1		33.8		98.1 98.5		7.3		11.8		11			
					Surface	1.0	0.1	303	20.2	20.2	8.1	8.1	33.1 33.1	33.1	98.5	98.5	7.3		5.8 5.8	+	9			
IM6	Sunny	Moderate	13:56	8.3	Middle	4.2	0.0	233	20.0	20.0	8.1	0.4	33.5	33.5	96.5	96.5	7.2	7.3	7.2	7.2	9	. 8	821072	805848
IIVIO	Suriny	woderate	13.30	0.3	Middle	4.2	0.0	244	20.0	20.0	8.1	8.1	33.5	33.5	96.5	90.5	7.2		7.2	1.2	8	. 0	021072	003040
					Bottom	7.3	0.1	256	19.9	19.9	8.1	8.1	33.7	33.7	95.6	95.7	7.1	7.1	8.4	1	7			
						7.3 1.0	0.1	281 269	19.9		8.1		33.7 33.1		95.7 97.9		7.1 7.3		8.5 6.0		8			
					Surface	1.0	0.1	290	20.1	20.1	8.1	8.1	33.1	33.1	97.9	97.9	7.3	7.3	6.4	†	6			
IM7	Sunny	Moderate	13:50	7.9	Middle	4.0	0.0	210	20.1	20.1	8.1	8.1	33.5	33.5	97.7	97.7	7.3	1.3	8.8	8.8	7	7	821331	806820
						4.0	0.0	211	20.1		8.1		33.5		97.6	****	7.3		8.8		6			
					Bottom	6.9	0.1	161 163	20.0	20.0	8.2	8.2	33.8	33.7	96.9 97.0	97.0	7.2 7.2	7.2	11.5 11.5	+	6 7			
					Confess	1.0	0.1	47	19.5	40.5	8.2	0.0	32.2	22.2	91.2	01.0	6.9		4.1		6			
					Surface	1.0	0.2	48	19.5	19.5	8.2	8.2	32.2	32.2	91.2	91.2	6.9	6.9	4.1	1	7			
IM8	Cloudy	Moderate	14:17	8.0	Middle	4.0	0.1	55	19.5	19.5	8.2	8.2	32.3	32.3	91.4	91.4	6.9	0.0	4.5	7.2	6	6	821818	808157
						4.0 7.0	0.1	58 54	19.5 19.4		8.2 8.2		32.3 32.9		91.4 92.3		6.9 7.0		4.6 12.2	1	7 5			
					Bottom	7.0	0.2	57	19.4	19.4	8.2	8.2	32.9	32.9	92.3	92.4	7.0	7.0	13.4	t	6			
L						1							,											

Water Quality Monitoring
Water Quality Monitoring Results on

23 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ılts on		23 December 21	during Mid-	Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	mperature (°C)		ЭΗ	Salir	nity (ppt)	DO S	Saturation (%)	Disso		Turbidity	(NTU)		ded Solids a/L)	Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	th (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
				1 ()	01	1.0	0.2	38	19.5		8.2		32.2		91.0		6.9		4.8		6			
					Surface	1.0	0.2	40	19.5	19.5	8.2	8.2	32.2	32.2	90.9		6.9	6.9	5.2	İ	6	1		
IM9	Cloudy	Moderate	14:22	7.4	Middle	3.7	0.1	46 47	19.4 19.4	19.4	8.2	8.2	32.5 32.5	32.5	90.9		6.9		9.6 9.8	9.0	6	6	822106	808803
					Bottom	6.4	0.1	70	19.4	19.4	8.2	8.2	32.6	32.6	91.8		7.0	7.0	12.1	-	6	t		
					BOILOITI	6.4	0.2	76	19.4	19.4	8.2	0.2	32.6	32.0	91.9	91.9	7.0	7.0	12.4	<u> </u>	5			
					Surface	1.0	0.2	55 55	19.6 19.6	19.6	8.2	8.2	32.1	32.1	91.2	91.2	6.9		4.8	1	7	-		
IM10	Claudii	Madasata	14.00	7.7	Made	3.9	0.2	59	19.4	10.4	8.2	8.2	32.3	20.2	90.0	00.0	6.9	6.9	4.7	5.2	7	6	822361	809784
IIVITU	Cloudy	Moderate	14:28	7.7	Middle	3.9	0.2	59	19.4	19.4	8.2	0.2	32.3	32.3	90.0	90.0	6.8		4.8	5.2	6	1 "	022301	009704
					Bottom	6.7	0.1	66 68	19.4 19.4	19.4	8.2	8.2	32.8	32.8	90.9		6.9	6.9	6.0	+	5 6	-		
					Surface	1.0	0.2	46	19.5	19.5	8.2	8.2	32.8	32.8	90.7		6.9		4.6	_	7			
					Surface	1.0	0.2	46	19.5	19.5	8.2	0.2	32.8	32.0	90.7		6.9	6.9	4.6	1	8	1		
IM11	Cloudy	Moderate	14:37	8.4	Middle	4.2	0.1	61 62	19.4 19.4	19.4	8.2 8.2	8.2	32.8	32.8	90.5		6.9		5.1 5.1	5.1	8	8	822077	811444
					Bottom	7.4	0.1	73	19.4	19.4	8.2	8.2	32.8	32.8	91.0		6.9	6.9	5.5	-	8	t		
					Bottom	7.4	0.1	75	19.4	13.4	8.2	0.2	32.8	32.0	91.1		6.9	0.5	5.5	<u> </u>	8			
					Surface	1.0	0.2	67 72	19.5 19.5	19.5	8.2	8.2	32.8	32.8	90.6		6.9		4.5 4.4	1	6 7	-		
IM12	Cloudy	Moderate	14:43	9.7	Middle	4.9	0.2	72	19.4	19.4	8.2	8.2	32.8	32.8	90.5		6.9	6.9	5.2	5.1	6	7	821448	812022
IIVI1Z	Cioudy	Woderate	14.43	5.1	Middle	4.9	0.2	77	19.4	13.4	8.2	0.2	32.8	32.0	90.6		6.9		5.3	3.1	7	1 ′	021440	012022
					Bottom	8.7 8.7	0.2	88 92	19.4 19.4	19.4	8.2	8.2	32.8	32.8	91.5 91.6		6.9	6.9	5.5 6.1	1	7	1		
					Surface	1.0	-	-	19.6	19.6	8.2	8.2	32.7	32.7	89.4		6.8		3.7		6			
					Suriace	1.0	-	-	19.6	15.0	8.2	0.2	32.7	32.1	89.3	09.4	6.7	6.8	3.9	1	5	1		
SR1A	Cloudy	Moderate	15:11	5.5	Middle	2.8	-		-	-	-	-	-	-	-	-	-		-	5.3	-	6	819977	812660
					Bottom	4.5	-	-	19.4	19.4	8.2	8.2	32.8	32.8	89.6	89.7	6.8	6.8	6.7	-	5			
					Bottom	4.5	-	- 70	19.4	10.7	8.2	0.2	32.8	32.0	89.7		6.8	0.0	6.7	ـــــ	6			
					Surface	1.0	0.1	72 78	19.5 19.5	19.5	8.2	8.2	32.8	32.8	90.0		6.8		3.8	+	- 6 - 5	+		
SR2	Cloudy	Moderate	15:23	4.5	Middle	-	-	-	-		-		-		-	-	-	6.8	-	4.0	-	5	821483	814148
O.L.	Cicacy	moderate	10.20	1.0	Middle	-	-	-	- 40.5		-		-		-		-		-	- 1.0	-	Ĭ	021100	011110
					Bottom	3.5 3.5	0.1	86 93	19.5 19.5	19.5	8.2 8.2	8.2	32.8 32.9	32.8	91.2 91.4		6.9	6.9	4.2 4.2	+	5 5	-		
					Surface	1.0	0.3	148	19.6	19.6	8.2	8.2	32.2	32.2	91.4	91.4	6.9		4.3		7			
					Canado	1.0 4.5	0.3	149	19.6	10.0	8.2	0.2	32.2	OL.L	91.4		6.9	6.9	4.3	1	6			
SR3	Cloudy	Moderate	14:12	8.9	Middle	4.5	0.1	155 160	19.3 19.3	19.3	8.2	8.2	32.9 32.9	32.9	90.6	90.6	6.9		14.2 14.3	11.8	7	7	822125	807555
					Bottom	7.9	0.2	167	19.3	19.3	8.2	8.2	32.9	32.9	90.7		6.9	6.9	16.6	1	8	1		
					Bottom	7.9 1.0	0.2	175 77	19.3 20.4		8.2 8.1		32.9 33.8	02.0	90.7		6.9	0.0	17.0 7.3	<u> </u>	7 8			
					Surface	1.0	0.2	83	20.4	20.4	8.1	8.1	33.8	33.8	101.2		7.5 7.5	7.5	7.4	ŧ	9	ł		
SR4A	Sunny	Moderate	15:06	9.2	Middle	4.6	0.2	88	20.2	20.2	8.1	8.1	33.9	33.9	99.1		7.4	7.5	9.1	9.2	9	9	817195	807802
						4.6 8.2	0.3	88 74	20.2		8.1 8.1		33.9 33.9	-	99.1 98.1		7.4 7.3		9.1 11.0		9			
					Bottom	8.2	0.2	78	20.1	20.1	8.1	8.1	33.9	33.9	98.1	98.1	7.3	7.3	11.1	ŧ	9	ł		
					Surface	1.0	0.1	67	20.4	20.4	8.1	8.1	33.6	33.6	99.8	99.8	7.4		7.8		12	1		
						1.0	0.1	71	20.4		8.1		33.6		99.8		7.4	7.4	7.8	1	13	-		
SR5A	Sunny	Moderate	15:21	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-			8.1	-	11	816610	810703
					Bottom	3.5	0.1	123	20.1	20.1	8.1	8.1	33.8	33.7	97.6	97.6	7.3	7.3	8.4	1	10	I		
						3.5 1.0	0.1	131 117	20.1		8.1 8.1		33.7		97.6		7.3		8.3 7.8	<u> </u>	10			
					Surface	1.0	0.0	119	20.4	20.5	8.1	8.1	33.5	33.5	97.2	97.2	7.2	7.2	7.8	ŧ	7	1		
SR6A	Sunny	Moderate	15:47	4.9	Middle	-	-	-	-	-	-		-	-	-	-	-	1.2	-	8.2	-	7	817967	814761
	,					3.9	0.0	108	20.3		8.1		33.6		96.0		7.1		8.5		7	1		
					Bottom	3.9	0.0	114	20.3	20.3	8.1	8.1	33.5	33.5	96.0		7.1	7.1	8.5	<u> </u>	7			
					Surface	1.0	0.3	55	19.8	19.8	8.2	8.2	33.0	33.0	86.9	87.0	6.5		3.3	1	8	1		
						1.0 7.7	0.3	59 67	19.8 19.8		8.2 8.2		33.0 33.0		87.0 87.6		6.5 6.6	6.6	3.3	+	7	† _		
SR7	Cloudy	Moderate	16:11	15.3	Middle	7.7	0.3	67	19.8	19.8	8.2	8.2	33.0	33.0	87.7	87.7	6.6		4.0	3.8	8	7	823626	823761
					Bottom	14.3 14.3	0.3	72	19.7 19.7	19.7	8.2 8.2	8.2	33.0	33.0	88.3 88.4		6.7	6.7	4.4 4.2	1	7	1		
						14.3	0.3	72	19.7		8.2		33.0		92.4		7.0		4.2	\vdash	10	1		
					Surface	1.0	-		19.7	19.8	8.2	8.2	32.7	32.7	92.3	92.4	7.0	7.0	4.2	1	9	1		
SR8	Cloudy	Moderate	14:50	5.2	Middle	-	-	-	-	-		-	-	-	-		-	7.0	-	5.2	-	10	820412	811631
						4.2	-		19.4		8.2		32.8		93.2	H	7.1		6.2	ł	10	+		
					Bottom	4.2	-		19.4	19.4	8.2	8.2	32.8	32.8	93.4		7.1	7.1	6.2	<u>t </u>	9			
DA: Depth-Aver	aned				·																			

Water Quality Monitoring
Water Quality Monitoring Results on

23 December 21 during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		23 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salini	ity (ppt)	DO S	aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspend (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling 20	, u. ()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	26 26	20.0	20.0	8.1 8.1	8.1	33.7 33.7	33.7	98.6 98.6	98.6	7.4		4.5 4.5		23 22			
C1	Sunny	Rough	11:08	7.9	Middle	4.0 4.0	0.4	18 19	20.0	20.0	8.1 8.1	8.1	33.8	33.8	98.0 98.0	98.0	7.3 7.3	7.4	4.0 4.4	4.6	21 22	20	815607	804234
					Bottom	6.9	0.3	17	20.0	20.0	8.1	8.1	33.9	33.9	97.7	97.7	7.3	7.3	5.2	1	16			
					Surface	6.9 1.0	0.3	17 33	20.0 19.7	19.7	8.1 8.2	8.2	33.9 32.1	32.1	97.7 90.9	90.9	7.3 6.9		5.2 2.8		17 4			
						1.0 6.0	0.4	34 35	19.6 19.5		8.2 8.2		32.1 32.1		90.8 90.4		6.9	6.9	2.8 3.7	1	4			
C2	Cloudy	Moderate	12:10	12.0	Middle	6.0 11.0	0.4	38 41	19.5 19.4	19.5	8.2 8.2	8.2	32.1 32.4	32.1	90.4 91.8	90.4	6.9 7.0		3.7 11.6	6.0	4	4	825702	806923
					Bottom	11.0	0.3	43	19.4	19.4	8.2	8.2	32.4	32.4	91.9	91.9	7.0	7.0	11.5		4			
					Surface	1.0	0.3	222 238	19.5 19.5	19.5	8.2 8.2	8.2	32.9 32.9	32.9	89.4 89.4	89.4	6.8	6.8	3.0 3.1	Ì	6			
С3	Cloudy	Moderate	10:15	11.1	Middle	5.6 5.6	0.3	199 217	19.5 19.5	19.5	8.2	8.2	32.9 32.9	32.9	88.9 89.0	89.0	6.7		4.4 4.5	4.7	6	6	822087	817801
					Bottom	10.1 10.1	0.3	231 242	19.5 19.5	19.5	8.2 8.2	8.2	32.9 32.9	32.9	91.1 91.3	91.2	6.9 6.9	6.9	6.5 6.5	1	5 5			
					Surface	1.0	0.2	6	20.0	20.0	8.1	8.1	33.9 33.9	33.9	98.5 98.5	98.5	7.3		9.1	1	11			
IM1	Sunny	Moderate	11:23	5.7	Middle	-	-	-	-		-	-	-	-	-	-	7.3	7.3		9.7	-	14	817960	807112
	,				Bottom	4.7	0.1	341	19.9	19.9	8.1	8.1	34.0	34.0	97.2	97.2	7.2	7.2	10.1		16			
					Surface	4.7 1.0	0.1	357 358	19.9	20.0	8.1	8.1	34.0 33.9	33.9	97.2 98.4	98.4	7.2		10.5 14.9		15 17			
	_					1.0 3.4	0.2 0.2	329 346	20.0 19.9		8.1 8.1		33.9 33.8		98.4 97.9		7.3 7.3	7.3	15.7 16.3	1	16 24			
IM2	Sunny	Moderate	11:29	6.7	Middle	3.4 5.7	0.2	352 354	20.0	20.0	8.1	8.1	33.8	33.8	97.9	97.9	7.3		15.9 13.9	14.9	24 25	22	818180	806142
					Bottom	5.7	0.2	355	19.9	19.9	8.1	8.1	33.9 33.9	33.9	97.7 97.7	97.7	7.3 7.3	7.3	12.6		24			
					Surface	1.0	0.3	20 20	20.1	20.1	8.1 8.1	8.1	33.8 33.8	33.8	98.7 98.7	98.7	7.3	7.3	11.9 11.9	1	19 18			
IM3	Sunny	Moderate	11:36	7.3	Middle	3.7	0.3	28 28	19.9 19.9	19.9	8.1 8.1	8.1	33.8 33.8	33.8	97.9 97.9	97.9	7.3 7.3	7.0	16.0 15.8	17.7	30 29	<u>26</u>	818789	805600
					Bottom	6.3 6.3	0.4 0.4	44 47	19.9 19.9	19.9	8.1 8.1	8.1	33.8 33.8	33.8	97.6 97.6	97.6	7.3 7.3	7.3	25.5 25.3	1	30 29			
					Surface	1.0	0.5	15 15	20.0	20.0	8.1 8.1	8.1	33.6 33.6	33.6	99.6 99.7	99.7	7.4		10.1		10			
IM4	Sunny	Moderate	11:44	7.9	Middle	4.0	0.5	12	19.9	19.9	8.1	8.1	33.8	33.8	98.4	98.4	7.4	7.4	13.6	13.0	11	11	819717	804602
					Bottom	4.0 6.9	0.5 0.5	12 5	19.9 19.9	19.9	8.1 8.1	8.1	33.8 33.8	33.8	98.4 98.2	98.2	7.3 7.3	7.3	13.7 15.3	1	11 12			
					Surface	6.9 1.0	0.5	5 25	19.9	20.0	8.1	8.1	33.8 33.8	33.8	98.2 98.2	98.2	7.3		15.3 14.9		11 24			
						1.0 3.6	0.8	27 32	20.0		8.1 8.1		33.8 33.8		98.1 97.9		7.3 7.3	7.3	14.9 15.2	1	25 21			
IM5	Sunny	Rough	11:51	7.1	Middle	3.6 6.1	0.7	34 42	20.0	20.0	8.1	8.1	33.8 33.8	33.8	97.9 97.8	97.9	7.3		15.3 15.5	15.1	22	23	820744	804851
					Bottom	6.1	0.8	42	20.0	20.0	8.1	8.1	33.8	33.8	97.9	97.9	7.3	7.3	15.0		22			
					Surface	1.0	0.1 0.1	103 103	20.1	20.1	8.1 8.1	8.1	33.1 33.2	33.2	97.9 97.9	97.9	7.3	7.3	7.4 7.6	Ì	20 19			
IM6	Sunny	Rough	11:58	7.4	Middle	3.7	0.2	104 110	20.0	20.0	8.1 8.1	8.1	33.6 33.6	33.6	97.6 97.6	97.6	7.3 7.3	7.0	9.7 9.6	9.7	13 13	15	821043	805814
					Bottom	6.4 6.4	0.3	98 104	20.0	20.0	8.1 8.1	8.1	33.7 33.7	33.7	97.3 97.4	97.4	7.3 7.3	7.3	12.0 12.0	1	11 11			
					Surface	1.0	0.0	185 186	20.0	20.0	8.1	8.1	33.3	33.3	96.7 96.7	96.7	7.2		7.2 7.2		7			
IM7	Sunny	Rough	12:04	8.7	Middle	4.4	0.1	124	19.9	19.9	8.1	8.1	33.6	33.6	95.6	95.6	7.1	7.2	8.8	8.3	7	8	821368	806855
		v			Bottom	4.4 7.7	0.1	131 141	19.9 19.9	19.9	8.1 8.1	8.1	33.6 33.7	33.7	95.6 95.6	95.6	7.1 7.1	7.1	8.8 9.1	1	8 10			
						7.7 1.0	0.1	146 333	19.9 19.5		8.1 8.2		33.7 32.1		95.6 90.3		7.1 6.9		9.0	<u> </u>	11 9			
					Surface	1.0	0.2	306 351	19.5 19.4	19.5	8.2	8.2	32.1	32.1	90.2	90.3	6.9	6.9	3.8	1	8			
IM8	Cloudy	Moderate	11:47	7.5	Middle	3.8	0.2	323	19.4	19.4	8.2	8.2	32.1	32.1	90.0	90.0	6.9		4.8	4.7	8	8	821806	808125
DA: Denth-Aver					Bottom	6.5 6.5	0.2	346 350	19.4 19.4	19.4	8.2 8.2	8.2	32.1 32.1	32.1	91.3 91.4	91.4	7.0 7.0	7.0	5.5 5.4	<u> </u>	7			

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 23 December 21 during

23 December 21 during Mid-Flood Tide

Water Qua	ity Monit	oring Resu	ılts on		23 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	0	n. ()	Current Speed	Current	Water Te	emperature (°C)	- 1	рН	Salir	ity (ppt)	DO	Saturation (%)	Disso		Turbidity	(NTU)		led Solids g/L)	Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	in (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Surface	1.0	0.2	311	19.4	19.4	8.2	8.2	32.4	32.4	90.5		6.9		5.8		10			
						1.0 3.8	0.2	340 308	19.4 19.3		8.2		32.4 32.5		90.4		6.9	6.9	5.9 7.9	+	11			
IM9	Cloudy	Moderate	11:40	7.6	Middle	3.8	0.2	310	19.3	19.3	8.2	8.2	32.5	32.5	90.4	90.4	6.9		8.1	8.2	10	11	822091	808814
					Bottom	6.6	0.1	330 350	19.3 19.3	19.3	8.2 8.2	8.2	32.5 32.5	32.5	91.7		7.0	7.0	10.8 10.6	1	11 12	ļ		
						1.0	0.1	299	19.3		8.2		32.8		89.8		6.8		7.3		13			
					Surface	1.0	0.2	308	19.4	19.4	8.2	8.2	32.8	32.8	89.8		6.8	6.8	7.3	1	14	İ		
IM10	Cloudy	Moderate	11:34	7.4	Middle	3.7	0.1	278	19.3	19.3	8.2	8.2	32.8 32.8	32.8	89.9		6.8	0.0	8.1	8.0	14	13	822407	809778
					Bottom	3.7 6.4	0.1	288 275	19.3 19.3	19.3	8.2 8.2	8.2	32.8	32.8	89.9 90.2		6.8	6.9	8.0 8.6	1	13 12	ŧ		
					BOILOITI	6.4	0.1	275	19.3	19.5	8.2	0.2	32.8	32.0	90.3	90.3	6.9	0.9	8.6		11			
					Surface	1.0	0.1	288 299	19.4 19.4	19.4	8.2 8.2	8.2	32.8	32.8	91.3		6.9		6.9 7.7	1	14 13	ŀ		
IM11	Cloudy	Moderate	11:25	7.7	Middle	3.9	0.2	276	19.3	19.3	8.2	8.2	32.9	32.9	91.0		6.9	6.9	12.6	11.9	15	14	822042	811457
	Cioddy	Woderate	11.25	7.7	Wildelic	3.9	0.2	293	19.3	10.0	8.2	0.2	32.9	32.3	91.1		6.9		12.5	11.3	14		022042	011437
					Bottom	6.7 6.7	0.1	270 295	19.3 19.3	19.3	8.2 8.2	8.2	32.9	32.9	92.0		7.0	7.0	15.8 15.9	+	15 15	ŧ		
					Surface	1.0	0.2	274	19.3	19.3	8.2	8.2	32.9	32.9	90.5		6.9		11.2		11			
					Ouriace	1.0	0.2	278	19.3	10.0	8.2	0.2	32.9	32.3	90.5	i	6.9	6.9	11.6]	10			
IM12	Cloudy	Moderate	11:18	8.6	Middle	4.3	0.2	277 298	19.3	19.3	8.2	8.2	32.9	32.9	90.5		6.9		14.9 14.8	13.2	10	11	821448	812036
					Bottom	7.6	0.2	266	19.3	19.3	8.2	8.2	32.9	32.9	91.0	01.1	6.9	6.9	13.1	1	12	İ		
					Bottom	7.6 1.0	0.2	269	19.3	10.0	8.2	0.2	32.9	02.0	91.2	!	6.9	0.3	13.8		11			
					Surface	1.0	-	-	19.3 19.3	19.3	8.2 8.2	8.2	32.8	32.8	87.1 87.2		6.6		10.1	1	10 10			
SR1A	Cloudy	Moderate	10:51	4.3	Middle	2.2	-	-	-	-	-		-		-		-	6.6	-	10.4	-	10	819979	812660
	,					2.2 3.3	-	-	19.3		8.2		32.8		- 00 6		6.7		10.7		9			
					Bottom	3.3	-	-	19.3	19.3	8.2	8.2	32.8	32.8	88.88		6.7	6.7	10.7	ł	10	t		
					Surface	1.0	0.1	265	19.3	19.3	8.2	8.2	32.9	32.9	90.9		6.9		8.3		13			
						1.0	0.1	283	19.3		8.2		32.9		91.0		6.9	6.9	8.3	+	12			
SR2	Cloudy	Moderate	10:34	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	8.6	-	13	821470	814151
					Bottom	3.5	0.1	254	19.3	19.3	8.2	8.2	32.9	32.9	91.5		6.9	7.0	8.9]	13			
						3.5 1.0	0.1	264 47	19.3 19.6		8.2 8.2		32.9 32.0		91.7	T T	7.0 6.9		9.1		14 6			
					Surface	1.0	0.3	47	19.6	19.6	8.2	8.2	32.0	32.0	91.0	91.1	6.9	6.9	2.8	1	6			
SR3	Cloudy	Moderate	11:52	9.3	Middle	4.7	0.1	38 38	19.4	19.4	8.2 8.2	8.2	32.0	32.0	90.3		6.9	0.0	4.8	5.8	5 5	5	822163	807550
					Bottom	8.3	0.1	46	19.4 19.4	19.4	8.2	8.2	32.0	32.0	90.3		6.9	6.9	5.1 9.3	1	5	ŧ		
					BOILOITI	8.3	0.2	49	19.4	19.4	8.2	0.2	32.0	32.0	90.8		6.9	0.9	9.8		5			
					Surface	1.0	0.2	78 85	19.9 19.9	19.9	8.1 8.1	8.1	33.6 33.6	33.6	96.6		7.2		7.7	+	12 13			
SR4A	Sunny	Moderate	10:49	8.9	Middle	4.5	0.3	81	19.8	19.8	8.1	8.1	33.7	33.6	96.0		7.2	7.2	8.6	8.6	12	13	817177	807812
SIN4A	Suriny	Woderate	10.45	0.5	Middle	4.5	0.3	83	19.8	19.0	8.1	0.1	33.6	33.0	96.0	1	7.2		8.6	0.0	13	13	01/1//	00/012
					Bottom	7.9 7.9	0.1	69 70	19.8 19.8	19.8	8.1 8.1	8.1	33.7	33.7	95.5 95.5		7.1	7.2	9.6 9.6	1	14 15	ŀ		
					Surface	1.0	0.2	222	19.9	19.9	8.1	8.1	33.5	33.5	95.0	95.0	7.1		8.0	İ	15			
					Canado	1.0	0.2	241	19.9	10.0	8.1	0.1	33.5	00.0	95.0	00.0	7.1	7.1	7.9	1	15	ļ.		
SR5A	Sunny	Calm	10:31	3.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	8.2		14	816605	810682
					Bottom	2.8	0.2	241	19.9	19.9	8.1	8.1	33.5	33.5	94.9		7.1	7.1	8.3]	14	1		
						2.8 1.0	0.2	244 233	19.9		8.1 8.0		33.5		94.9		7.1		8.4 7.6		13 9			
					Surface	1.0	0.2	252	20.2	20.2	8.0	8.0	33.4	33.4	93.7		7.0	7.0	7.7	†	10			
SR6A	Sunny	Calm	10:06	4.2	Middle	-	-	-	-	-	-		-	-	-	-	-	7.0	-	8.2	-	9	817980	814748
	,					3.2	0.2	231	20.1		8.0		33.5		93.4		7.0		8.7	-	9	ł		
					Bottom	3.2	0.2	251	20.1	20.1	8.0	8.0	33.5	33.5	93.4		7.0	7.0	8.7	1	9			
					Surface	1.0	0.3	198 216	19.7 19.7	19.7	8.1 8.1	8.1	33.0	33.0	86.7 86.7		5.3 5.3		4.9 5.0	1	9 10	ļ <u> </u>		
CD7	Claude	Madaget	00.40	46.0	Medale	8.1	0.3	187	19.7	10.7	8.1	0.4	33.0	22.0	86.5		4.6	5.0	5.6		10	1	000600	000760
SR7	Cloudy	Moderate	09:48	16.2	Middle	8.1	0.3	195	19.7	19.7	8.1	8.1	33.0	33.0	86.5	00.5	4.6		5.5	5.3	9	9	823638	823762
					Bottom	15.2 15.2	0.3	183 193	19.7 19.7	19.7	8.1 8.1	8.1	33.0	33.0	86.6		4.3	4.3	5.5 5.5	+	9	1		
			1		Surface	1.0	-	-	19.3	19.3	8.2	8.2	32.7	32.7	90.7		6.9		4.6		8			1
					Guilate	1.0	-	-	19.3	13.3	8.2	0.2	32.7	UZ.1	90.6	30.1	6.9	6.9	4.7	1	7	1		
SR8	Cloudy	Moderate	11:10	5.1	Middle	-	-	-	-	-	-	-	-	-	-	- +	-	1	-	7.7	-	7	820392	811601
					Bottom	4.1	-	-	19.3	19.3	8.2	8.2	32.8	32.8	89.4		6.8	6.8	10.9	1	7	1		
					DOLLOITI	4.1	-	-	19.3	13.3	8.2	U.Z	32.8	52.0	89.5	05.0	6.8	0.0	10.7		6			

Water Quality Monitoring
Water Quality Monitoring Results on 25 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ılts on		25 December 21	during Mid-	Ebb Tide	е																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Camping Dept		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	56	19.1	19.1	8.2	8.2	31.7	31.7	89.7	89.7	6.9		11.2		7			
						1.0	0.3	57	19.1 19.1		8.2		31.7		89.7		6.9	6.9	11.2	4	7			
C1	Fine	Rough	16:46	7.1	Middle	3.6 3.6	0.2	62 66	19.1	19.1	8.2	8.1	31.8	31.8	89.3 89.3	89.3	6.8		11.3 11.4	11.6	8	8	815629	804227
						6.1	0.1	65	19.2		8.1		31.9		89.7		6.9		12.1	1	8			
					Bottom	6.1	0.1	68	19.2	19.2	8.1	8.1	31.9	31.9	89.8	89.8	6.9	6.9	12.4		8			
					Surface	1.0	0.3	180	20.0	20.0	8.1	8.1	31.8	31.8	94.7	94.7	7.1		5.9		4			
					Canado	1.0	0.3	189	20.0	20.0	8.1	0.1	31.8	01.0	94.6	01.7	7.1	7.1	5.9		5			
C2	Sunny	Rough	18:26	9.3	Middle	4.7	0.3	176	20.1	20.1	8.1	8.1	32.4	32.4	94.1 94.1	94.1	7.1		6.9	7.4	6	6	825658	806945
						8.3	0.4	190 189	20.1		8.1		32.7		94.1		7.1 7.0		7.0 9.3	1	6 8			
					Bottom	8.3	0.2	196	20.1	20.1	8.1	8.1	32.7	32.7	94.0	94.0	7.0	7.0	9.3		8			
					Surface	1.0	0.4	166	19.9	19.9	8.1	8.1	32.8	32.8	95.8	95.8	7.2		7.1		9			
					Ouriace	1.0	0.4	168	19.9	10.0	8.1	0.1	32.8	32.0	95.8	33.0	7.2	7.2	7.1		9			
C3	Fine	Rough	16:09	12.0	Middle	6.0	0.0	32	20.0	20.0	8.1	8.1	33.0	33.0	94.9	94.9	7.1		5.7	6.2	8	8	822101	817823
						6.0 11.0	0.0	33 47	20.0 19.9		8.1 8.1		33.0 33.0		94.9 94.6		7.1 7.1		5.8 5.6	4	8 7			
					Bottom	11.0	0.6	51	20.0	20.0	8.1	8.1	33.0	33.0	94.6	94.6	7.1	7.1	5.6	1	7			
					Surface	1.0	0.0	59	19.4	19.4	8.2	8.2	32.1	32.1	90.4	90.4	6.9		3.2		5			
					Surface	1.0	0.0	61	19.4	15.4	8.2	0.2	32.1	32.1	90.4	30.4	6.9	6.9	3.2		5			
IM1	Fine	Moderate	17:05	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-			4.3	-	6	817946	807111
						3.1	0.0	304	19.5		8.2		32.4		90.1		6.8		5.4	-	7			
					Bottom	3.1	0.0	324	19.5	19.5	8.2	8.2	32.4	32.4	90.1	90.1	6.8	6.8	5.4		7			
					Surface	1.0	0.3	25	19.5	19.5	8.1	8.1	32.2	32.2	88.0	88.0	6.7		13.3		6			
					Odriace	1.0	0.3	25	19.5	10.0	8.1	0.1	32.2	JZ.2	0.88	00.0	6.7	6.7	13.8		6			
IM2	Fine	Moderate	17:11	6.0	Middle	3.0	0.3	28 28	19.5 19.5	19.5	8.1	8.1	32.2	32.2	88.0	88.0	6.7		14.3 14.4	14.7	6	6	818142	806164
						5.0	0.3	29	19.5		8.1		32.2		88.5		6.7		15.9	1	6			
					Bottom	5.0	0.3	30	19.4	19.4	8.1	8.1	32.2	32.2	88.6	88.6	6.7	6.7	16.3	1	7			
					Surface	1.0	0.2	307	19.3	19.3	8.2	8.2	32.2	32.2	89.4	89.4	6.8		5.7		5			
						1.0	0.2	318	19.3		8.2		32.2		89.4		6.8	6.8	5.7	1	5			
IM3	Fine	Moderate	17:17	6.2	Middle	3.1 3.1	0.2	311 313	19.4 19.4	19.4	8.2 8.2	8.2	32.3 32.3	32.3	88.7 88.6	88.7	6.7 6.7		10.2 10.2	9.7	6	6	818789	805601
						5.2	0.2	296	19.4		8.2		32.3		88.7		6.8	6.8	13.4	1	7			
					Bottom	5.2	0.2	298	19.4	19.4	8.2	8.2	32.3	32.3	88.7	88.7	6.8	6.8	13.3		7			
					Surface	1.0	0.2	222	19.3	19.3	8.2	8.2	31.9	31.9	90.1	90.2	6.9		4.8		7			
						1.0 4.0	0.2	230 249	19.3 19.4		8.2 8.2		31.9 32.2		90.2 91.4		6.9 7.0	7.0	4.8 3.9	1	7 6			
IM4	Fine	Moderate	17:25	7.9	Middle	4.0	0.2	253	19.4	19.4	8.2	8.2	32.2	32.2	91.4	91.4	7.0		3.9	4.2	6	6	819711	804627
					Bottom	6.9	0.2	255	19.4	19.4	8.2	8.2	32.2	32.2	93.1	93.2	7.1	7.1	4.0		6			
					BOROIII	6.9	0.2	266	19.4	15.4	8.2	0.2	32.2	32.2	93.2	93.2	7.1	7.1	4.0		6			
					Surface	1.0	0.4	244	19.3	19.3	8.1	8.1	31.7	31.7	88.2	88.2	6.7		7.3	1	7			
						1.0 3.7	0.4	249 238	19.3 19.3		8.1 8.1		31.7		88.2 88.1		6.7 6.7	6.7	7.3 8.2	-	7			
IM5	Fine	Moderate	17:33	7.4	Middle	3.7	0.4	239	19.3	19.3	8.1	8.1	31.7	31.7	88.1	88.1	6.7		8.1	7.9	7	7	820741	804877
					Bottom	6.4	0.4	243	19.3	19.3	8.1	8.1	31.7	31.7	88.1	88.2	6.7	6.7	8.3		7			
					Bottom	6.4	0.4	248	19.3	10.0	8.1	0.1	31.7	01.7	88.2	00.2	6.7	0.7	8.4		7			
					Surface	1.0	0.6	246 264	19.4 19.4	19.4	8.2	8.2	31.6 31.6	31.6	88.4 88.4	88.4	6.8		7.8 8.0	-	6			
						3.3	0.5	245	19.3		8.2		31.6		88.4		6.8	6.8	8.3	1	6			
IM6	Fine	Moderate	17:41	6.6	Middle	3.3	0.5	266	19.3	19.3	8.2	8.2	31.6	31.6	88.4	88.4	6.8		8.4	8.4	6	6	821046	805834
					Bottom	5.6	0.5	242	19.3	19.3	8.1	8.1	31.6	31.6	88.4	88.5	6.8	6.8	8.9		7			
						5.6	0.5	262	19.3		8.1		31.6		88.5		6.8		8.8		7			
					Surface	1.0	0.2	259 269	19.4 19.4	19.4	8.2	8.2	31.5	31.5	88.3 88.3	88.3	6.8		9.3 9.3	1	6			
13.47	F		47.50	7.5	A.F.L.E.	3.8	0.2	242	19.4	40.4	8.2		31.7	04.7	88.1	00.4	6.7	6.8	9.9	40.5	6	-	004000	000000
IM7	Fine	Moderate	17:50	7.5	Middle	3.8	0.2	257	19.4	19.4	8.2	8.2	31.7	31.7	88.1	88.1	6.7		10.0	10.5	6	7	821362	806829
					Bottom	6.5	0.1	239	19.4	19.4	8.1	8.1	31.8	31.8	88.3	88.3	6.7	6.7	12.3	1	7			
<u> </u>			ļ		1	6.5 1.0	0.1	244 206	19.4		8.1		31.8		88.3		6.7		12.4 8.1	 	7			
					Surface	1.0	0.4	206	20.0	20.0	8.1	8.1	32.1	32.1	95.3 95.3	95.3	7.2		8.1	1	7			
IM8	Fine	Pough	17:54	7.2	Middle	3.6	0.5	212	20.0	20.0	8.1	8.1	32.1	32.1	95.1	95.1	7.2	7.2	9.8	9.9	6	6	821833	808128
livio	FILE	Rough	17.54	1.2	Middle	3.6	0.5	212	20.0	20.0	8.1	0.1	32.1	34.1	95.1	3J. I	7.2		9.8	5.5	6	U	02 1000	300120
					Bottom	6.2	0.3	219	20.0	20.0	8.1	8.1	32.1	32.1	95.0	95.0	7.2	7.2	11.8	4	5			
L					1	6.2	0.4	235	20.0		8.1	1	32.1		95.0		7.2		11.7	<u> </u>	5			

Water Quality Monitoring
Water Quality Monitoring Results on

25 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ilts on		25 December 21	during Mid-	Ebb Tide	e																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation %)	Disso Oxy	olved gen	Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0 1.0	0.3	192	20.0	20.0	8.1	8.1	32.0 32.0	32.0	95.2 95.2	95.2	7.2 7.2		9.1 9.1		6 5			
	_					3.8	0.3	202 194	20.0		8.1 8.1		32.0		95.2		7.2	7.2	10.8		6			
IM9	Fine	Rough	17:49	7.5	Middle	3.8	0.3	196	20.0	20.0	8.1	8.1	32.0	32.0	94.9	95.0	7.2		10.8	10.7	7	6	822082	808813
					Bottom	6.5	0.3	201 219	20.0	20.0	8.1	8.1	32.1	32.1	94.9	94.9	7.2	7.2	12.0 12.0		7			
						1.0	0.3	122	20.0		8.1		32.1		95.3		7.2		7.6		7			
					Surface	1.0	0.3	128	20.0	20.0	8.1	8.1	32.1	32.1	95.3	95.3	7.2	7.2	7.6		7			
IM10	Fine	Rough	17:41	7.8	Middle	3.9 3.9	0.2	108 109	20.0	20.0	8.1 8.1	8.1	32.1 32.1	32.1	95.1 95.1	95.1	7.2		8.0 8.1	8.0	7	8	822393	809774
					Bottom	6.8	0.3	87	20.0	20.0	8.1	0.4	32.1	32.1	94.9	94.9	7.2	7.2	8.5		9			
					Bollom	6.8	0.2	89	20.0	20.0	8.1	8.1	32.1	32.1	94.9	94.9	7.2	1.2	8.5		8			
					Surface	1.0	0.3	105 114	19.9 19.9	19.9	8.1	8.1	32.3	32.3	95.6 95.6	95.6	7.2		6.3		4 5			
IM11	Fine	Davish	17:28	7.1	Middle	3.6	0.3	81	20.0	20.0	8.1	8.1	32.4	32.4	95.2	95.2	7.2	7.2	6.7	7.4	5	5	822049	811477
IIVIII	riie	Rough	17.20	7.1	Wildlie	3.6	0.2	87	20.0	20.0	8.1	0.1	32.4	32.4	95.2	93.2	7.2		6.8	7.4	4	5	022049	011477
					Bottom	6.1	0.1	69 74	20.0	20.0	8.1	8.1	32.7	32.7	94.6 94.6	94.6	7.1 7.1	7.1	9.1 9.1		6			
					Surface	1.0	0.1	105	19.9	19.9	8.1	8.1	32.6	32.6	95.2	95.2	7.2		6.9		5			
					Ouriace	1.0	0.1	113	19.9	10.0	8.1	0.1	32.6	32.0	95.2	33.2	7.2	7.2	6.9		5			
IM12	Fine	Rough	17:21	8.4	Middle	4.2 4.2	0.2	96 101	19.9 19.9	19.9	8.1	8.1	32.6 32.6	32.6	95.1 95.1	95.1	7.1 7.1		6.6 6.5	6.8	6	6	821473	812033
					Bottom	7.4	0.1	87	19.9	19.9	8.1	8.1	32.6	32.6	94.9	94.9	7.1	7.1	7.1		7			
						7.4 1.0	0.1	88	19.9 19.9		8.1 8.1		32.6 32.8		94.9 95.1		7.1		7.1 5.9		7			
					Surface	1.0	-		19.9	19.9	8.1	8.1	32.8	32.8	95.1	95.1	7.1	7.1	5.9	-	7			
SR1A	Fine	Moderate	16:52	3.9	Middle	2.0	-	-	-		-	-	-		-	-	-	7.1	-	6.0	-	8	819979	812664
						2.0 2.9	-	-	20.0		8.1		32.9		94.7		7.1		6.1	-	- 8			
					Bottom	2.9	-	-	20.0	20.0	8.1	8.1	32.9	32.9	94.7	94.7	7.1	7.1	6.1		8			
					Surface	1.0	0.3	92	19.9	19.9	8.1	8.1	32.4	32.4	95.6	95.6	7.2		8.2		7			
	_					1.0	0.4	99	19.9		8.1		32.4		95.6		7.2	7.2	8.2		-	_		
SR2	Fine	Rough	16:34	4.5	Middle	-	-	-		-	-	-		-	-	-	-		-	8.3	-	8	821447	814142
					Bottom	3.5 3.5	0.3	74 80	19.9 19.9	19.9	8.1 8.1	8.1	32.4 32.4	32.4	95.6 95.7	95.7	7.2	7.2	8.4 8.5		9			
					Surface	1.0	0.4	200	20.0	20.0	8.1	8.1	32.1	32.1	95.2	95.2	7.2		9.3		7			
					Surface	1.0	0.4	205	20.0	20.0	8.1	0.1	32.1	32.1	95.2	55.2	7.2	7.2	9.3		7			
SR3	Fine	Rough	18:01	7.9	Middle	4.0	0.4	201 212	19.9 19.9	19.9	8.1 8.1	8.1	32.1 32.1	32.1	95.1 95.1	95.1	7.2		10.0 10.1	10.2	6	6	822130	807558
					Bottom	6.9	0.4	203	19.9	19.9	8.1	8.1	32.1	32.1	95.1	95.1	7.2	7.2	11.3		6			
					Bottom	6.9	0.4	211	19.9	10.0	8.1	0.1	32.1	OZ. I	95.1		7.2		11.3		5			
					Surface	1.0	0.7 0.7	244 256	19.5 19.5	19.5	8.1 8.1	8.1	32.3 32.3	32.3	88.9 88.9	88.9	6.7		7.3 7.3	-	7			
SR4A	Cloudy	Calm	16:27	7.4	Middle	3.7	0.7	240	19.5	19.5	8.1	8.1	32.3	32.3	88.8	88.8	6.7	6.7	7.6	7.8	7	7	817175	807809
	,					3.7 6.4	0.7	241 235	19.5 19.5		8.1 8.1	-	32.3 32.2		88.8 88.7		6.7		7.7 8.3	-	7 6			
					Bottom	6.4	0.6	248	19.5	19.5	8.1	8.1	32.2	32.2	88.7	88.7	6.7	6.7	8.4	-	6			
					Surface	1.0	0.3	290	19.5	19.5	8.1	8.1	32.6	32.6	88.2	88.2	6.7		5.6		8			
						1.0	0.4	310	19.5		8.1		32.6		88.2		6.7	6.7	5.6	-	8 -			
SR5A	Cloudy	Calm	16:13	3.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	6.3	-	7	816610	810677
					Bottom	2.5 2.5	0.3	290 298	19.5 19.5	19.5	8.1 8.1	8.1	32.6 32.6	32.6	88.2 88.2	88.2	6.7	6.7	7.1 7.1		6			
						1.0	0.0	298	19.5		8.1		32.6		83.3		6.3		4.7		6			
					Surface	1.0	0.0	310	19.7	19.7	8.1	8.1	32.6	32.6	83.4	83.4	6.3	6.3	4.7		6			
SR6A	Cloudy	Calm	15:47	4.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	6.6	-	6	817950	814726
					Bottom	3.0	0.1	284	19.7	19.7	8.0	8.0	32.8	32.8	85.9	85.9	6.5	6.5	8.8		6			
					Bottom	3.0	0.1	310	19.7	15.7	8.0	0.0	32.8	32.0	85.9	00.9	6.5	0.5	8.4		5			
					Surface	1.0	0.4	74 74	20.1	20.1	8.1	8.1	33.4	33.4	94.5 94.5	94.5	7.1		4.4		8			
SR7	Fine	Rough	15:31	16.8	Middle	8.4	0.3	61	20.1	20.1	8.1	8.1	33.5	33.5	93.7	93.7	7.0	7.1	4.9	4.8	8	8	823635	823721
5		. toag		10.0		8.4	0.3	65	20.1		8.1		33.5		93.7		7.0		4.9	5	7		020000	320.21
					Bottom	15.8 15.8	0.2	41 42	20.2	20.2	8.1	8.1	33.5 33.5	33.5	93.7 93.8	93.8	7.0	7.0	5.2 5.2		7			
					Surface	1.0	-	-	20.2	20.2	8.1	8.1	32.8	32.8	94.4	94.4	7.0		9.1		6			
						1.0	-	-	20.2		8.1		32.9		94.4		7.0	7.0	9.1	-	6			
SR8	Fine	Moderate	17:14	4.6	Middle	-	-	-	-	-		-	-	-	-	-	-	1	-	10.4	-	6	820391	811609
					Bottom	3.6	-	-	20.2	20.2	8.1	8.1	32.9	32.9	94.2	94.2	7.0	7.0	11.6	1	7			
DA: Depth-Aver	agod		1		1	3.6	-	-	20.2		8.1	<u> </u>	32.9	1	94.2		7.0	<u> </u>	11.7		6		l	

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 25 December 21 during

25 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ilts on		25 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation %)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5	35	19.2	19.2	8.2	8.2	31.4	31.4	90.9	90.9	7.0		7.9		5			
						1.0 3.8	0.5	36 22	19.2		8.2		31.4		90.8		7.0	7.0	7.9		5			
C1	Fine	Rough	11:27	7.6	Middle	3.8	0.4	22	19.2 19.2	19.2	8.2	8.2	31.6	31.6	90.2	90.2	6.9		8.7 8.7	9.2	6	6	815600	804238
						6.6	0.4	20	19.3		8.2		31.9		90.2		6.9		11.0	-	8			
					Bottom	6.6	0.4	20	19.3	19.3	8.2	8.2	31.9	31.9	90.2	90.2	6.9	6.9	11.3		8			
					Surface	1.0	0.2	229	20.1	20.1	8.1	8.1	32.3	32.3	95.1	95.1	7.1		5.4		7			
					Surface	1.0	0.2	246	20.1	20.1	8.1	0.1	32.3	32.3	95.1	90.1	7.1	7.1	5.4		8			
C2	Fine	Rough	10:21	7.6	Middle	3.8	0.2	255	20.1	20.1	8.1	8.1	32.4	32.4	94.6	94.6	7.1		6.4	6.3	6	7	825662	806959
						3.8	0.2	278	20.1		8.1		32.4		94.6		7.1		6.4		6			
					Bottom	6.6	0.1	285 313	20.1	20.1	8.1	8.1	32.5 32.5	32.5	94.6 94.6	94.6	7.1	7.1	7.3 7.3		6			
						1.0	0.4	265	20.3		8.1		33.7		91.2		6.8		4.6		5			
					Surface	1.0	0.4	279	20.3	20.3	8.1	8.1	33.7	33.7	91.2	91.2	6.8	6.0	4.6	-	5			
СЗ	Fine	Rough	12:43	11.2	Middle	5.6	0.5	259	20.3	20.3	8.1	8.1	33.7	33.7	91.3	91.3	6.8	6.8	6.8	6.3	5	6	822113	817790
03	TIIIC	rtougii	12.40	11.2	Wilduic	5.6	0.5	279	20.3	20.0	8.1	0.1	33.7	35.7	91.3	31.5	6.8		6.8	0.0	6	Ü	022110	017730
					Bottom	10.2	0.4	262	20.3	20.3	8.1	8.1	33.7	33.7	91.6	91.7	6.8	6.8	7.4		8			
						10.2 1.0	0.4	285 33	20.3 19.6		8.1 8.2		33.7		91.7 88.4		6.8		7.4 8.3		8			
					Surface	1.0	0.2	35	19.6	19.6	8.2	8.2	32.4	32.4	88.3	88.4	6.7		8.3	-	6			
						-	-	-	-		-		- 52.4		-		-	6.7	-		-	_		
IM1	Fine	Moderate	11:07	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	10.0	-	7	817942	807126
					Bottom	3.6	0.2	40	19.6	19.6	8.2	8.2	32.4	32.4	88.1	88.1	6.7	6.7	11.7		7			
					Bottom	3.6	0.2	40	19.6	10.0	8.2	0.2	32.4	02.1	88.1	00.1	6.7	0.,	11.6		8			
					Surface	1.0	0.3	8	19.4	19.4	8.2	8.2	31.8	31.8	90.4	90.4	6.9		6.5		6			
						1.0 3.3	0.3	8 2	19.4 19.3		8.2		31.8 31.9		90.4 89.8		6.9	6.9	6.6 9.4		6 7			
IM2	Fine	Moderate	11:00	6.5	Middle	3.3	0.3	2	19.3	19.3	8.2	8.2	31.9	31.9	89.8	89.8	6.9		9.4	9.2	7	7	818175	806149
					D. W	5.5	0.3	349	19.3	40.0	8.2		32.0	00.0	90.0	00.0	6.9		11.4	1	8			
					Bottom	5.5	0.3	353	19.3	19.3	8.2	8.2	32.0	32.0	90.0	90.0	6.9	6.9	11.6		8			
					Surface	1.0	0.4	357	19.3	19.3	8.2	8.2	31.7	31.7	90.4	90.4	6.9		6.3		5			
						1.0	0.4	328	19.3		8.2		31.7		90.4		6.9	6.9	6.3		5			
IM3	Fine	Moderate	10:53	6.7	Middle	3.4	0.4	353 325	19.3 19.3	19.3	8.2	8.2	31.8	31.8	89.8 89.8	89.8	6.9		7.9 7.9	9.0	6	6	818805	805574
					_	5.7	0.4	328	19.3		8.2		32.0		90.1		6.9		12.7		6			
					Bottom	5.7	0.4	343	19.3	19.3	8.2	8.2	32.0	32.0	90.2	90.2	6.9	6.9	12.7	-	6			
					Surface	1.0	0.5	328	19.3	19.3	8.2	8.2	31.9	31.9	90.8	90.8	6.9		4.9		5			
					Ouriace	1.0	0.5	351	19.3	15.5	8.2	0.2	31.9	31.3	90.8	30.0	6.9	6.9	4.9		4			
IM4	Fine	Moderate	10:43	8.1	Middle	4.1	0.5	333	19.3	19.3	8.2	8.2	32.2	32.2	89.4	89.4	6.8		9.6	7.6	6	6	819737	804590
						4.1 7.1	0.5	334 339	19.3 19.4		8.2 8.2		32.2		89.4 89.9		6.8		9.5 8.4		6 7			
					Bottom	7.1	0.3	312	19.4	19.4	8.2	8.2	32.2	32.2	90.1	90.0	6.9	6.9	8.4	-	6			
					Confess	1.0	0.6	358	19.4	10.1	8.2	0.0	32.2	22.2	90.0	00.0	6.8		10.3		7			
					Surface	1.0	0.6	329	19.4	19.4	8.2	8.2	32.2	32.2	90.0	90.0	6.8	6.8	10.3	-	6			
IM5	Fine	Moderate	10:35	7.5	Middle	3.8	0.5	357	19.4	19.4	8.2	8.2	32.2	32.2	89.9	89.9	6.8	0.0	10.3	10.3	6	6	820717	804860
						3.8	0.5	328	19.4		8.2		32.2		89.9		6.8		10.4		5	-		
					Bottom	6.5	0.5	359 330	19.4 19.4	19.4	8.2	8.2	32.2	32.2	90.0	90.0	6.9	6.9	10.3	-	5			
—						1.0	0.5	348	19.4		8.2		31.6		88.6		6.8		6.7		4			
					Surface	1.0	0.1	320	19.4	19.4	8.2	8.2	31.6	31.6	88.6	88.6	6.8	6.0	6.7	1	5			
IM6	Fine	Moderate	10:28	6.8	Middle	3.4	0.2	329	19.4	19.4	8.2	8.2	31.5	31.5	88.5	88.5	6.8	6.8	7.0	7.0	6	6	821044	805823
livio	TIIIC	Woderate	10.20	0.0	Wilduic	3.4	0.2	337	19.4	10.4	8.2	0.2	31.5	31.3	88.5	00.5	6.8		7.0	7.0	6	Ü	021044	003023
					Bottom	5.8	0.2	340	19.4	19.4	8.1	8.1	31.5	31.5	88.9	88.9	6.8	6.8	7.1		7			
						5.8 1.0	0.2	346 259	19.4 19.3		8.1 8.2		31.5 31.3		88.9 88.6		6.8		7.2 8.3		6			
					Surface	1.0	0.2	262	19.3	19.3	8.2	8.2	31.3	31.3	88.6	88.6	6.8		8.3	-	4			
IM7	Fine	Moderate	10:01	7.8	Middle	3.9	0.2	242	19.3	40.2	8.2	0.0	31.3	24.2	88.5	00.5	6.8	6.8	9.5	9.3	5	5	821343	000000
IIVI/	rine	woderate	10:21	1.0	Iviidale	3.9	0.2	249	19.3	19.3	8.2	8.2	31.3	31.3	88.5	88.5	6.8		9.5	9.5	5	5	021343	806839
					Bottom	6.8	0.1	239	19.3	19.3	8.2	8.2	31.3	31.3	88.7	88.7	6.8	6.8	10.2	1	6			
						6.8	0.1	249	19.3		8.2		31.3		88.7		6.8		10.2		6			
					Surface	1.0	0.2	263 263	20.2	20.2	8.1	8.1	32.1	32.1	96.4 96.4	96.4	7.2		5.4 5.4	4	8			
	_					3.9	0.2	266	20.2		8.1	.	32.1		95.2		7.2	7.2	6.9	1	6	_		
IM8	Fine	Rough	10:56	7.7	Middle	3.9	0.2	274	20.0	20.0	8.1	8.1	32.3	32.3	95.2	95.2	7.2		6.9	6.5	7	6	821833	808119
					Bottom	6.7	0.2	273	20.0	20.0	8.1	8.1	32.3	32.3	95.2	95.3	7.2	7.2	7.1		5			
					Dollom	6.7	0.2	300	20.0	20.0	8.1	Ŭ.,	32.3	02.0	95.3	00.0	7.2		7.2		4			

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 25 December 21 during

25 December 21 during Mid-Flood Tide

Water Qua	iity wonii	oring Resu	แร บท		25 December 21	during Mid-		iue	1												T a			
Manitania	Weather	Sea	Sampling	Water	1		Current	C	Water To	emperature (°C)	1	pН	Salin	ity (ppt)		aturation	Disso		Turbidity	(NTU)	Suspende		Coordinate	Coordinate
Monitoring Station					Sampling Dept	h (m)	Speed	Current Direction		, , ,						%)	Оху			· ·	(mg/		HK Grid	HK Grid
Station	Condition	Condition	Time	Depth (m)		-	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
_	<u> </u>				1	1.0	0.2	263	20.0		8.1	<u> </u>	32.4	_	96.7		7.3		9.5		6			
					Surface	1.0	0.2	263	20.0	20.0	8.1	8.1	32.4	32.4	96.7	96.7	7.3		9.5	1	6			
					<u> </u>	3.9	0.2	257	20.0			-	32.4				7.2	7.3	7.1	1				
IM9	Fine	Rough	11:02	7.7	Middle	3.9	0.1	268	20.0	20.0	8.1	8.1	32.4	32.4	96.3 96.2	96.3	7.2		7.1	8.0	5	5	822117	808826
					-	6.7	0.2	268	20.0		8.1	-	32.4		96.2		7.2		7.0	-	5			
					Bottom					20.0		8.1		32.5		96.0		7.2						
						6.7	0.2	285	20.0		8.1		32.5		96.0		7.2		7.4		5			
					Surface	1.0	0.5	287	20.0	20.0	8.1	8.1	32.5	32.5	95.8	95.8	7.2		6.7		6			
						1.0	0.5	299	20.0		8.1		32.5		95.8		7.2	7.2	6.7		6			
IM10	Fine	Rough	11:09	7.8	Middle	3.9	0.5	281	19.9	19.9	8.1	8.1	32.5	32.5	95.5	95.5	7.2		7.6	7.5	5 4	5	822388	809797
		-				3.9	0.5	294	19.9		8.1		32.5		95.5		7.2		7.6					
					Bottom	6.8	0.5	275	19.9	19.9	8.1	8.1	32.5	32.5	95.5	95.5	7.2	7.2	8.1		4			
						6.8	0.5	301	19.9		8.1		32.5		95.5		7.2		8.1		4			
					Surface	1.0	0.4	254	20.0	20.0	8.1	8.1	32.6	32.6	96.5	96.5	7.2		7.5		4			
						1.0	0.4	256	20.0		8.1		32.6		96.5		7.2	7.2	7.6		4			
IM11	Fine	Rough	11:28	8.5	Middle	4.3	0.4	264	20.0	20.0	8.1	8.1	32.7	32.7	96.1	96.1	7.2		8.1	9.0	5	5	822059	811438
						4.3	0.4	273	20.0		8.1		32.7		96.1		7.2		8.1		5			
					Bottom	7.5	0.3	286	20.1	20.1	8.1	8.1	33.0	33.0	95.8	95.9	7.2	7.2	11.2		6			
						7.5	0.3	294	20.1	-	8.1		33.0		95.9		7.2		11.3		6			
					Surface	1.0	0.5	272	20.0	20.0	8.1	8.1	32.8	32.8	95.9	95.9	7.2		5.2		5			
						1.0	0.5	294	20.0		8.1		32.8		95.8		7.2	7.2	5.2		5			
IM12	Fine	Rough	11:34	8.9	Middle	4.5	0.4	280	20.1	20.1	8.1	8.1	32.9	32.9	95.5	95.5	7.2	· ·-	6.9	7.5	6	6	821454	812027
						4.5	0.4	301	20.1		8.1		32.9		95.5		7.2		7.0		6	-		
					Bottom	7.9	0.4	296	20.1	20.1	8.1	8.1	32.9	32.9	95.6	95.6	7.2	7.2	10.5		7			
					Bottom	7.9	0.4	323	20.1	20.1	8.1	0.1	32.9	52.5	95.6	30.0	7.2	7.2	10.4		7			
					Surface	1.0	-	-	20.2	20.2	8.1	8.1	33.2	33.2	95.3	95.3	7.1		4.7		7			
					Surface	1.0	-	-	20.2	20.2	8.1	0.1	33.2	33.2	95.3	55.5	7.1	7.1	4.7	1	7			
SR1A	Fine	Moderate	12:04	4.4	Middle	2.2		-	-		-			-		-	-	7.1	-	5.2	-	6	819973	812654
SKIA	rine	Woderate	12.04	4.4	Wildlie	2.2	-	-	-	-	-	1 -	-	-	-	-	-		-	5.2	-	0	019973	012004
					Bottom	3.4	-	-	20.1	20.1	8.1	8.1	33.4	33.4	93.5	93.5	7.0	7.0	5.7	1	6			
					Bottom	3.4		-	20.1	20.1	8.1	0.1	33.4	33.4	93.5	33.3	7.0	7.0	5.7		5			
					Surface	1.0	0.2	67	20.2	20.2	8.1	8.1	33.2	33.2	95.8	95.8	7.1		4.5		5			
					Surface	1.0	0.2	70	20.2	20.2	8.1	0.1	33.2	33.2	95.8	95.6	7.1	7.1	4.5	i	5			
SR2	Fine	Rough	12:18	4.8	Middle	-	-	-	-		-		-				-	7.1	-	47	-	6	821440	814174
SKZ	rine	Rougn	12.10	4.0	iviiddie	-	-	-	-	-	-	-	-	-		-	-		-	4.7	-	0	021440	014174
					D . #	3.8	0.2	38	20.1	00.4	8.1	0.4	33.3	00.0	94.0	04.0	7.0	7.0	4.9	i	6			
					Bottom	3.8	0.2	41	20.1	20.1	8.1	8.1	33.3	33.3	93.9	94.0	7.0	7.0	4.9	i	6			
					0(1.0	0.2	257	20.1	00.4	8.1	0.4	32.3	00.0	96.2	00.0	7.2		5.6		4			
					Surface	1.0	0.2	276	20.1	20.1	8.1	8.1	32.3	32.3	96.2	96.2	7.2	7.0	5.6	i	4			
						3.6	0.1	251	20.1		8.1		32.3		95.9		7.2	7.2	6.8		4			
SR3	Fine	Rough	10:51	7.2	Middle	3.6	0.1	275	20.1	20.1	8.1	8.1	32.3	32.3	95.9	95.9	7.2		6.8	6.6	5	5	822168	807568
						6.2	0.1	263	20.1		8.1		32.3		95.9		7.2		7.3		6			
					Bottom	6.2	0.2	278	20.1	20.1	8.1	8.1	32.3	32.3	95.9	95.9	7.2	7.2	7.4		5			
						1.0	0.3	82	19.6		8.2		32.3		89.3		6.8		6.5		4			
					Surface	1.0	0.3	82	19.6	19.6	8.2	8.2	32.3	32.3	89.2	89.3	6.8		6.6		4			
						4.4	0.3	85	19.6		8.2		32.4		88.2		6.7	6.8	6.9		5			
SR4A	Fine	Calm	11:45	8.8	Middle	4.4	0.3	85	19.6	19.6	8.2	8.2	32.4	32.4	88.2	88.2	6.7		6.9	7.3	5	5	817184	807802
						7.8	0.2	86	19.5		8.1		32.4		88.6		6.7		7.8		6			
					Bottom	7.8	0.2	87	19.5	19.5	8.1	8.1	32.4	32.4	88.7	88.7	6.7	6.7	8.9		6			
-					+	1.0	0.1	42	19.7		8.2		32.6		89.4		6.8		5.4		6			
					Surface	1.0	0.1	45	19.7	19.7	8.2	8.2	32.6	32.6	89.4	89.4	6.8		5.5	l	5			
	_					-	-	-	-		-		-					6.8	-		-			
SR5A	Fine	Calm	12:01	3.9	Middle	-	-	 .		-	-	-	H .	-		-				6.2	-	5	816603	810683
						2.9	0.1	63	19.6		8.2		32.6		89.1		6.7		6.9	l	5			
	1				Bottom	2.9	0.1	69	19.6	19.6	8.2	8.2	32.6	32.6	89.2	89.2	6.7	6.7	6.9	ł	5			
—					1	1.0	0.1	123	19.5	l I	8.2	1	32.1		89.7		6.8		4.3	_	7			
	1				Surface	1.0	0.1	129	19.5	19.5	8.2	8.2	32.1	32.1	89.6	89.7	6.8		4.3	ł	7			
	1					-	-	- 129	19.5		- 0.2		- 32.1		- 09.0		- 0.0	6.8	4.3	ł	-			
SR6A	Fine	Calm	12:34	4.3	Middle	-	-	-	-	-	H-	-	Ė	-		-				5.8		6	817981	814718
	1					3.3	0.0	75	19.6		8.2		32.5		89.8		6.8		7.2	ł	5			
					Bottom	3.3	0.0	80	19.6	19.6	8.2	8.2	32.5	32.5	90.2	90.0	6.8	6.8	7.3	1	5			
-	-				1	1.0	0.6	227	20.3	I		<u> </u>							6.5		4			
					Surface					20.3	8.1	8.1	33.7	33.7	91.5	91.5	6.8			-				
					-	1.0	0.6	237	20.3		8.1	-	33.7		91.5		6.8	6.8	6.6	-	5			
SR7	Fine	Rough	13:14	16.1	Middle	8.1	0.6	228	20.3	20.3	8.1	8.1	33.7	33.7	90.9	90.9	6.7		7.9	8.1	5	5	823642	823745
		-			<u> </u>	8.1	0.6	233	20.3		8.1		33.7		90.9		6.7		7.9		5			
					Bottom	15.1	0.7	218	20.3	20.3	8.1	8.1	33.7	33.7	90.9	90.9	6.7	6.7	9.8		5			
					1	15.1	0.7	225	20.3	ļ	8.1	 	33.7		90.9		6.7		9.8	<u> </u>	5			
	1				Surface	1.0	-	-	20.0	20.0	8.1	8.1	32.8	32.8	95.8	95.8	7.2		9.9	1	4			
					<u> </u>	1.0	-	-	20.0		8.1		32.8		95.8		7.2	7.2	9.8		4			
SR8	Fine	Moderate	11:44	4.0	Middle	-	-	-	-	-	-	-	-	-		-			-	10.3	-	5	820369	811642
						-	-	-	-		-		-				-		-		-			
					Bottom	3.0	-	-	20.0	20.0	8.1	8.1	32.9	32.8	95.6	95.7	7.2	7.2	10.9		6			
L	<u> </u>				1	3.0	-	-	20.0	l	8.1		32.8		95.7		7.2		10.8		6			
DA: Depth-Aver	aned																			_				

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

28 December 21 during Mid-Ebb Tide

Marcia	Water Qua	lity Monit	oring Resu	ilts on		28 December 21	during Mid-	Ebb Tide	•																
Control Cont		Weather	Sea	Sampling	Water	Sampling Dep	th (m)			Water Te	emperature (°C)		pН	Salir	nity (ppt)	DO S				Turbidity	(NTU)				Coordinate HK Grid
Monty Cam 17:30 7:30	Station	Condition	Condition	Time	Depth (m)						Average		Average				Average		DA		DA		DA		
California May Cam Cap 7.8 Modele 33 Cap C						Surface					18.5		8.2				92.9								
Miles																			7.2		-				
Control Cont	C1	Misty	Calm	07:39	7.8	Middle					18.4		8.2		33.2		93.9				8.2		9	815628	804249
Caury Moderate 08.29 11.6						D. W					40.4						00.4								
Calcular Machania Calcular Machania Calcular						Bottom					18.4		8.2				96.1		7.4						
Check Moderate Check Moderate Check Moderate Check Che						Surface					19.0		8.1		33.1		95.5								
Color Colo																			7.3						
Bellet	C2	Cloudy	Moderate	08:29	11.6	Middle					19.1		8.1				95.3				6.5		5	825703	806926
Column C																									
C3 Rany Rough 0606 12.4 Madde 1.0 0.3 66 19.7 19.6 19.6 11. 33. 34. 91.0 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6						Bottom					19.2		8.1				95.5		7.2						
Ray Rough						Curfoco			64	19.7	10.7		0.1	33.8	22.0	91.0	01.0	6.8				6			
Color Place Plac						Surface					15.7		0.1				91.0		6.8						
Bistom	C3	Rainy	Rough	06:06	12.4	Middle					19.6		8.1		33.8		91.2				3.7		5	822095	817809
Mary Calm Or550 A6 Surface 11.4 O.3 O.5 A 10.0 10.0 242 17.9 17.9 0.2		-																			1				
Mary Calm OF 58 4.6 Middle 1.0 0.1 242 179 17.3 6.2 8.2 32.8 32.8 94.8 94.6 74. 74. 74. 77. 7.0						Bottom					19.6		8.1				91.5		6.9						
M1 Mely Calm 07:58 4.6						Curtana	1.0	0.1	242	17.9	47.0	8.2	0.0	32.8	22.0	94.4	04.6	7.4		5.7		6			
May Calm (07.56) 4.6 Modes						Surface			259		17.9	8.2	0.2		32.0	94.8	94.0		74	5.7					
Mary Calm OR OR OR OR OR OR OR O	IM1	Misty	Calm	07:58	4.6	Middle			-		-	-	-		-		-			-	6.2		7	817960	807149
May Calm 68.05 6.2 Modele 8.0 Modele 8.0 Modele 8.0 Modele 9.0 Mod		,							-												1				
Miley Calm 06.05 0.2 Middle 1.0 0.1 279 18.0 18.0 8.2 8.2 32.8 28.8 83.4 93.5 7.3 7.4 2.2 8.7 7.4 2.2 7.5 7.						Bottom					18.0		8.1				98.2		7.7						
May Calm 0805 6.2 Mode 3.1 0.0 1.3 936 180.0 18.0 0.2 1.328 18.0 17.7 7.4 22 7.7 2.2 17.7 2.2						Curtana					40.0		0.0				02.5								
May Caim Botton S. 10.0 3 15.0 16.0 16.0 6.2 2.3 2.3 2.8 0.6 0.5 0.7 4 1.5 3.5 3.5 8 8 18141 808149 May Caim Botton S. 10.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1						Surface		0.1	306	18.0	18.0		8.2		32.8		93.5		7.4						
Bottom Society Bottom Society Bottom Society Society Society Bottom Society Bottom Society	IM2	Misty	Calm	08:05	6.2	Middle					18.0		8.2				95.0		7.4		3.5		8	818141	806149
Mishy Calm 08:11 6.4 Surface 1.0 0.3 113 18.0 18.0 8.2 8.2 82 82 82 82 82 82 82 82 82 82 82 82 82		,																			1				
May Calm 08:11 6.4 Micide 32 0.3 108 18.0 18.0 8.2 8.2 329 92.0 94.0 92.7 7.3 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5						Bottom					18.0		8.2				96.8	7.5	7.5						
Misty Calm OB:11 6.4 Middle 3.2 0.3 108 180 180 180 0.2 2.3 2.3 3.2 3.						Curtana					40.0		0.0		1		02.0								
MS Mety Calm 08:11 6.4 Modele 3.2 0.3 108 180 180 180 8.2 82 92 93 94 094 2 73 8.1 8.1 8.2 8.8 8 18788 805576 Bottom 5.4 0.3 108 180 180 8.2 8.2 8.2 8.2 8.2 8.0 8.7 7.3 8.2 8.0 8.0 94 2 73 8.2 8.0 8.0 94 2 73 8.2 8.0 8.0 94 2 73 8.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 8.0 94 2 73 9.0 94 2 74 9.0 94 2 9.0 94 2 9.0 94 2 9.0 94 2 9.0 94 2 9.0 94 2 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0						Surface					16.0		0.2				92.0		7.3						
Bottom S-4 0.3 108 180 180 6.2 3.24 3.28 3.28 56.7 56.7 57.5 51 59 59 59 59 59 59 5	IM3	Misty	Calm	08:11	6.4	Middle					18.0		8.2				94.2	7.3			8.2		8	818788	805576
Marty Calm Naty Calm		-																			1				
Milest M						Bottom					18.0		8.2				95.8		7.5		1				
May Cam May Ca						Curtana					40.0		0.0		1		00.7								
Midela M						Surface					10.0		0.2				52.1		72						
Misty Calm Mist	IM4	Misty	Calm	08:21	8.0	Middle					18.0		8.2				93.4				8.4		8	819741	804591
Misty Calm O8:30 Part		,																			1				
Misty Calm OB:30 7.6 Surface 1.0 0.6 2.19 17.9 17.9 8.2 8.2 33.0 33.0 95.1 95.2 7.4 7.5 6.2 7.6 6.6 7.3 7.2 6.5 7.3						Bottom					18.0		8.2				95.5		7.4						
Misty Calm O8:30 7.6 Middle 3.8 0.6 238 17.9 17.9 17.9 17.9 17.9 18.2 32.9 32.9 96.2 96.2 7.5 7.5 7.8 7.2 6.6 7.8 820745 804855						Curtana					47.0		0.0				05.0								
Misty Calm Mist						Surface					17.9		0.2	33.0	33.0		93.2		7.5						
Moderate Moderate	IM5	Misty	Calm	08:30	7.6	Middle					17.9		8.2		32.9		96.3				7.2		7	820745	804855
M6 Misty Calm No.38 A Middle A Misty Calm No.40 A Misty Calm No.40 A Misty Calm No.40 A Middle Middle A Middle A Middle A Middle A Middle A Middle A Middle A Middle A Middle A Middle A		-																			-				
Misty Calm OB:36 A Surface 1.0 O.4 241 17.9 17.9 B.2 32.8 32						Bottom					17.9		8.1				98.6		7.7						
Milety Calm 08:38 6.8 Milder 3.4 0.4 202 17.9 17.9 8.2 32.8 32.8 95.2 93.1 7.4 7.4 8.4 8.5 7.7 8.2 8.2 8.5 7.4 7.5 7.5 7.6 7.5 7						Surface			241	17.9	17.0	8.2	8.2	32.8	32.8		03.1	7.3		7.4		7			
Mideland Misky Calm Misky						Odridoc					17.5		0.2		32.0		33.1		7.4						
Bottom 5.8 0.4 236 17.9 17.9 8.2 32.8 32.8 96.7 96.9 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.6 91.0 7.5 7.5 7.5 7.5 91.0 7.5 7.5 7.5 7.5 91.0 7.5 7.5 7.5 91.0 7.5 7.5 7.5 91.0 7.5 7.5 7.5 91.0 7.5 7.5 7.5 91.0 7.5 7.5 7.5 91.0 7.5 7.5 91.0 7.5 91.0 7.5 91.0 91.0 91.0 91.0 91.0 91.0 91.0 91.0	IM6	Misty	Calm	08:38	6.8	Middle					17.9		8.2		32.8		95.3				8.3		7	821039	805809
Milety Calm Moderate Mode																									
Mildle No. Mildle No.						Bottom					17.9		8.2				96.9		7.6						
Middle						Surface					17.9		8.2				93.0								
Middle 4.0 0.4 248 17.9 17.9 8.2 82 32.6 94.0 93.9 7.3 6.8 6.4 7 821398 80845 Bottom 7.0 0.2 244 17.9 17.9 8.2 8.2 8.2 32.6 95.7 95.6 7.5 7.5 7.6 8 Surface 1.0 0.1 165 18.5 18.5 8.2 8.2 33.6 33.6 99.6 9.6 7.6 7.6 7.6 9.9 93.9 93. 93. 93. 93. 93. 93. 93. 93						Gundoo					11.0		0.2				00.0		7.3						
Bottom 7.0 0.2 244 17.9 17.9 8.2 8.2 32.6 32.6 95.5 95.6 7.5 7.5 7.6 8 Surface 1.0 0.1 165 18.5 18.5 8.2 8.2 33.6 33.6 99.6 97.6 7.6 7.6 5.9 5.9 5.9 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	IM7	Misty	Calm	08:46	8.0	Middle					17.9		8.2				93.9				6.4		7	821358	806845
M8 Cloudy Moderate 08:00 F.5 Middle 08:00 F.5 Middle Rottom 6.5 0.1 148 18.5																					1				
IM8 Cloudy Moderate 08:00 7.5 Middle 3.8 0.1 101 18.5 18.5 8.2 8.2 33.6 33.6 99.2 99.6 7.6 7.6 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6						Bottom					17.9		8.2				95.6		7.5						
IM8 Cloudy Moderate 08:00 7.5 Middle 3.8 0.1 101 18.5 8.2 33.6 99.6 7.6 7.6 5.9 6.5 6.5 6 6 821846 808150						Surface					18.5		8.2				99.6	7.6							
IM8 Cloudy Moderate 08:00 7.5 Middle 3.8 0.1 101 18.5 18.5 8.2 8.2 33.6 33.6 99.2 9.3 7.6 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6						Guildoo					10.0		V.2				00.0	7.6	7.6		1				
Rottom 6.5 0.1 148 18.5 18.5 8.2 8.2 33.7 33.7 99.3 99.3 7.6 7.6 7.3 6	IM8	Cloudy	Moderate	08:00	7.5	Middle					18.5		8.2				99.3				6.5		6	821846	808150
																					1				
						Bottom					18.5		8.2				99.3		7.6		1				

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 28 December 21 during

28 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	toring Resu	ılts on		28 December 21	during Mic	d-Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DO S	Saturation (%)	Disso		Turbidity	(NTU)	Suspende (mg.		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	th (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	1/	Value	DA	Value	DA	Value	DA DA	HK Grid (Northing)	HK Grid (Easting)
				,	Curfore	1.0	0.3	89	18.5	-	8.2	-	33.5		99.6		7.6		5.8		5			,
					Surface	1.0	0.3	92	18.5	18.5	8.2	8.2	33.5	33.5	99.6	99.6	7.6	7.6	5.8		5			
IM9	Cloudy	Moderate	07:53	7.1	Middle	3.6	0.3	70 71	18.5 18.5	18.5	8.2	8.2	33.6 33.6	33.6	99.3 99.3	99.3	7.6 7.6		6.9	6.6	6	6	822080	808789
					_	3.6 6.1	0.3	76	18.5		8.2		33.6		99.3		7.6		7.1	1	6			
					Bottom	6.1	0.3	78	18.5	18.5	8.2	8.2	33.6	33.6	99.5	99.5	7.6	7.6	7.1	1	6			
					Surface	1.0	0.4	80	18.5	18.5	8.2	8.2	33.4	33.4	98.9	98.9	7.6	,	5.7		6			
						1.0 3.7	0.4	83 78	18.5 18.5		8.2		33.4 33.5		98.9 98.6		7.6 7.6	7.6	5.7 6.7	4	6			
IM10	Cloudy	Moderate	07:44	7.3	Middle	3.7	0.4	78	18.5	18.5	8.2	8.2	33.5	33.5	98.6	98.6	7.6		6.7	7.1	5	6	822395	809783
					Bottom	6.3	0.4	76	18.5	18.5	8.2	8.2	33.5	33.5	98.5	98.5	7.6	7.6	8.9		5			
						6.3	0.4	82 153	18.5		8.2		33.5		98.5 96.3		7.6		8.9 6.6		5 7			
					Surface	1.0	0.2	165	18.7	18.7	8.1	8.1	33.3	33.3	96.3	96.3	7.4		6.6	1	7			
IM11	Cloudy	Rough	07:31	8.8	Middle	4.4	0.3	138	18.7	18.7	8.1	8.1	33.3	33.3	96.1	96.1	7.4	7.4	7.4	7.2	7	6	822060	811475
	Cioday	rtougii	01.01	0.0	Middlo	4.4	0.3	138	18.7	10.7	8.1	0.1	33.3	00.0	96.1	00.1	7.4		7.3		6	Ü	OLLOGO	011110
					Bottom	7.8 7.8	0.2	154 164	18.7 18.7	18.7	8.1 8.1	8.1	33.3 33.3	33.3	96.5 96.5	96.5	7.4 7.4	7.4	7.7	-	5 5			
					Surface	1.0	0.3	105	18.7	18.7	8.1	8.1	33.3	33.3	96.4	96.4	7.4		5.8		7			
					Surface	1.0	0.3	114	18.7	10.7	8.1	0.1	33.3	33.3	96.4	30.4	7.4	7.4	5.8	1	7			
IM12	Cloudy	Rough	07:23	9.2	Middle	4.6 4.6	0.4	77 79	18.7 18.7	18.7	8.1 8.1	8.1	33.3	33.3	96.3 96.3	96.3	7.4 7.4		6.6 6.7	6.8	6	6	821437	812028
					D. W	8.2	0.4	82	18.7	40.7	8.1	0.4	33.3	00.0	96.4	00.5	7.4	7.4	7.8	1	5			
					Bottom	8.2	0.3	87	18.7	18.7	8.1	8.1	33.3	33.3	96.5	96.5	7.4	7.4	7.9		5			
					Surface	1.0	-		18.5	18.5	8.1	8.1	33.1	33.1	93.6	93.6	7.2		3.8		4			
						1.0 2.5	-	-:-	18.5		8.1		33.1		93.6		7.2	7.2	3.8	ł	4			
SR1A	Cloudy	Calm	06:49	4.9	Middle	2.5	-		-	-	-	-	-	-	-	-	-		-	4.2	-	4	819981	812657
					Bottom	3.9	-	•	18.9	18.9	8.1	8.1	33.4	33.4	95.2	95.4	7.3	7.3	4.5		3			
						3.9 1.0	0.3	73	18.9 19.2		8.1		33.4 33.6		95.5 93.4		7.3 7.1		4.5 5.7		3 5			
					Surface	1.0	0.3	76	19.2	19.2	8.1	8.1	33.6	33.6	93.4	93.4	7.1		5.9	1	4			
SR2	Cloudy	Rough	06:32	4.5	Middle	-	-		-		-		-				-	7.1	-	6.3	-	4	821469	814177
0.12	Oloddy	rtougii	00.02	1.0	Middle	-	-	-	-		-		-		-		-		-	0.0	-		021100	0
					Bottom	3.5	0.3	78 79	19.2 19.2	19.2	8.1	8.1	33.6 33.6	33.6	94.2	94.3	7.1 7.1	7.1	6.8	-	4			
					Surface	1.0	0.3	190	18.5	18.5	8.1	8.1	33.3	33.3	99.0	99.0	7.6		4.9		4			
					Surface	1.0	0.3	193	18.5	10.5	8.1	0.1	33.3	33.3	99.0	99.0	7.6	7.6	4.9		5			
SR3	Cloudy	Moderate	08:06	8.4	Middle	4.2 4.2	0.3	186 203	18.4 18.5	18.5	8.2	8.2	33.4 33.4	33.4	99.3	99.3	7.6 7.6		6.0 6.1	6.6	5 6	5	822131	807565
					D. W	7.4	0.3	195	18.6	40.0	8.2		33.6	00.0	99.7	00.7	7.6	7.0	8.9	1	6			
					Bottom	7.4	0.2	208	18.6	18.6	8.2	8.2	33.6	33.6	99.7	99.7	7.6	7.6	8.9		6			
					Surface	1.0	0.1	127	17.9 17.9	17.9	8.2	8.2	32.9 32.9	32.9	92.9 92.9	92.9	7.2		3.3	1	8			
						4.4	0.1	128 168	17.9		8.2		32.9		93.6		7.3	7.3	4.1	ł	8			
SR4A	Misty	Calm	07:19	8.8	Middle	4.4	0.1	181	17.9	17.9	8.2	8.2	32.9	32.9	93.8	93.7	7.3		4.1	4.2	7	8	817180	807809
					Bottom	7.8	0.1	128	17.9	17.9	8.1	8.1	32.9	32.9	95.0	95.1	7.4	7.4	5.1		7			
						7.8 1.0	0.1	137 309	17.9 17.8		8.1		32.9 32.4		95.2 90.5		7.4		5.1 3.2	<u> </u>	8			
					Surface	1.0	0.0	324	17.8	17.8	8.1	8.1	32.4	32.4	90.7	90.6	7.1	7.1	3.2	1	8			
SR5A	Misty	Calm	07:03	5.0	Middle	-	-		-	_	-		-		-		-	7.1	-	3.9	-	8	816608	810710
	,					4.0	0.1	121	17.7		8.1		32.6		94.7		7.4		4.6		- 8			
					Bottom	4.0	0.1	129	17.7	17.7	8.1	8.1	32.6	32.6	95.1	94.9	7.5	7.5	4.6	1	8			
					Surface	1.0	0.0	26	17.9	17.9	8.1	8.1	32.4	32.4	88.5	88.5	6.9		5.2		7			
					Gunace	1.0	0.0	27	17.9	11.0	8.1	0.1	32.4	32.4	88.5	00.0	6.9	6.9	5.5	_	6			
SR6A	Misty	Calm	06:16	4.7	Middle		-	-	-	-	-	-	-	-	-	-	-		-	5.7	-	6	817955	814716
					Bottom	3.7	0.0	54	17.9	17.9	8.1	8.1	32.5	32.5	89.2	89.3	7.0	7.0	6.2	1	6			
					Bottom	3.7	0.0	59	17.9	17.9	8.1	0.1	32.5	32.3	89.3	09.3	7.0	7.0	6.1		6			
					Surface	1.0	0.3	133 136	19.9 19.9	19.9	8.1	8.1	33.9 33.9	33.9	92.2	92.2	6.9		3.6 3.6		4			1 7
0.07	D. in	Boots	05.04	45.7	AP LU.	7.9	0.3	168	19.9	40.0	8.1		33.9	20.0	92.2	00.5	6.9	6.9	3.5	1	4		200005	000745
SR7	Rainy	Rough	05:34	15.7	Middle	7.9	0.3	168	19.9	19.9	8.1	8.1	33.9	33.9	92.5	92.5	6.9		3.5	3.6	4	4	823625	823745
					Bottom	14.7	0.2	183	19.9	19.9	8.0	8.0	33.9	33.9	93.1	93.2	6.9	7.0	3.6	1	5			
<u> </u>			1		1	14.7	0.2	193	19.9 19.2		8.0		33.9 33.4		93.2 95.0		7.0 7.2		3.6 5.0		5			-
					Surface	1.0			19.2	19.2	8.1	8.1	33.4	33.4	95.0	95.0	7.2	7.0	5.0	1	6			
SR8	Cloudy	Moderate	07:14	5.0	Middle	-	-	-	-	-	-		-	-	-	-	-	7.2	-	5.3	-	6	820373	811614
	,					4.0	-	-	19.0		8.1		33.4		94.4	1	7.2		5.7	1	- 6			
					Bottom	4.0	-		19.0	19.0	8.1	8.1	33.4	33.4	94.4	94.5	7.2	7.2	5.7	1	7			
1					I.					1					01.0				, v.v					

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 28 December 21 during

28 December 21 during Mid-Flood Tide

Water Qua	lity Monit	oring Resu	ılts on		28 December 21	during Mid	I-Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DO S	Saturation (%)	Disso		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	64	18.4	18.4	8.2	8.2	33.3	33.3	94.3	94.3	7.3		6.0		7			
						1.0 3.9	0.3	64 48	18.4 18.4		8.2		33.3 33.3		94.3 96.0		7.3 7.4	7.4	6.1 7.6		8			
C1	Misty	Moderate	13:40	7.8	Middle	3.9	0.4	50	18.4	18.4	8.2	8.2	33.3	33.3	96.0	96.1	7.4		7.5	7.3	6	7	815608	804235
					Bottom	6.8	0.4	66	18.4	18.4	8.2	8.2	33.2	33.2	97.8	98.1	7.5	7.6	8.3		6			
					Dottom	6.8	0.4	66	18.4	10.4	8.2	0.2	33.2	33.Z	98.3	30.1	7.6	7.0	8.4		6			
					Surface	1.0	0.0	222 233	19.1 19.0	19.1	8.1 8.1	8.1	33.0 33.0	33.0	96.1 96.0	96.1	7.3		4.7 4.8		6 7			
C2	Claudi	Moderate	12:36	11.6	Middle	5.8	0.0	235	18.9	18.9	8.1	8.1	33.1	33.1	95.6	95.6	7.3	7.3	5.9	5.8	4	-	825687	806948
C2	Cloudy	Moderate	12:36	11.6	Middle	5.8	0.0	236	18.9	18.9	8.1	8.1	33.1	33.1	95.6	95.6	7.3		5.9	5.8	4	5	825687	806948
					Bottom	10.6 10.6	0.1	270 294	18.8 18.8	18.8	8.1	8.1	33.0 33.0	33.0	96.1 96.1	96.1	7.4	7.4	6.8		3			
						1.0	0.1	270	19.8		8.1		33.9		90.1		6.9		4.1		7			
					Surface	1.0	0.4	289	19.8	19.8	8.1	8.1	33.9	33.9	92.4	92.4	6.9	6.9	4.1		7			
СЗ	Cloudy	Moderate	14:42	12.2	Middle	6.1	0.4	268	19.8	19.8	8.1	8.1	33.9	33.9	92.5	92.5	6.9	0.0	4.5	4.5	8	8	822115	817782
						6.1 11.2	0.4	280 271	19.8 19.8		8.1 8.1		33.9 33.9		92.5 94.3		6.9 7.1		4.4 5.0		8			
					Bottom	11.2	0.4	296	19.8	19.8	8.1	8.1	33.9	33.9	94.4	94.4	7.1	7.1	5.0		9			
					Surface	1.0	0.1	353	18.1	18.1	8.2	8.2	32.9	32.9	95.8	95.9	7.4		4.2		9			
						1.0	0.1	325	18.1		8.2		32.9		96.0		7.5	7.5	4.3		9			
IM1	Misty	Moderate	13:20	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-			5.0	-	10	817961	807146
					Bottom	3.6	0.2	5	18.0	18.0	8.2	8.2	32.9	32.9	97.5	97.8	7.6	7.6	5.8		10			
						3.6	0.2	5 21	18.0		8.2		32.9		98.0		7.6		5.7		10			
					Surface	1.0	0.2	22	18.0 18.0	18.0	8.2	8.2	32.8 32.8	32.8	92.9	93.0	7.2		7.1 7.0		10 10			
IM2	Misty	Moderate	13:14	6.6	Middle	3.3	0.3	39	18.1	18.1	8.2	8.2	32.9	32.9	94.0	94.2	7.3	7.3	8.1	8.1	9	9	818159	806147
	imoty	moderate	10.11	0.0	middio	3.3	0.3	39	18.1	10.1	8.2	0.2	32.9	02.0	94.3	01.2	7.3		8.2		9		010100	000111
					Bottom	5.6 5.6	0.2	342 315	18.1	18.1	8.2	8.2	32.9 32.9	32.9	95.6 95.8	95.7	7.4	7.4	9.0 9.1		8 7			
					Surface	1.0	0.2	35	18.1	18.1	8.2	8.2	33.0	33.0	93.7	93.8	7.3		4.0		8			
					Surface	1.0	0.2	37	18.1	10.1	8.2	0.2	33.0	33.0	93.8	93.0	7.3	7.4	4.1		8			
IM3	Misty	Moderate	13:08	6.8	Middle	3.4 3.4	0.2	12 12	18.1 18.1	18.1	8.2	8.2	33.0 33.0	33.0	95.4 95.6	95.5	7.4		5.4 5.5	5.3	9 10	9	818798	805589
					D-H	5.8	0.2	29	18.1	10.1	8.2	0.0	33.0	33.0	96.5	96.7	7.5	7.5	6.6	1	10			
					Bottom	5.8	0.2	30	18.1	18.1	8.2	8.2	33.0	33.0	96.8	90.7	7.5	7.5	6.5		10			
					Surface	1.0	0.4	346 318	18.1 18.1	18.1	8.2	8.2	32.9 32.9	32.9	92.6 92.6	92.6	7.2		7.1 7.0		8			
IM4	Minter	Moderate	12:59	8.4	Middle	4.2	0.1	16	18.1	18.1	8.2	8.2	32.9	32.9	93.9	94.1	7.3	7.3	8.4	8.2	9	9	819741	804589
IIVI4	Misty	Woderate	12.59	0.4	iviidale	4.2	0.1	17	18.1	10.1	8.2	0.2	32.9	32.9	94.2	94.1	7.3		8.5	0.2	9	9	019741	004309
					Bottom	7.4	0.2	42 43	18.1 18.1	18.1	8.2	8.2	32.8 32.8	32.8	95.8 96.0	95.9	7.4	7.5	9.0 9.1		10 9			
					0(1.0	0.2	22	18.2	40.0	8.2	1	32.9	00.0	93.7	00.0	7.3		7.0		10			
					Surface	1.0	0.5	23	18.2	18.2	8.2	8.2	32.9	32.9	93.8	93.8	7.3	7.4	7.1		10			
IM5	Misty	Moderate	12:52	8.0	Middle	4.0	0.4	20	18.2 18.2	18.2	8.2	8.2	32.9 32.9	32.9	95.4 95.5	95.5	7.4		8.4 8.5	8.2	9	9	820750	804872
						7.0	0.5	25	18.2		8.2		32.8		95.5		7.5		9.1		9			
					Bottom	7.0	0.4	26	18.1	18.1	8.2	8.2	32.8	32.8	97.4	97.3	7.6	7.6	9.1		9			
					Surface	1.0	0.1	339	18.1	18.1	8.2	8.2	32.7	32.7	93.1	93.1	7.2		2.4		10			
						1.0 3.5	0.1	351 334	18.1 18.0		8.2		32.7 32.7		93.1 93.6		7.2	7.3	2.4 3.3	1	11 9			
IM6	Misty	Moderate	12:45	7.0	Middle	3.5	0.1	307	18.0	18.0	8.2	8.2	32.7	32.7	93.7	93.7	7.3		3.4	3.4	9	10	821062	805811
					Bottom	6.0	0.1	4	18.0	18.0	8.2	8.2	32.6	32.6	96.0	96.2	7.5	7.5	4.5		9			
-						6.0 1.0	0.1	4 244	18.0 18.2		8.2		32.6 32.6		96.3 92.5		7.5 7.2		4.5 4.9		9			
					Surface	1.0	0.2	250	18.2	18.2	8.2	8.2	32.6	32.6	92.5	92.5	7.2	7.2	5.0		10			
IM7	Misty	Moderate	12:38	8.2	Middle	4.1	0.1	261	18.0	18.0	8.2	8.2	32.7	32.7	92.5	92.6	7.2	1.2	5.4	5.5	9	9	821357	806822
	,					4.1 7.2	0.2	272 315	18.0		8.2		32.7		92.6		7.2		5.4		8			
					Bottom	7.2	0.1	315	18.0 18.0	18.0	8.2	8.2	32.7 32.7	32.7	92.8 92.8	92.8	7.2	7.2	6.1	i	8			
					Surface	1.0	0.1	289	18.8	18.8	8.2	8.2	33.4	33.4	100.0	100.0	7.6		5.3		8			
						1.0	0.1	297	18.8		8.2		33.4		100.0		7.6	7.6	5.3	4	8			
IM8	Cloudy	Moderate	12:59	7.5	Middle	3.8	0.2	268 292	18.7 18.7	18.7	8.2	8.2	33.4 33.4	33.4	99.5 99.5	99.5	7.6 7.6		5.8 5.8	5.9	8	8	821827	808162
					Bottom	6.5	0.2	301	18.6	18.6	8.2	8.2	33.5	33.5	100.2	100.2	7.7	7.7	6.6		7			
				l	Sottom	6.5	0.2	314	18.6	.5.0	8.2	3.2	33.5	55.5	100.2	100.2	7.7		6.6		7			

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 28 December 21 during

28 December 21 during Mid-Flood Tide

Water Qua	lity Monit	toring Resu	ılts on		28 December 21	during Mid-	Flood T	ide																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	F	рΗ	Salir	nity (ppt)		aturation (%)	Disso		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Camping Dep		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	263 267	18.7	18.7	8.2	8.2	33.5	33.5	98.9 98.9	98.9	7.6		7.2		13			
						3.6	0.2	267	18.7		8.2		33.5		98.9		7.6 7.6	7.6	7.3 7.5		13			
IM9	Cloudy	Moderate	13:06	7.2	Middle	3.6	0.3	282	18.7	18.7	8.2	8.2	33.5		99.0	99.0	7.6		7.5	7.7	12	11	822105	808815
					Bottom	6.2	0.2	269	18.7	18.7	8.2	8.2	33.5		99.7	99.8	7.6	7.7	8.3		9			
					Bottom	6.2	0.3	282	18.7	10.7	8.2	0.2	33.5	33.3	99.9	99.0	7.7	1.1	8.3		9			
					Surface	1.0	0.3	291	18.6	18.6	8.2	8.2	33.4	33.4	100.4	100.4	7.7		5.4		9			
						1.0 3.7	0.3	310	18.6		8.2		33.4		100.4		7.7	7.7	5.4		7			
IM10	Cloudy	Moderate	13:13	7.3	Middle	3.7	0.3	273 289	18.6 18.6	18.6	8.2	8.2	33.5 33.5		99.4 99.4	99.4	7.6 7.6		7.2 7.2	6.8	8	8	822404	809782
					Bottom	6.3	0.3	289	18.6	18.6	8.2	8.2	33.5		100.0	100.1	7.7	7.7	7.9		8			
					Bottom	6.3	0.3	314	18.6	10.0	8.2	0.2	33.5		100.1	100.1	7.7	1.1	7.8		8			
					Surface	1.0	0.4	279	18.9	18.9	8.1	8.1	33.3		98.0	98.0	7.5		5.2		8			
						1.0 4.1	0.5	282 289	18.9 18.8		8.1 8.1		33.3 33.3		98.0 97.6		7.5 7.5	7.5	5.2 7.0		9			
IM11	Cloudy	Moderate	13:26	8.1	Middle	4.1	0.5	295	18.8	18.8	8.1	8.1	33.3		97.7	97.7	7.5		7.0	6.7	9	9	822034	811478
					Bottom	7.1	0.3	303	18.7	18.7	8.2	0.0	33.3		98.4	98.5	7.5	7.5	7.7		10			
					DOLLOTTI	7.1	0.3	322	18.7	10.7	8.2	8.2	33.3		98.5	90.5	7.5	7.5	7.8		11			
					Surface	1.0	0.4	316	18.8	18.8	8.1	8.1	33.3		97.0	97.0	7.4		5.3		7			
						1.0	0.5	317	18.8		8.1		33.3		96.9		7.4	7.4	5.3		7			
IM12	Cloudy	Moderate	13:33	8.2	Middle	4.1 4.1	0.4	311 341	18.9 18.9	18.9	8.1	8.1	33.4		95.7 95.7	95.7	7.3 7.3		6.0	7.9	9	9	821465	812066
						7.2	0.5	298	18.9		8.1		33.4		95.9		7.3		12.1		12			
					Bottom	7.2	0.5	302	18.9	18.9	8.1	8.1	33.4	33.4	96.0	96.0	7.3	7.3	12.5		12			
					Surface	1.0	-	-	18.7	18.7	8.1	8.1	33.2	33.2	95.0	95.0	7.3		6.4		10			
						1.0	-	-	18.7		8.1		33.2		95.0		7.3	7.3	6.4		10			
SR1A	Cloudy	Calm	14:04	5.2	Middle	2.6 2.6		-	- :	-	-	-	-	-	÷	-	-:-		- :	6.6	-:-	10	819978	812655
					Bottom	4.2	-	-	18.7	18.7	8.1	0.4	33.2	33.2	95.9	00.0	7.4		6.8		10			
					Bottom	4.2	-	-	18.7	18.7	8.1	8.1	33.2	33.2	96.0	96.0	7.4	7.4	6.8		10			
					Surface	1.0	0.2	76	19.5	19.5	8.1	8.1	33.7	33.7	93.8	93.8	7.1		6.1		10			
						1.0	0.2	76	19.5		8.1		33.7		93.8		7.1	7.1	6.1		10			
SR2	Cloudy	Moderate	14:20	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-			6.4		11	821457	814174
					Bottom	3.5	0.2	60	19.5	19.5	8.1	8.1	33.7	33.7	93.9	94.0	7.1	7.1	6.8		11			
					Bottom	3.5	0.2	60	19.5	19.5	8.1	0.1	33.7		94.0	54.0	7.1	7.1	6.7		11			
					Surface	1.0	0.1	206	19.2	19.2	8.1	8.1	33.5		96.4 96.4	96.4	7.3		5.7		9			
						1.0 4.4	0.1	220 211	19.2 19.1		8.1 8.1		33.5 33.5		96.4		7.3 7.4	7.4	5.7 6.2		9			
SR3	Cloudy	Moderate	12:54	8.7	Middle	4.4	0.1	229	19.1	19.1	8.1	8.1	33.5	33.5	97.3	97.3	7.4		6.3	6.8	8	8	822126	807588
					Bottom	7.7	0.1	212	18.8	18.8	8.2	8.2	33.4		98.1	98.2	7.5	7.5	8.5		7			
					Bottom	7.7	0.1	213	18.8	10.0	8.2	0.2	33.4		98.2	90.2	7.5	1.5	8.6		7			
					Surface	1.0	0.0	346	17.9	17.9	8.2	8.2	32.5	32.5	90.9	90.9	7.1		6.2		6			
						1.0 4.8	0.0	318 125	17.9 17.9		8.2 8.2		32.5 32.5		90.9 91.2		7.1 7.1	7.1	6.4 7.2		6 9			
SR4A	Misty	Moderate	13:58	9.6	Middle	4.8	0.1	135	17.8	17.9	8.2	8.2	32.5	32.5	91.3	91.3	7.1		7.3	7.5	9	8	817191	807806
					Bottom	8.6	0.1	110	17.8	17.8	8.2	8.2	32.5		93.5	93.6	7.3	7.3	9.0		9			
					Bottom	8.6	0.1	119	17.8	17.0	8.2	0.2	32.5		93.7	93.0	7.3	1.3	8.9		10			
					Surface	1.0 1.0	0.1	301	18.0 18.0	18.0	8.2	8.2	32.5 32.5		92.7	92.9	7.2		6.1		8			
						1.0	0.1	326	18.0		8.2		32.5		93.1		7.3	7.3	6.1		- 8			
SR5A	Misty	Moderate	14:13	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	6.9		9	816578	810689
					Bottom	3.6	0.1	311	18.0	18.0	8.2	8.2	32.5		94.4	94.5	7.4	7.4	7.7		9			
					Bottom	3.6	0.1	322	18.0	10.0	8.2	0.2	32.5		94.6	01.0	7.4		7.8		9			
					Surface	1.0	0.0	229	18.0	18.0	8.2	8.2	32.5		90.7	90.8	7.1		4.1		10			
						1.0	0.0	247	18.0		8.2		32.5		90.8		7.1	7.1	4.1		10			
SR6A	Misty	Moderate	14:42	4.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.8	-	10	817978	814737
					Bottom	3.0	0.1	213	18.0	18.0	8.2	8.2	32.5	32.5	91.4	91.5	7.1	7.1	5.6		9			
						3.0	0.1	229	18.0		8.2		32.5		91.5		7.1		5.5		10			
					Surface	1.0	0.3	46 50	19.9 19.9	19.9	8.1	8.1	34.0 33.9		93.2	93.2	7.0 7.0		3.9	1	7			
						8.0	0.3	79	19.9		8.1		34.0		93.2		7.0	7.0	4.2	۱	9			
SR7	Cloudy	Moderate	15:15	16.0	Middle	8.0	0.2	80	19.9	19.9	8.1	8.1	34.0	34.0	93.3	93.3	7.0		4.3	4.1	9	8	823649	823746
					Bottom	15.0	0.2	59	19.9	19.9	8.1	8.1	34.0		94.6	94.7	7.1	7.1	4.2	1	9			
						15.0	0.2	61	19.9		8.1		34.0		94.7		7.1		4.2		9			
					Surface	1.0	-	-	19.0 19.0	19.0	8.1 8.1	8.1	33.3	33.3	98.0 98.0	98.0	7.5		6.1		7			
055	OL .		40	<u> </u>		1.0	-	-	19.0		0.1		-		90.0		7.5	7.5	6.3		- 6	_	000	04.5.7
SR8	Cloudy	Moderate	13:41	5.1	Middle	-	-	-	-	-	-	-	-	1 -	-	-	-		-	7.7	-	6	820382	811614
					Bottom	4.1	-	-	18.8	18.8	8.2	8.2	33.4		98.0	98.1	7.5	7.5	9.3	1	6			
					Dottom	4.1	-	-	18.8	10.0	8.2	0.2	33.4	35.4	98.1	30.1	7.5	1.0	9.3		6			

Water Quality Monitoring
Water Quality Monitoring Results on

30 December 21 during Mid-Ebb Tide

Water Qual	lity Monit	oring Resu	ılts on		30 December 21	during Mid-	-Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salini	ty (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Camping Dep		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.1	240	18.2	18.2	8.2	8.2	33.4	33.4	93.5	93.5	7.2		9.5		10			
						1.0 4.0	0.1	257 236	18.2 18.2		8.2 8.2		33.4 33.4		93.5 93.3		7.2 7.2	7.2	9.6 10.6	-	11 11			
C1	Cloudy	Rough	09:46	7.9	Middle	4.0	0.1	249	18.2	18.2	8.2	8.2	33.4	33.4	93.3	93.3	7.2		10.6	11.0	12	12	815614	804226
					Bottom	6.9	0.1	266	18.3	18.3	8.2	8.2	33.4	33.4	93.4	93.5	7.2	7.2	12.8		14			
					Bottom	6.9	0.1	276	18.3	10.0	8.2	0.2	33.4	00.1	93.5	00.0	7.2		12.8		15			
					Surface	1.0	0.3	165 165	18.8 18.8	18.8	8.1 8.1	8.1	33.2 33.2	33.2	99.5 99.5	99.5	7.6 7.6		5.8 6.1	-	7 8			
C2		Moderate	10:50	11.8	Middle	5.9	0.2	172	18.7	40.7	8.1	0.4	33.3	00.0	99.6	99.6	7.6	7.6	9.3	9.4	7	7	825678	806966
C2	Misty	Moderate	10:50	11.8	Middle	5.9	0.3	180	18.6	18.7	8.1	8.1	33.3	33.3	99.6	99.6	7.6	•	9.6	9.4	6	/	825678	806966
					Bottom	10.8	0.1	149	18.6	18.6	8.1	8.1	33.3	33.3	100.0	100.1	7.7	7.7	12.8		6			
						10.8	0.1	151 242	18.6 19.9		8.1		33.3 34.1		100.1 94.8		7.7		13.2 4.1		7			
					Surface	1.0	0.1	244	19.9	19.9	8.1	8.1	34.1	34.1	94.8	94.8	7.1		4.1		6			
С3	Misty	Moderate	08:40	11.0	Middle	5.5	0.1	240	19.9	19.9	8.1	8.1	34.1	34.1	95.2	95.3	7.1	7.1	4.4	4.7	7	7	822092	817825
00	wiioty	Moderate	00.10	11.0	middio	5.5	0.1	254	19.9	10.0	8.1	0.1	34.1	01	95.3	00.0	7.1		4.4		6		OLLOGE	011020
					Bottom	10.0 10.0	0.1	231 244	19.9 19.9	19.9	8.1 8.1	8.1	34.1 34.1	34.1	96.0 96.3	96.2	7.2	7.2	5.4 5.7	4	7			
					0(1.0	0.0	207	18.1	40.4	8.2	0.0	33.1	00.4	93.3	00.4	7.2		3.5	<u> </u>	12			
					Surface	1.0	0.0	212	18.1	18.1	8.2	8.2	33.1	33.1	93.4	93.4	7.2	7.2	3.6]	11			
IM1	Cloudy	Moderate	10:05	5.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.6	-	11	817925	807145
	,					4.1	0.0	268	18.0		8.2		33.2		94.3		7.3		5.7	-	- 10			
					Bottom	4.1	0.0	281	18.0	18.0	8.2	8.2	33.2	33.2	94.3	94.3	7.3	7.3	5.7	1	11			
					Surface	1.0	0.1	176	18.0	18.0	8.2	8.2	33.2	33.2	93.3	93.3	7.2		4.7		13			
					Surface	1.0	0.1	177	18.0	16.0	8.2	0.2	33.2	33.2	93.3	55.5	7.2	7.2	4.8		12			
IM2	Cloudy	Moderate	10:13	6.1	Middle	3.1	0.1	212 216	18.0 18.0	18.0	8.2	8.2	33.2 33.2	33.2	92.1 92.1	92.1	7.2 7.2		5.6 5.7	6.5	11 12	12	818141	806179
						5.1	0.0	215	18.0		8.2		33.2		92.1		7.1		8.9	1	11			
					Bottom	5.1	0.0	219	18.0	18.0	8.2	8.2	33.2	33.2	92.0	92.0	7.1	7.1	9.0		12			
					Surface	1.0	0.1	209	18.1	18.1	8.2	8.2	33.2	33.2	94.0	94.0	7.3		4.9		8			
						1.0 3.3	0.2	219	18.1		8.2		33.2		94.0		7.3	7.3	5.0	1	9			
IM3	Cloudy	Rough	10:19	6.6	Middle	3.3	0.1	212 228	18.0 18.0	18.0	8.2	8.2	33.2 33.2	33.2	93.4 93.4	93.4	7.3 7.3		6.1 6.0	6.6	10 11	10	818762	805610
					Bottom	5.6	0.1	200	18.0	18.0	8.2	8.2	33.3	33.3	92.9	92.9	7.2	7.2	8.9	1	12			
					BOILOTT	5.6	0.1	208	18.0	16.0	8.2	0.2	33.3	33.3	92.9	92.9	7.2	1.2	8.9		11			
					Surface	1.0	0.2	174 185	18.1	18.1	8.2	8.2	33.3 33.3	33.3	93.7 93.6	93.7	7.3		7.4 7.5	1	11 10			
						4.3	0.2	148	18.1 18.0		8.2		33.3		93.0		7.2	7.3	9.3	1	11			
IM4	Cloudy	Rough	10:28	8.6	Middle	4.3	0.2	159	18.0	18.0	8.2	8.2	33.3	33.3	93.2	93.2	7.2		9.3	10.2	10	10	819711	804596
					Bottom	7.6	0.1	174	18.0	18.0	8.2	8.2	33.3	33.3	92.7	92.8	7.2	7.2	13.8		9			
						7.6	0.1	187	18.0		8.2		33.3		92.8		7.2		13.8		8			
					Surface	1.0	0.3	185 193	18.0 18.0	18.0	8.2	8.2	33.2 33.2	33.2	93.7 93.7	93.7	7.3		11.4 11.4	1	10 9			
IM5	Cloudy	Rough	10:37	8.5	Middle	4.3	0.2	195	18.0	18.0	8.2	8.2	33.2	33.2	93.4	93.4	7.3	7.3	12.0	11.9	9	11	820728	804860
livio	Cioudy	Rough	10.37	0.5	Middle	4.3	0.2	214	18.0	16.0	8.2	0.2	33.2	33.2	93.4	55.4	7.3		11.9	11.9	10	- ''	020720	004000
					Bottom	7.5 7.5	0.2	214 231	18.0 18.0	18.0	8.2	8.2	33.2	33.2	93.1	93.1	7.2	7.2	12.3 12.2	1	12			
						1.0	0.2	228	18.1		8.2		32.9		93.9		7.3		3.9		10			
					Surface	1.0	0.2	249	18.1	18.1	8.2	8.2	32.9	32.9	93.9	93.9	7.3	7.3	3.9	1	11			
IM6	Cloudy	Rough	10:47	7.4	Middle	3.7	0.2	230	18.0	18.0	8.2	8.2	32.9	32.9	93.6	93.6	7.3	1.3	4.2	5.4	8	9	821056	805839
	,	•				3.7 6.4	0.2	239 185	18.0 18.0		8.2 8.2		32.9 33.1		93.6 93.9		7.3		4.2 8.1		9			
					Bottom	6.4	0.1	196	18.0	18.0	8.2	8.2	33.1	33.1	93.9	93.9	7.3	7.3	8.1		9			
					Surface	1.0	0.1	85	18.1	18.1	8.2	8.2	33.0	33.0	94.2	94.2	7.3		3.9		9			
					Odriace	1.0	0.1	91	18.1	10.1	8.2	0.2	33.0	55.0	94.2	34.2	7.3	7.3	3.9		10			
IM7	Cloudy	Rough	10:55	8.5	Middle	4.3	0.1	80 82	18.1 18.1	18.1	8.2	8.2	33.0 33.0	33.0	94.0	94.0	7.3		4.3 4.2	4.7	10 11	11	821370	806849
						7.5	0.1	116	18.1		8.2		33.1		94.1		7.3		6.0	1	11			
					Bottom	7.5	0.1	121	18.1	18.1	8.2	8.2	33.1	33.1	94.2	94.2	7.3	7.3	5.9	<u></u>	12			
					Surface	1.0	0.2	98	18.7	18.7	8.1	8.1	33.5	33.5	101.1	101.1	7.7		5.7		9			
						1.0 3.6	0.2	103 76	18.7 18.6		8.1 8.1		33.5 33.7		101.1		7.7 7.7	7.7	5.7 7.3	-	10 10			
IM8	Misty	Moderate	10:22	7.2	Middle	3.6	0.1	76	18.6	18.6	8.1	8.1	33.7	33.7	100.2	100.2	7.7		7.4	7.4	10	10	821839	808131
					Bottom	6.2	0.2	65	18.6	18.6	8.1	8.1	33.9	33.9	100.6	100.6	7.7	7.7	9.1	1	10			
					Dottom	6.2	0.2	69	18.6	10.0	8.1	0.1	33.9	55.5	100.6	100.0	7.7	1.1	9.1		11			

Water Quality Monitoring
Water Quality Monitoring Results on

30 December 21 during Mid-Ebb Tide

Water Qua	lity Monit	oring Resu	ults on		30 December 21	during Mid	-Ebb Tide	•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	ith (m)	Current Speed	Current	Water Te	mperature (°C)		Н	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)		ded Solids ng/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	our (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	49	18.7	18.7	8.1	8.1	33.5	33.5	100.5	100.5	7.7		6.8		10			
						1.0 3.5	0.2	52 52	18.7 18.6		8.1 8.1		33.5 33.7		100.5 100.1		7.7	7.7	6.9 8.2		9	-		
IM9	Misty	Moderate	10:15	7.0	Middle	3.5	0.3	55	18.6	18.6	8.1	8.1	33.7	33.7	100.1	100.1	7.7		8.4	8.8	9	9	822070	808799
					Bottom	6.0	0.3	66 69	18.6 18.6	18.6	8.1	8.1	33.9	33.9	100.1	100.2	7.7	7.7	11.3 11.2		8	_		
						1.0	0.3	94	18.8		8.1		33.9		100.3		7.7		5.1	1	8	1		
					Surface	1.0	0.3	98	18.7	18.8	8.1	8.1	33.4	33.4	100.2	100.3	7.7	7.7	5.2		7			
IM10	Misty	Moderate	10:07	7.5	Middle	3.8	0.3	92 93	18.7 18.7	18.7	8.1	8.1	33.5 33.5	33.5	99.2 99.1	99.2	7.6 7.6		6.8 7.0	7.3	6 7	7	822365	809796
					Bottom	6.5	0.1	76	18.6	18.6	8.1	8.1	33.5	33.5	99.4	99.5	7.6	7.6	9.7		6			
					Bottom	6.5	0.2	78	18.6	10.0	8.1	0.1	33.5	00.0	99.5	00.0	7.6	1.0	9.8		7			
					Surface	1.0	0.1	43 44	19.3 19.3	19.3	8.1	8.1	33.8	33.8	96.1 96.1	96.1	7.3 7.3	7.3	6.2	1	9	1		
IM11	Misty	Moderate	09:56	7.4	Middle	3.7	0.2	53	19.3	19.3	8.1	8.1	33.8	33.8	96.0	96.0	7.3	1.3	6.8	7.0	6	7	822054	811479
	,					3.7 6.4	0.2	56 59	19.3 19.2		8.1 8.1		33.8 33.8		96.0 96.9		7.3 7.3		7.0 7.7	-	5	-		
					Bottom	6.4	0.1	64	19.2	19.2	8.1	8.1	33.8	33.8	97.1	97.0	7.3	7.3	7.8		6			
					Surface	1.0	0.0	145	19.4	19.4	8.1	8.1	33.9	33.9	95.2 95.2	95.2	7.2		4.9		9			
11440	Man	Madassa	00.40	0.5	Middle	1.0 4.3	0.0	158 134	19.4 19.4	10.4	8.1	0.4	33.9 33.9	22.0	95.2	05.0	7.2 7.2	7.2	5.0 5.3		10 9		004454	042022
IM12	Misty	Moderate	09:49	8.5	Middle	4.3	0.1	134	19.4	19.4	8.1	8.1	33.9	33.9	95.2	95.2	7.2		5.5	5.7	9	9	821454	812032
					Bottom	7.5 7.5	0.1	146 160	19.3 19.3	19.3	8.1	8.1	33.8	33.8	95.6 95.8	95.7	7.2 7.2	7.2	6.5 6.7	-	9	-		
					Surface	1.0	-	-	18.7	18.7	8.1	8.1	33.4	33.4	97.2	97.4	7.4		4.7		8			
					Guriaco	1.0 2.6	-	•	18.7	10.7	8.1	0.1	33.4	55.4	97.5	37.4	7.5	7.5	4.7		7			
SR1A	Misty	Moderate	09:19	5.2	Middle	2.6	-		-	-	-	-	-	-	-	-	-		-	4.8	-	7	819980	812655
					Bottom	4.2	-		18.3	18.3	8.1	8.1	33.7	33.7	98.7	98.8	7.6	7.6	4.9		6			
						4.2 1.0	0.1	- 15	18.2 19.3		8.1 8.1		33.7		98.9 98.1		7.6 7.4		5.0 5.5	1	7			
					Surface	1.0	0.2	16	19.3	19.3	8.1	8.1	33.8	33.8	98.5	98.3	7.4	7.4	5.6		8	1		
SR2	Misty	Moderate	09:02	4.0	Middle	-	-	•	-	-	-	-		-			-	1.4	-	5.8	-	7	821476	814176
					Bottom	3.0	0.2	36	19.3	19.3	8.1	8.1	33.8	33.8	100.9	101.1	7.6	7.7	6.1	1	7	1		
					BOLLOTTI	3.0	0.2	36	19.3	19.3	8.1	0.1	33.8	33.0	101.3	101.1	7.7	1.1	6.1		6			
					Surface	1.0	0.2	154 163	18.8 18.8	18.8	8.1	8.1	33.3	33.3	101.1	101.1	7.7		5.0 5.2	1	7	-		
SR3	Misty	Moderate	10:29	8.4	Middle	4.2	0.1	125	18.6	18.6	8.1	8.1	33.8	33.8	100.7	100.7	7.7	7.7	10.2	9.1	5	6	822125	807567
0110	Miloty	moderate	10.20	0.4		4.2 7.4	0.1	133 51	18.6 18.5		8.1 8.1		33.8 33.9		100.7 101.0		7.7 7.7		10.5 11.8		6 5	- I	OZZ IZO	001001
					Bottom	7.4	0.1	53	18.5	18.5	8.1	8.1	33.9	33.9	101.1	101.1	7.7	7.7	11.8	1	6	1		
					Surface	1.0	0.1	72	18.0	18.0	8.2	8.2	33.2	33.2	94.0	94.0	7.3	,	9.5		12			
						1.0 4.7	0.1	78 65	18.0 18.0		8.2 8.2		33.2 33.3		94.0 93.8		7.3 7.3	7.3	9.5 11.7	1	13 12	1		
SR4A	Cloudy	Moderate	09:26	9.4	Middle	4.7	0.2	66	18.0	18.0	8.2	8.2	33.3	33.3	93.8	93.8	7.3	3	11.7	10.5	13	12	817170	807793
					Bottom	8.4 8.4	0.2	56 60	18.0 18.0	18.0	8.2	8.2	33.3	33.3	93.8 93.8	93.8	7.3 7.3	7.3	10.4 10.5	-	11 12	-		
					Surface	1.0	0.2	123	18.1	18.1	8.2	8.2	33.0	33.0	91.5	91.5	7.1		5.0	1	10	1		
					Guriaco	1.0	0.1	131	18.1	10.1	8.2	0.2	33.0	55.0	91.5	31.5	7.1	7.1	5.0		11			
SR5A	Cloudy	Moderate	09:09	4.6	Middle	-	-		-	-	-	-	-	-	-	-	-		-	5.3	-	12	816582	810719
					Bottom	3.6	0.0	128	18.1	18.1	8.2	8.2	33.0	33.0	91.8	91.9	7.1	7.1	5.7		13			
						3.6 1.0	0.0	130 37	18.1		8.2 8.1		33.0		91.9 89.3		7.1 6.9		5.7 3.7		13			
					Surface	1.0	0.1	40	18.3	18.3	8.1	8.1	32.8	32.8	89.2	89.3	6.9	6.9	3.7		15			
SR6A	Cloudy	Moderate	08:44	4.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	5.0	-	14	817967	814736
					Bottom	3.8	0.1	79	18.3	18.3	8.1	8.1	32.8	32.8	89.1	89.1	6.9	6.9	6.3	1	13	1		
					DOROTT	3.8	0.1	82	18.3	10.3	8.1	0.1	32.8	J2.0	89.1	U.J. I	6.9	0.9	6.4		12			
					Surface	1.0	0.1	69 69	19.9 19.9	19.9	8.1	8.1	34.1	34.1	95.6 95.6	95.6	7.1 7.1		4.0	1	6	1		
SR7	Misty	Moderate	08:08	16.8	Middle	8.4	0.1	73	19.9	19.9	8.0	8.0	34.1	34.1	95.4	95.4	7.1	7.1	5.0	5.5	6	6	823619	823729
	,					8.4 15.8	0.1	73 38	19.9 19.9		8.0		34.1 34.1		95.4 95.1		7.1 7.1		5.1 7.8	-	7	4		
					Bottom	15.8	0.1	40	19.9	19.9	8.0	8.0	34.1	34.1	95.1	95.1	7.1	7.1	7.4	<u></u>	6	1		
					Surface	1.0	-	-	19.2	19.2	8.2	8.2	33.6	33.6	98.6	98.6	7.5		6.0		7	1		
SR8	Mistv	Moderate	09:42	4.2	Middle	1.0	-	-:-	19.2		8.2		33.6		98.5		7.5	7.5	6.1	7.5	- 8	8	820376	811627
076	iviisty	wouerate	09.42	4.2	Middle	-	-	-	-	-	-	-		-	-	-			-	7.5	-	l °	020376	01102/
					Bottom	3.2	-	-:-	19.0 19.0	19.0	8.1	8.1	33.7	33.7	98.0 98.1	98.1	7.4 7.5	7.5	8.8 9.2	-	7	-		
DA: Depth-Aver	nand		1		<u> </u>	3.2	1		13.0		0.1		55.1		JU. 1		1.0		J.2			1	1	1

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 30 December 21 during

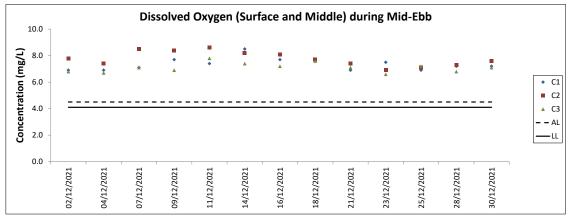
30 December 21 during Mid-Flood Tide

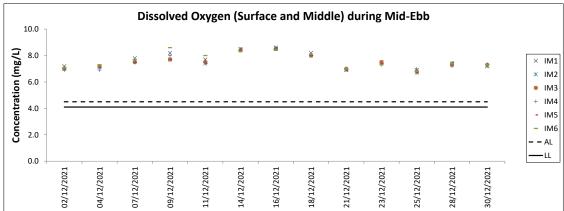
Water Qua	lity Moni	oring Resi	uits on		30 December 21	during Mic		ide																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Salir	nity (ppt)	DO S	aturation (%)	Disso		Turbidity	(NTU)		ded Solids ng/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	21 21	18.7 18.7	18.7	8.2	8.2	33.2	33.2	96.4 96.4	96.4	7.4		5.0 5.0		11			
						4.0	0.4	21	18.5		8.2		33.3		94.5		7.4	7.4	7.6		8	1		
C1	Fine	Rough	14:54	7.9	Middle	4.0	0.4	21	18.5	18.5	8.2	8.2	33.3	33.3	94.5	94.5	7.3		7.6	6.2	7	9	815620	804246
					Bottom	6.9	0.3	12	18.4	18.4	8.2	8.2	33.3	33.3	94.5	94.5	7.3	7.3	6.0		7			
						6.9 1.0	0.4	12 302	18.4 19.2		8.2 8.1		33.3 33.5		94.5 99.3		7.3 7.5		6.0 5.3		8			
					Surface	1.0	0.1	312	19.2	19.2	8.1	8.1	33.5	33.5	99.1	99.2	7.5	7.5	5.4		5			
C2	Misty	Moderate	14:00	11.2	Middle	5.6	0.2	304	18.9	18.9	8.1	8.1	33.6	33.6	98.3	98.3	7.5	1.0	6.6	8.7	6 7	6	825663	806957
						5.6 10.2	0.2	317 318	18.9 18.7		8.1 8.1		33.6 33.6		98.2 97.7		7.5 7.5		6.7 14.1		7	-		
					Bottom	10.2	0.3	348	18.7	18.7	8.1	8.1	33.6	33.6	97.7	97.7	7.5	7.5	14.1		7			
					Surface	1.0	0.4	286 307	20.0	20.0	8.1	8.1	34.1	34.1	95.0 95.0	95.0	7.1 7.1		7.0 7.1	-	9	-		
СЗ	Minh	Madassa	15.57	10.1	Middle	6.1	0.4	278	20.0	20.0	8.1	8.1	34.1	34.1	95.3	95.4	7.1	7.1	7.5	8.6	9	9	822000	817789
Co	Misty	Moderate	15:57	12.1	iviidale	6.1	0.5	302	20.0	20.0	8.1	0.1	34.1	34.1	95.4	95.4	7.1		7.5	0.0	10	9	822090	01//09
					Bottom	11.1	0.4	280 302	19.9 19.8	19.9	8.1 8.1	8.1	34.1	34.2	97.8 98.1	98.0	7.3 7.3	7.3	11.1 11.6	-	9	-		
					Surface	1.0	0.1	44	18.6	18.6	8.2	8.2	33.1	22.4	96.8	96.8	7.4		5.5		7			
					Surface	1.0	0.1	46	18.6	10.0	8.2	0.2	33.1	33.1	96.7	90.0	7.4	7.4	5.6		8			
IM1	Fine	Moderate	14:39	4.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	7.1		8	817942	807148
					Bottom	3.8	0.1	46	18.1	18.1	8.2	8.2	33.2	33.2	94.0	94.0	7.3	7.3	8.5	-	8			
					Dottom	3.8	0.1	46	18.1	10.1	8.2	0.2	33.2	33.2	94.0	34.0	7.3	7.5	8.6		9			
					Surface	1.0	0.2	7	18.5 18.5	18.5	8.2	8.2	33.1	33.1	97.1 97.0	97.1	7.5 7.5		3.6	-	8	1		
IM2	Fine	Rough	14:32	7.8	Middle	3.9	0.1	6	18.1	18.1	8.2	8.2	33.2	33.2	92.6	92.7	7.2	7.4	9.9	7.3	8	8	818167	806187
	1 110	rtougii	11.02	7.0	middio	3.9	0.2	6	18.1	10.1	8.2	0.2	33.2	00.2	92.7	02.7	7.2		9.9	1.0	9	1	010101	000101
					Bottom	6.8	0.3	327 346	18.1 18.1	18.1	8.2	8.2	33.2	33.2	92.9	92.9	7.2	7.2	8.5 8.6	-	8	1		
					Surface	1.0	0.1	9	18.4	18.4	8.2	8.2	33.1	33.1	95.3	95.3	7.3		4.7		9			
						1.0 3.7	0.1	9 279	18.4 18.3		8.2 8.2		33.1 33.1	-	95.3 94.3		7.3	7.3	4.7 5.3		8			
IM3	Fine	Rough	14:25	7.3	Middle	3.7	0.1	287	18.3	18.3	8.2	8.2	33.1	33.1	94.3	94.3	7.3		5.3	6.2	10	9	818770	805610
					Bottom	6.3	0.1	278	18.2	18.2	8.2	8.2	33.2	33.2	93.4	93.4	7.2	7.2	8.7		9			
						6.3 1.0	0.1	303 10	18.2 18.2		8.2		33.2	1	93.4		7.2 7.3		8.7 5.2		10			
					Surface	1.0	0.2	10	18.2	18.2	8.2	8.2	33.0	33.0	94.3	94.3	7.3	7.3	5.2	-	7			
IM4	Fine	Rough	14:17	8.2	Middle	4.1	0.1	356	18.1	18.1	8.2	8.2	33.1	33.1	93.1	93.1	7.2	7.5	7.7	7.5	7	8	819744	804611
						4.1 7.2	0.1	328 15	18.1 18.1		8.2 8.2		33.1 33.1		93.1 93.5		7.2		7.7 9.7		8 10	-		
					Bottom	7.2	0.2	16	18.1	18.1	8.2	8.2	33.1	33.1	93.5	93.5	7.3	7.3	9.7		9			
					Surface	1.0	0.4	24 24	18.2 18.2	18.2	8.2	8.2	33.2	33.2	93.3	93.3	7.2 7.2		8.2 8.2		10 9			
IM5	F10.	D	44.40	7.0	Middle	3.7	0.3	28	18.2	40.0	8.2		33.2	00.0	93.3	00.4	7.2	7.2	8.2	8.3	9	9	000704	004070
IIVI5	Fine	Rough	14:10	7.3	Middle	3.7	0.4	29	18.2	18.2	8.2	8.2	33.2	33.2	93.4	93.4	7.2		8.2	8.3	9	9	820731	804872
					Bottom	6.3	0.3	25 25	18.2 18.2	18.2	8.2	8.2	33.2	33.2	93.8	93.9	7.3 7.3	7.3	8.5 8.4	-	8	-		
					Surface	1.0	0.0	286	18.2	18.2	8.2	8.2	33.0	33.0	94.9	94.9	7.3		5.5		9			
					Surface	1.0	0.0	305	18.2	10.2	8.2	0.2	33.0	33.0	94.8	54.5	7.3	7.3	5.4		8			
IM6	Fine	Rough	14:03	8.4	Middle	4.2 4.2	0.2	333 353	18.2 18.2	18.2	8.2	8.2	33.0	33.0	94.5 94.5	94.5	7.3 7.3		5.2 5.2	5.6	9	9	821055	805847
					Bottom	7.4	0.1	318	18.1	18.1	8.2	8.2	33.1	33.1	93.0	93.0	7.2	7.2	6.1		10			
					Dottom	7.4	0.1	342	18.1	10.1	8.2	0.2	33.1	30.1	93.0	33.0	7.2	1.2	6.2		10			
					Surface	1.0	0.1	295 299	18.3 18.3	18.3	8.2	8.2	32.8	32.8	94.6 94.6	94.6	7.3 7.3		4.0		9	-		
IM7	Fine	Rough	13:56	8.9	Middle	4.5	0.1	278	18.2	18.2	8.2	8.2	32.8	32.8	94.5	94.5	7.3	7.3	4.3	4.3	9	8	821333	806816
		110091	10.00	0.0		4.5	0.1	283	18.2		8.2		32.8		94.5		7.3		4.3		8	1	02.000	000010
					Bottom	7.9 7.9	0.1	324 352	18.1 18.1	18.1	8.3	8.3	33.0	33.0	94.5 94.6	94.6	7.3 7.3	7.3	4.5 4.5		8	1		
					Surface	1.0	0.2	265	19.1	19.1	8.1	8.1	33.5	33.5	103.6	103.6	7.9		5.1		7		Ì	İ
						1.0 3.6	0.2	272 242	19.1 18.9		8.1 8.1		33.5 33.5	-	103.6 102.1		7.9 7.8	7.9	5.1 5.2	-	- 8 - 5	1		
IM8	Misty	Moderate	14:24	7.2	Middle	3.6	0.2	253	18.9	18.9	8.1	8.1	33.5	33.5	102.1	102.1	7.8		5.3	5.9	6	6	821833	808134
					Bottom	6.2	0.1	277	18.8	18.8	8.1	8.1	33.6	33.6	102.8	103.0	7.8	7.9	7.6		5			
	1		1			6.2	0.1	294	18.7		8.1		33.7		103.1		7.9		7.1		5	1	1	1

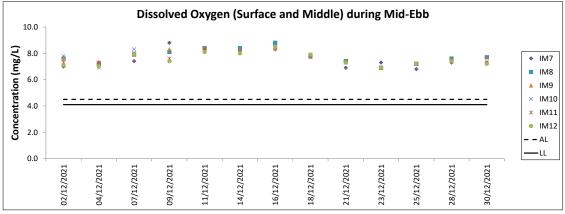
Water Quality Monitoring
Water Quality Monitoring Results on

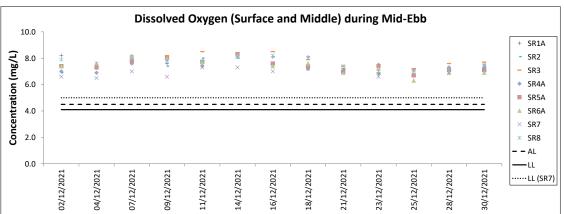
30 December 21 during Mid-Flood Tide

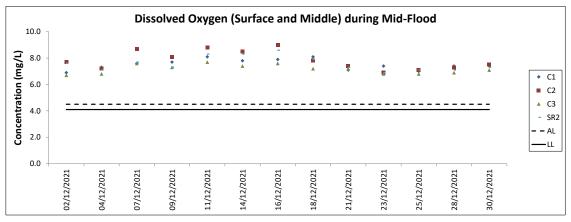
Monitoring Sampling Depth (m) Speed Current (%) Oxygen (mg/L) HK Grid	Water Qua	lity Monit	oring Resu	ults on		30 December 21	during Mid	I-Flood T	ide																
1		Weather	Sea	Sampling	Water	Sampling Don	th (m)			Water Te	emperature (°C)		pН	Salir	ity (ppt)					Turbidity	(NTU)				Coordinate
May Moreone 1430 72 153 153 153 151	Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average			Value	DA	Value	DA	(Northing)	(Easting)
May Modeles						Surface					18.9		8.1		33.5		100.4								
Mary Mary																			7.7				-		
May May May Makes May Makes May Makes May Makes May Makes May Makes Makes May Makes	IM9	Misty	Moderate	14:30	7.2	Middle	3.6	0.3	287	18.9	18.9		8.1	33.6	33.6	101.3	101.3	7.7		7.8	1.7		′	822098	808798
Mathor M						Bottom					18.8		8.1		33.6		103.2		7.9				1		
Mode						Surface	1.0	0.4	311		19.0		8.1		33.6	100.1	100.1			7.7					
Martin M																			7.6		١		1		
M11 Mey Moderne 16:49 8.1 Models 16:49 8	IM10	Misty	Moderate	14:37	8.1	Middle	4.1	0.4	329	18.9	18.9	8.1	8.1	33.5	33.5	99.8	99.8	7.6		9.8	9.4	9	9	822404	809778
Main						Bottom					18.9		8.1		33.6		100.1		7.6		_		-		
Mile Male						Surface					19.7		8.1		33.9		99.0								
Miles Modele				44.40	0.4	AP LUI					40.0		0.4		00.0		00.4		7.4				-	000045	044440
May Moderate Moderate Moderate Moderate Moderate Moderate Moderate Moderate Moderate M	IM111	Misty	Moderate	14:49	8.1	Middle					19.6		8.1		33.9		99.4				5.9		8	822045	811442
Mily Moderate 1455 8.8						Bottom					19.6		8.1		33.9		100.3		7.5		_		-		
Maily Moderate 1455 8.8 Mode Mode 1455 8.8 Mode Mo						Surface					19.2		8.1		33.7		98.1		,						
Miles Mile	1140			44.55	0.0	AF LU.					40.4								7.4		0.4		-	004455	040000
SRIA Muly Moderate 1521 5.4 Ma69	IIV112	Misty	Moderate	14:55	8.8	Middle		0.5	306		19.1		8.1	33.7	33.7		97.8	7.4			8.1		8	821455	812060
Serie Mary Moderate 1521 Serie Marke Moderate 1521 Serie Marke Moderate 1521 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Serie Marke Moderate 1524 Serie Marke Moderate 1524 Serie Serie Moderate 1524 Serie Marke Moderate 1524 Serie Moderate 1524 Serie Serie Moderate 1524 Serie Serie Moderate 1524 Serie Serie Moderate 1524 Serie Serie Moderate 1524 Serie						Bottom					19.1		8.1		33.7		98.3		7.5				-		
Section May Moderate 15.21 S.41						Surface	1.0	-	-		19.2		8.1		33.4		99.4								
Region R	CD4A	Minte	Madassia	15:01	E 4	Middle			-					33.4		99.4		7.5	7.5	8.3	0.4	- 6		040072	040005
Second May Moderate 15.05 May May Moderate 15.05 May M	SKIA	iviisty	woderate	15.21	5.4	Middle			-	-		-		-	-	-	-	-	•	-	0.4		0	019973	012005
Mely Moderate 15.35 4.2 Middle 1.0 0.2 101 105 100						Bottom		-	-		19.2		8.1		33.4		99.4		7.5		1		1		
Secondary Moderate 15.35 4.2 Middle - - - - - - - - -						Surface					19.6		8.1		33.9		97.0								
Second S	epo	Minh	Modorato	15:25	4.2	Middlo		_											7.3		7.4		-	921460	914144
Second S	SRZ	iviisty	woderate	15.35	4.2	Middle	-	-	-	-		-		-	•	-	-	-			7.4	-	0	021409	014144
State Stat						Bottom					19.6		8.1		33.9		97.3		7.3				-		
Misky Moderate 14.18 8.7 Middle 4.4 0.1 264 18.8 18.						Surface					19.0		8.1		33.5		102.5								
Second Part	CD2	Minte	Madassia	14.10	0.7	Middle					40.0		0.4		22.0		101.0		7.8		6.4			000440	007504
Second S	SNS	iviisty	woderate	14:10	0.7	Middle					10.0		0.1		33.0		101.6				0.4		0	022149	00/591
SR4A Fine Moderate 15.09 9.9 Middle 5.0						Bottom					18.8		8.1		33.7		102.6		7.8				1		
Second Fine Moderate 15.09 9.9 Middle 5.0 0.1 260 18.2 18.2 8.2 8.2 33.1 33.1 93.9 93.9 7.3 7.8 6.9 7.4 9.8 9.8 817195 807806						Surface					18.6		8.2		33.0		96.0								
Surface Surf	SD4A	Eine	Modorato	15:00	0.0	Middlo					10.2		0.7		22.1		02.0		7.4		7.1		0	017105	907906
SR5A Fine Moderate 15:24 4.0 Middle	SN4A	rille	Woderate	15.09	5.5																1.4		-	617195	807800
SR5A Fine Moderate 15.24 4.0 Middle 1						Bottom			240		18.1		8.2		33.1		93.5		7.3						
SR5A Fine Moderate 15.24 4.0 Middle						Surface					18.5		8.2		32.8		94.2				-				
Bottom B	SR5A	Fine	Moderate	15:24	4.0	Middle								-	_		_		7.3		5.5		10	816593	810675
SR6A Fine Moderate 15:50 4:2 Surface 1:0 0.1 322 19:1 19:1 8:2 8:2 8:2 8:2 8:2 8:2 8:2 8:2 8:2 8:2	Onto t	1 2.10	Modorato	10.21	1.0		3.0	- 0.1	273	18.4		8.2		32.8		_		- 72		-	- 0.0	- 10		0.0000	010010
SR6A Fine Moderate 15:50 4.2 Middle 1.0 0.1 322 19.1 19.1 19.1 8.2 8.2 32.7 32.7 32.7 32.0 96.6 96.6 7.4 7.4 2.9 11. 10 817940 814749 Bottom 3.2 0.0 269 18.9 18.9 8.2 8.2 32.7 32.7 95.0 95.1 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 5.0 7.7 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3						Bottom	3.0	0.1	275	18.4	18.4	8.2	8.2	32.8	32.8	93.4	93.4		7.2	6.0		9			
RRA Fine Moderate 15:50 4.2 Middle						Surface					19.1		8.2		32.7		96.6						-		
Bottom 3.2 0.0 269 18.9 18.9 18.9 8.2 8.2 32.7 32.7 32.7 95.0 95.1 7.3 7.3 5.0 7 8 Surface 1.0 0.2 68 20.0 20.0 8.1 8.1 8.1 34.1 95.3 95.3 7.1 7.1 7.1 4.6 4.6 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8	SR6A	Fine	Moderate	15:50	4.2	Middle	-	-	-	-	-	-	-		-	-	_		7.4	-	3.9	-	10	817940	814749
SR7 Misty Moderate 16:32 16:4 Surface 10:0 0:2 64 20:0 20:0 8:1 8:1 8:3 34:1 8:1 8:1 8:1 8:1 8:1 8:1 8:1 8:1 8:1 8														32.7				- 73			-		-		
SR7 Misty Moderate 16:32 16:4 Middle 10:0 0.2 68 20.0 20.0 8.1 8.1 34.1 34.1 34.1 34.1 34.1 34.1 34.1 34						Bottom	3.2	0.0	275	18.9	18.9	8.2	8.2	32.7	32.7	95.1	95.1	7.3	7.3	5.0		8			
SR7 Misty Moderate 16:32 16:4 Middle 8.2 0.2 54 20.0 20.0 8.1 8.1 34.1 34.1 95.6 95.5 7.1 7.1 48.8 4.8 5 5 823627 823722			·		·	Surface					20.0		8.1		34.1		95.3				1		-		
R82 0.2 59 20.0 8.1 34.1 95.5 7.1 4.9 5 Bottom 15.4 0.2 38 20.0 20.0 8.1 8.1 34.1 95.5 7.3 7.3 5.0 5 Sr8 Misty Moderate 15.03 4.2 Middle 19.4 19.4 8.1 8.1 33.7 33.7 100.1 100.1 7.6 7.6 8.0 5 Bottom 23.2 19.2 19.2 8.1 8.1 8.3 33.8 33.7 100.1 100.0 7.6 7.6 9.1 7.7 Bottom 3.2 19.1 19.2 8.1 8.1 8.3 33.8 33.7 100.1 100.0 7.6 7.6 9.1 7.7	SR7	Mistv	Moderate	16:32	16.4	Middle	8.2	0.2	54	20.0	20.0	8.1	8.1	34.1	34.1	95.4	95.5	7.1	7.1	4.8	4.8	4	5	823627	823722
SR8 Misty Moderate 15:03 4.2 Middle 19:4 8:1 8:1 8:1 8:1 8:1 8:1 8:1 8:1 8:1 8:1					-																1		1		
SR8 Misty Moderate 15:03 4.2 Middle 10 - 19:3 19:4 8.1 8.1 33.7 33.7 100.1 100.1 7.6 7.6 8.0 5 6 820411 811625 861 87.1 87.1 87.1 87.1 87.1 87.1 87.1 87.						Bottom	15.4			20.0	20.0	8.1	8.1	34.1	34.1	97.6	97.5	7.3	7.3	4.9	<u> </u>	6	1		
SR8 Misty Moderate 15:03 4.2 Middle						Surface		-	-		19.4		8.1		33.7		100.1				1		1		
Bottom 3.2 19.1 19.2 8.1 8.1 33.7 19.9 100.1 7.6 7.6 9.1 8. 7	SR8	Misty	Moderate	15:03	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.6		8.5	-	6	820411	811625
3.2 19.1 19.2 8.1 33.8 33.7 100.1 100.0 7.6 7.0 9.1 7						Datte					40.0		0.4		20.7		400.0		7.0		1		1		
						Bottom					19.2		8.1		33.7		100.0		7.6		<u> </u>		1		

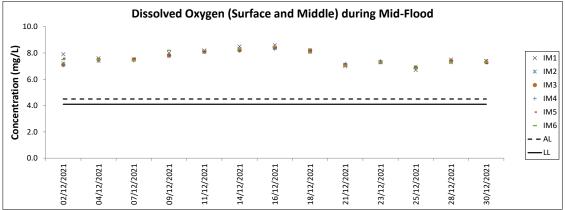


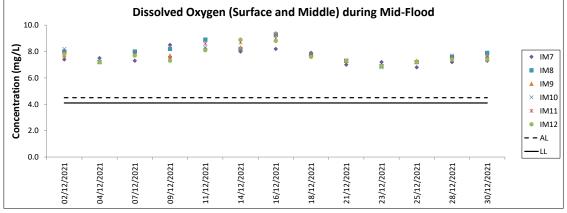


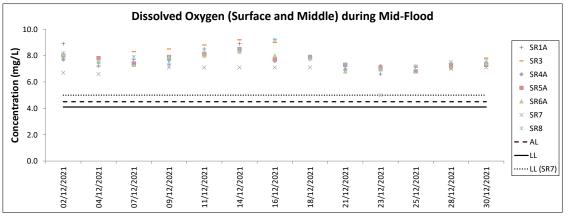


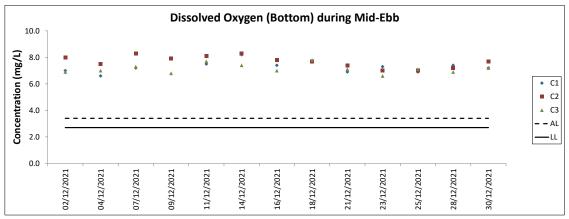


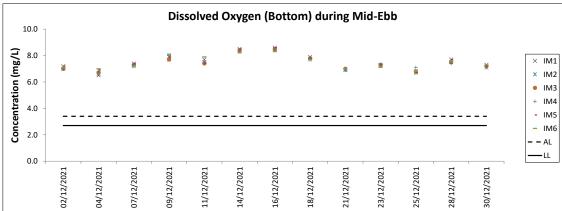


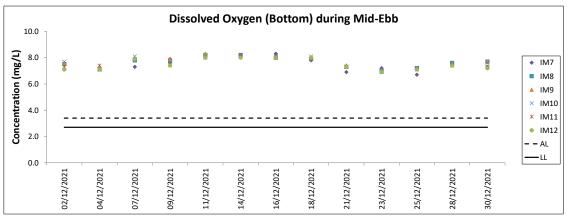


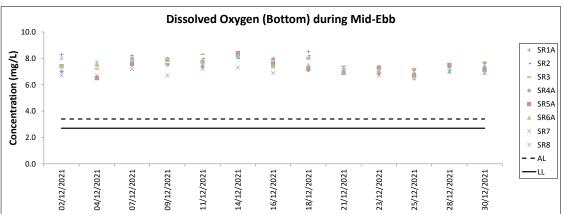


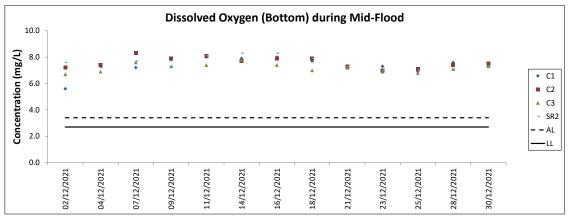


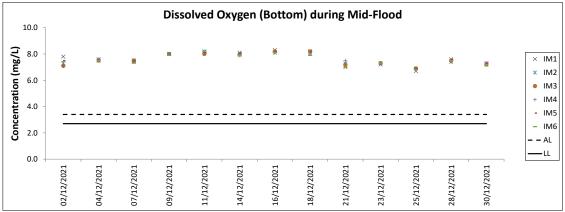


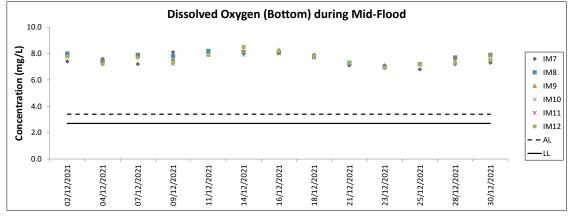


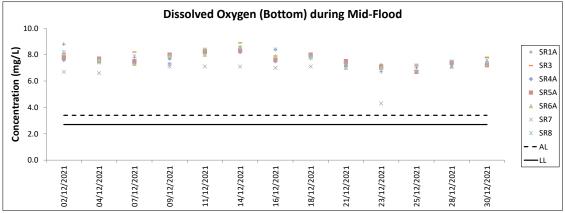


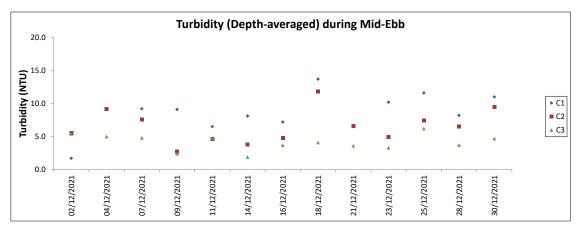


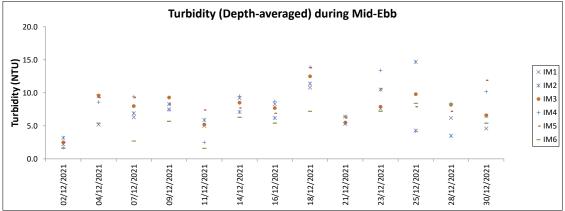


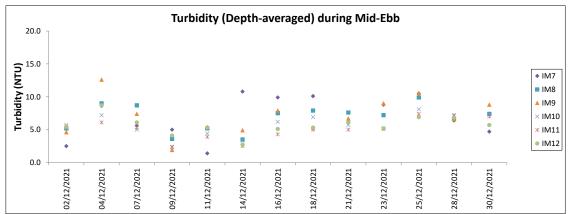


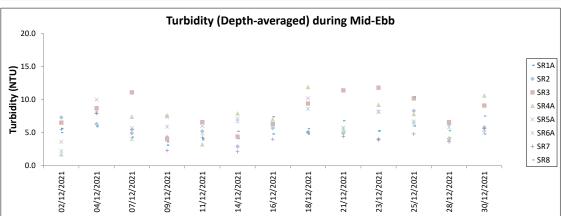




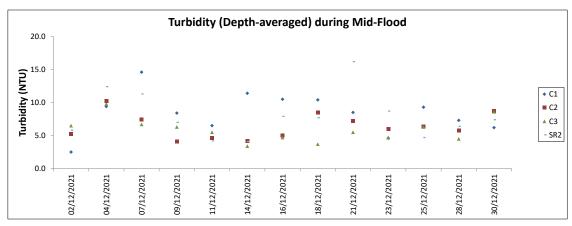


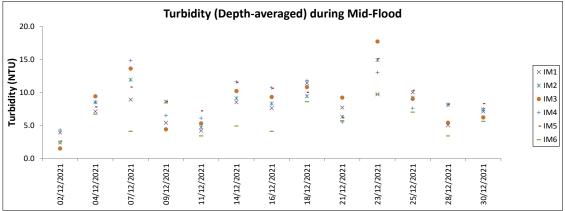


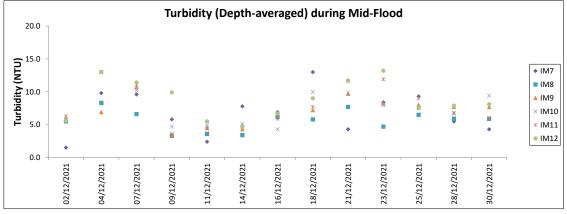


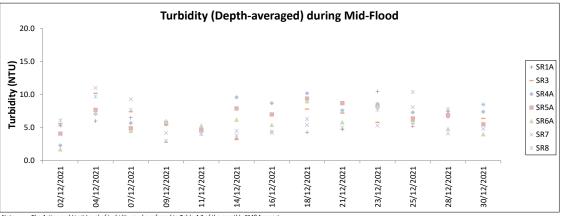


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A repor

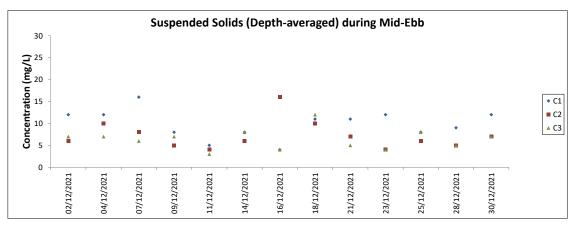


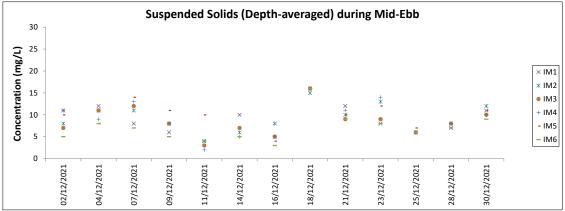


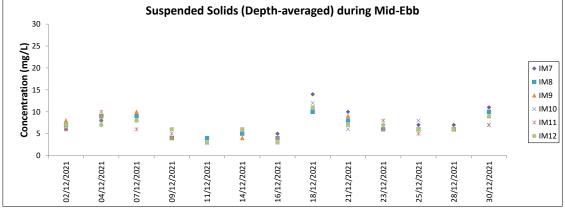


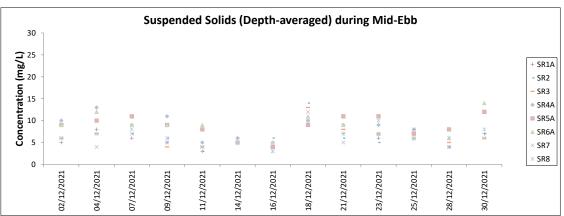


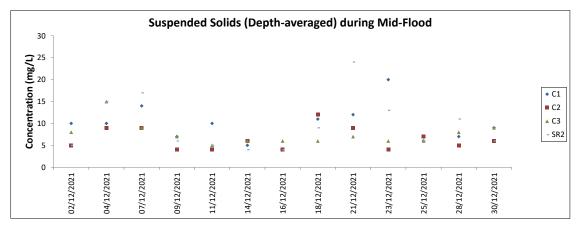
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report

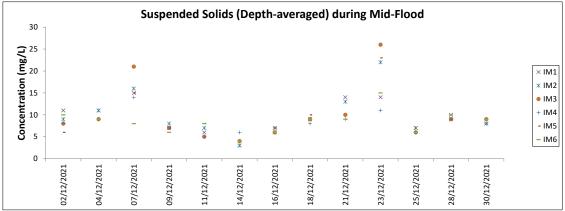


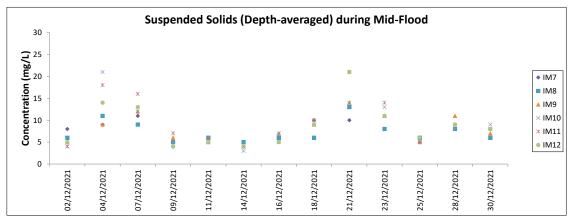


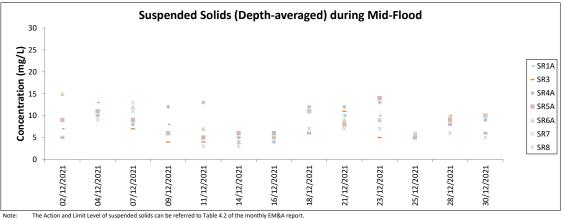












Mott MacDonald Expansion of Hong Kong International Airport into a Three-Runway System
Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
6-Oct-21	AW	3	1.940	AUTUMN	32166	3RS ET	Р
6-Oct-21	AW	4	3.010	AUTUMN	32166	3RS ET	Р
6-Oct-21	WL	3	9.820	AUTUMN	32166	3RS ET	Р
6-Oct-21	WL	4	7.360	AUTUMN	32166	3RS ET	Р
6-Oct-21	WL	3	7.509	AUTUMN	32166	3RS ET	S
6-Oct-21	WL	4	2.190	AUTUMN	32166	3RS ET	S
7-Oct-21	NWL	3	39.660	AUTUMN	32166	3RS ET	Р
7-Oct-21	NWL	4	24.540	AUTUMN	32166	3RS ET	Р
7-Oct-21	NWL	3	6.400	AUTUMN	32166	3RS ET	S
7-Oct-21	NWL	4	4.900	AUTUMN	32166	3RS ET	S
11-Oct-21	NWL	3	52.100	AUTUMN	32166	3RS ET	Р
11-Oct-21	NWL	4	12.000	AUTUMN	32166	3RS ET	Р
11-Oct-21	NWL	3	8.300	AUTUMN	32166	3RS ET	S
11-Oct-21	NWL	4	3.000	AUTUMN	32166	3RS ET	S
15-Oct-21	NEL	2	32.840	AUTUMN	32166	3RS ET	Р
15-Oct-21	NEL	3	3.730	AUTUMN	32166	3RS ET	Р
15-Oct-21	NEL	2	8.100	AUTUMN	32166	3RS ET	S
15-Oct-21	NEL	3	1.930	AUTUMN	32166	3RS ET	S
18-Oct-21	NEL	2	26.460	AUTUMN	32166	3RS ET	Р
18-Oct-21	NEL	3	10.780	AUTUMN	32166	3RS ET	Р
18-Oct-21	NEL	2	6.840	AUTUMN	32166	3RS ET	S
18-Oct-21	NEL	3	3.220	AUTUMN	32166	3RS ET	S
19-Oct-21	AW	2	1.870	AUTUMN	32166	3RS ET	Р
19-Oct-21	AW	3	2.940	AUTUMN	32166	3RS ET	Р
19-Oct-21	WL	2	12.638	AUTUMN	32166	3RS ET	Р
19-Oct-21	WL	3	5.821	AUTUMN	32166	3RS ET	Р
19-Oct-21	WL	2	5.544	AUTUMN	32166	3RS ET	S
19-Oct-21	WL	3	3.723	AUTUMN	32166	3RS ET	S
20-Oct-21	SWL	3	19.450	AUTUMN	32166	3RS ET	Р
20-Oct-21	SWL	4	33.040	AUTUMN	32166	3RS ET	Р
20-Oct-21	SWL	5	3.800	AUTUMN	32166	3RS ET	Р
20-Oct-21	SWL	3	8.320	AUTUMN	32166	3RS ET	S
20-Oct-21	SWL	4	4.890	AUTUMN	32166	3RS ET	S
20-Oct-21	SWL	5	0.900	AUTUMN	32166	3RS ET	S
27-Oct-21	SWL	2	13.470	AUTUMN	32166	3RS ET	Р
27-Oct-21	SWL	3	39.770	AUTUMN	32166	3RS ET	Р
27-Oct-21	SWL	2	5.020	AUTUMN	32166	3RS ET	S
27-Oct-21	SWL	3	12.150	AUTUMN	32166	3RS ET	S
2-Nov-21	NEL	2	3.500	AUTUMN	32166	3RS ET	Р
2-Nov-21	NEL	3	25.180	AUTUMN	32166	3RS ET	Р
2-Nov-21	NEL	4	8.390	AUTUMN	32166	3RS ET	Р
2-Nov-21	NEL	2	2.700	AUTUMN	32166	3RS ET	S
2-Nov-21	NEL	3	6.030	AUTUMN	32166	3RS ET	S
2-Nov-21	NEL	4	0.900	AUTUMN	32166	3RS ET	S
3-Nov-21	AW	2	2.830	AUTUMN	32166	3RS ET	Р
3-Nov-21	AW	3	1.910	AUTUMN	32166	3RS ET	Р
3-Nov-21	WL	2	13.015	AUTUMN	32166	3RS ET	Р

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
3-Nov-21	WL	3	4.635	AUTUMN	32166	3RS ET	Р
3-Nov-21	WL	4	2.430	AUTUMN	32166	3RS ET	Р
3-Nov-21	WL	2	5.150	AUTUMN	32166	3RS ET	S
3-Nov-21	WL	3	3.530	AUTUMN	32166	3RS ET	S
3-Nov-21	WL	4	2.100	AUTUMN	32166	3RS ET	S
4-Nov-21	AW	2	4.780	AUTUMN	32166	3RS ET	Р
4-Nov-21	WL	2	15.006	AUTUMN	32166	3RS ET	Р
4-Nov-21	WL	4	4.543	AUTUMN	32166	3RS ET	Р
4-Nov-21	WL	2	6.324	AUTUMN	32166	3RS ET	S
4-Nov-21	WL	4	2.097	AUTUMN	32166	3RS ET	S
5-Nov-21	SWL	3	48.320	AUTUMN	32166	3RS ET	Р
5-Nov-21	SWL	4	6.250	AUTUMN	32166	3RS ET	Р
5-Nov-21	SWL	3	15.130	AUTUMN	32166	3RS ET	S
5-Nov-21	SWL	4	1.000	AUTUMN	32166	3RS ET	S
8-Nov-21	NEL	3	15.680	AUTUMN	32166	3RS ET	P
8-Nov-21	NEL	4	21.020	AUTUMN	32166	3RS ET	P
8-Nov-21	NEL	3	5.800	AUTUMN	32166	3RS ET	S
8-Nov-21	NEL	4	4.300	AUTUMN	32166	3RS ET	S
10-Nov-21	NWL	3	47.000	AUTUMN	32166	3RS ET	P
10-Nov-21	NWL	4	16.600	AUTUMN	32166	3RS ET	P
10-Nov-21	NWL	3	11.200	AUTUMN	32166	3RS ET	S
10-Nov-21	NWL	4	1.200	AUTUMN	32166	3RS ET	S
11-Nov-21	SWL	2	45.610	AUTUMN		3RS ET	P
11-Nov-21	SWL	3	+	AUTUMN	32166		P
			8.300		32166	3RS ET	
11-Nov-21 11-Nov-21	SWL SWL	3	15.490 0.500	AUTUMN	32166	3RS ET 3RS ET	S
12-Nov-21	NWL	3	+	AUTUMN	32166		P
			53.300	AUTUMN	32166	3RS ET 3RS ET	P
12-Nov-21	NWL	4	10.400	AUTUMN	32166		S
12-Nov-21 12-Nov-21	NWL	3 4	9.700	AUTUMN	32166	3RS ET	S
1-Dec-21	NWL NEL		1.900 6.110	AUTUMN WINTER	32166	3RS ET 3RS ET	
1-Dec-21	NEL	3 4	30.730	WINTER	32166 32166	3RS ET	P
1-Dec-21	NEL	3	2.210	WINTER	32166	3RS ET	P
1-Dec-21	NEL	4	7.450	WINTER	32166	3RS ET	S
3-Dec-21	NWL	3	49.900	WINTER		3RS ET	P
3-Dec-21	NWL	4	14.000		32166 32166	3RS ET	P
				WINTER			
3-Dec-21	NWL	3	8.400	WINTER	32166	3RS ET	S
3-Dec-21	NWL	4	3.100	WINTER	32166	3RS ET	S
6-Dec-21	SWL	2	3.350	WINTER	32166	3RS ET	Р
6-Dec-21	SWL	3	50.190	WINTER	32166	3RS ET	Р
6-Dec-21	SWL	2	0.900	WINTER	32166	3RS ET	S
6-Dec-21	SWL	3	14.960	WINTER	32166	3RS ET	S
7-Dec-21	NWL	2	7.900	WINTER	32166	3RS ET	Р
7-Dec-21	NWL	3	53.100	WINTER	32166	3RS ET	P
7-Dec-21	NWL	4	2.000	WINTER	32166	3RS ET	S
7-Dec-21	NWL	3	12.300	WINTER	32166	3RS ET	Р
13-Dec-21	NEL	2	1.290	WINTER	32166	3RS ET	Р
13-Dec-21	NEL	3	29.980	WINTER	32166	3RS ET	Р
13-Dec-21	NEL	4	5.880	WINTER	32166	3RS ET	Р

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Dec-21	NEL	2	0.440	WINTER	32166	3RS ET	S
13-Dec-21	NEL	3	8.270	WINTER	32166	3RS ET	S
13-Dec-21	NEL	4	1.040	WINTER	32166	3RS ET	S
15-Dec-21	AW	2	4.940	WINTER	32166	3RS ET	Р
15-Dec-21	WL	2	19.188	WINTER	32166	3RS ET	Р
15-Dec-21	WL	2	10.482	WINTER	32166	3RS ET	S
16-Dec-21	SWL	2	28.760	WINTER	32166	3RS ET	Р
16-Dec-21	SWL	3	26.150	WINTER	32166	3RS ET	Р
16-Dec-21	SWL	2	6.185	WINTER	32166	3RS ET	S
16-Dec-21	SWL	3	8.280	WINTER	32166	3RS ET	S
17-Dec-21	AW	3	4.970	WINTER	32166	3RS ET	Р
17-Dec-21	WL	3	11.890	WINTER	32166	3RS ET	Р
17-Dec-21	WL	4	8.700	WINTER	32166	3RS ET	Р
17-Dec-21	WL	3	6.710	WINTER	32166	3RS ET	S
17-Dec-21	WL	4	4.000	WINTER	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months are presented for reference only.

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
6-Oct-21	1	1049	CWD	1	WL	3	47	ON	3RS ET	22.2604	113.8535	AUTUMN	NONE	S
6-Oct-21	2	1107	CWD	3	WL	3	32	ON	3RS ET	22.2607	113.8427	AUTUMN	NONE	Р
6-Oct-21	3	1137	CWD	1	WL	3	94	ON	3RS ET	22.2413	113.8391	AUTUMN	NONE	Р
6-Oct-21	4	1153	CWD	13	WL	3	162	ON	3RS ET	22.2318	113.8280	AUTUMN	NONE	Р
6-Oct-21	5	1220	CWD	1	WL	3	15	ON	3RS ET	22.2317	113.8341	AUTUMN	NONE	Р
6-Oct-21	6	1246	CWD	8	WL	3	100	ON	3RS ET	22.2140	113.8308	AUTUMN	NONE	Р
19-Oct-21	1	1023	CWD	4	WL	2	192	ON	3RS ET	22.2706	113.8447	AUTUMN	NONE	Р
19-Oct-21	2	1037	CWD	2	WL	2	201	ON	3RS ET	22.2689	113.8501	AUTUMN	NONE	Р
19-Oct-21	3	1054	CWD	1	WL	2	355	ON	3RS ET	22.2651	113.8587	AUTUMN	NONE	S
19-Oct-21	4	1134	CWD	3	WL	3	93	ON	3RS ET	22.2342	113.8244	AUTUMN	NONE	S
19-Oct-21	5	1159	CWD	1	WL	2	282	ON	3RS ET	22.2242	113.8232	AUTUMN	NONE	Р
19-Oct-21	6	1204	CWD	1	WL	3	54	ON	3RS ET	22.2225	113.8214	AUTUMN	SHRIMP TRAWLER	Р
27-Oct-21	1	1100	FP	4	SWL	3	47	ON	3RS ET	22.1431	113.9276	AUTUMN	NONE	S
27-Oct-21	2	1111	FP	3	SWL	3	398	ON	3RS ET	22.1629	113.9275	AUTUMN	NONE	Р
27-Oct-21	3	1240	CWD	1	SWL	2	218	ON	3RS ET	22.2046	113.9073	AUTUMN	NONE	Р
3-Nov-21	1	1102	CWD	1	WL	2	63	ON	3RS ET	22.2610	113.8531	AUTUMN	NONE	S
3-Nov-21	2	1140	CWD	2	WL	2	229	ON	3RS ET	22.2414	113.8311	AUTUMN	NONE	Р
3-Nov-21	3	1248	CWD	1	WL	4	75	ON	3RS ET	22.1869	113.8395	AUTUMN	NONE	Р
4-Nov-21	1	1038	CWD	3	WL	2	87	ON	3RS ET	22.2664	113.8593	AUTUMN	NONE	S
4-Nov-21	2	1101	CWD	7	WL	2	296	ON	3RS ET	22.2603	113.8428	AUTUMN	NONE	Р
4-Nov-21	3	1154	CWD	6	WL	2	286	ON	3RS ET	22.2244	113.8372	AUTUMN	NONE	S
4-Nov-21	4	1224	CWD	1	WL	2	171	ON	3RS ET	22.2240	113.8236	AUTUMN	NONE	Р
4-Nov-21	5	1242	CWD	5	WL	2	32	ON	3RS ET	22.2142	113.8315	AUTUMN	NONE	Р
5-Nov-21	1	1306	FP	2	SWL	3	95	ON	3RS ET	22.1643	113.8970	AUTUMN	NONE	Р
11-Nov-21	1	1456	CWD	7	SWL	3	375	ON	3RS ET	22.1853	113.8486	AUTUMN	NONE	Р
6-Dec-21	1	1119	FP	1	SWL	3	11	ON	3RS ET	22.1765	113.9280	WINTER	NONE	Р
6-Dec-21	2	1504	CWD	3	SWL	3	22	ON	3RS ET	22.1878	113.8497	WINTER	NONE	Р
7-Dec-21	1	0945	CWD	1	NWL	2	N/A	OFF	3RS ET	22.3983	113.8873	WINTER	NONE	N/A
15-Dec-21	1	1043	CWD	4	WL	2	471	ON	3RS ET	22.2500	113.8357	WINTER	NONE	Р
15-Dec-21	2	1112	CWD	1	WL	2	113	ON	3RS ET	22.2415	113.8315	WINTER	NONE	Р
16-Dec-21	1	1333	CWD	5	SWL	2	134	ON	3RS ET	22.1885	113.8880	WINTER	NONE	Р

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
16-Dec-21	2	1448	CWD	1	SWL	2	16	ON	3RS ET	22.1989	113.8685	WINTER	NONE	Р
16-Dec-21	3	1507	CWD	3	SWL	2	63	ON	3RS ET	22.1998	113.8622	WINTER	GILLNETTER	S

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

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this monthly EM&A report.

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

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

A total of 376.855 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 6 on-effort sightings and total number of 17 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in December 2021 are shown as below:

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

$$STG = \frac{6}{376.855} \times 100 = 1.59$$

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

$$ANI = \frac{17}{376.855} \times 100 = 4.51$$

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

A total of 1097.820 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 27 on-effort sightings and total number of 89 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) $STG = \frac{27}{1097.820} \times 100 = 2.46$

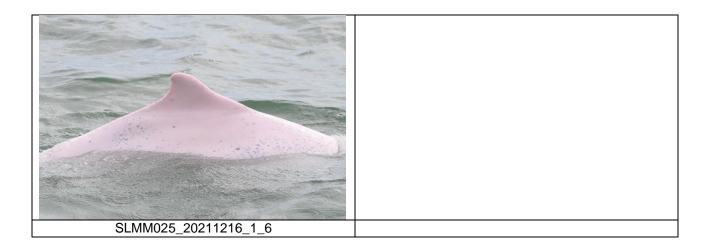
$$STG = \frac{27}{1007,920} \times 100 = 2.46$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)
$$ANI = \frac{89}{1097.820} \ x \ 100 = 8.11$$

CWD Small Vessel Line-transect Survey

Photo Identification





CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range	
16/Dec/21	Lung Kwu Chau	08:50	14:50	6:00	2	4	3	1-7	
20/Dec/21	Sha Chau	10:50	16:50	6:00	2	3-4	0	-	

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

Appendix D. Calibration Certificates



Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BA120147

Date of Issue

: 30 December 2021

Page No.

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PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

Attn:

PART B - SAMPLE INFORMATION

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

17E100747

Date of Received:

24 December 2021

Date of Calibration :

Date of Next Calibration:

24 December 2021 23 March 2022

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

Turbidity

APHA 21e 2130B

Conductivity

APHA 21e 2510B

Dissolved oxygen

APHA 21e 4500 O

pH value Salinity APHA 21e 4500 H+ APHA 21e 2520B

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

PART D - CALIBRATION RESULT

(1) Turbidity

EXPECTED READING (NTU)	DISPLAY READING (NTU)	TOLERANCE (%)	RESULT
0	0.10		Satisfactory
10	9.88	-1.2	Satisfactory
20	19.79	-1.1	Satisfactory
100	100.26	0.3	Satisfactory
800	808.37	1.0	Satisfactory

Tolerance of Turbidity should be less than \pm 10.0 (%)

(2) Conductivity

DISPLAY READING (MS/CM AT	TOLERANCE (%	RESULT
25°C))	2
151.2	2.92	Satisfactory
1348	-4.53	Satisfactory
12591	-2.32	Satisfactory
57734	-1.60	Satisfactory
111592	-0.28	Satisfactory
	25°C) 151.2 1348 12591 57734	25°C)) 151.2 2.92 1348 -4.53 12591 -2.32 57734 -1.60

Tolerance of Conductivity should be less than ± 10.0 (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)



Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

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(3) Dissolved oxygen

EXPECTED READING (MG/L)	DISPLAY READING (MG/L)	TOLERANCE (MG/L)	RESULT
7.65	7.76	0.11	Satisfactory
6.09	6.17	0.08	Satisfactory
3.20	3.28	0.08	Satisfactory
0.78	0.56	-0.22	Satisfactory

Tolerance of Dissolved oxygen should be less than \pm 0.5 (mg/L)

(4) pH value

TARGET (PH UNIT)	DISPLAY READING (PH UNIT)	TOLERANCE	RESULT
4.00	4.04	0.04	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.13	0.12	Satisfactory

Tolerance of pH value should be less than \pm 0.2 (pH unit)

(5) Salinity

EXPECTED READING (G/L)	DISPLAY READING (G/L)	TOLERANCE (%)	RESULT
10	9.93	-0.70	Satisfactory
20	19.89	-0.55	Satisfactory
30	30.20	0.67	Satisfactory

Tolerance of Salinity should be less than ± 0.0 (%)

(6) Temperature

READING OF REF. THERMOMETER (°C)	DISPLAY READING (°C)	TOLERANCE (°C)	RESULT
10	9.9	-0.1	Satisfactory
20	20.0	0.0	Satisfactory
40	40.0	0.0	Satisfactory

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

Remark(s)

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

--- END OF REPORT ---



Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BA120148

Date of Issue

: 30 December 2021

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: 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

Attn:

PART B - SAMPLE INFORMATION

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

21G105356

Date of Received:

24 December 2021

Date of Calibration:

24 December 2021

Date of Next Calibration:

23 March 2022

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

Turbidity

APHA 21e 2130B

Conductivity

APHA 21e 2510B

Dissolved oxygen

APHA 21e 4500 O APHA 21e 4500 H+

pH value Salinity

APHA 21e 2520B

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

PART D - CALIBRATION RESULT

(1) Turbidity

EXPECTED READING (NTU)	DISPLAY READING (NTU)	TOLERANCE (%)	RESULT
0	0.10		Satisfactory
10	9.81	-1.9	Satisfactory
20	19.82	-0.9	Satisfactory
100	100.22	0.2	Satisfactory
800	810.23	1.3	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(2) Conductivity

EXPECTED READING (MS/CM AT 25°C)	DISPLAY READING (MS/CM AT	TOLERANCE (%	RESULT
	25°C))	
146.9	150.3	2.31	Satisfactory
1412	1369	-3.05	Satisfactory
12890	12488	-3.12	Satisfactory
58670	57746	-1.57	Satisfactory
111900	111426	-0.42	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

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AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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(3) Dissolved oxygen

EXPECTED READING (MG/L)	DISPLAY READING (MG/L)	TOLERANCE (MG/L)	RESULT
7.65	7.80	0.15	Satisfactory
6.09	6.20	0.11	Satisfactory
3.20	3.33	0.13	Satisfactory
0.78	0.56	-0.22	Satisfactory

Tolerance of Dissolved oxygen should be less than \pm 0.5 (mg/L)

(4) pH value

TARGET (PH UNIT)	DISPLAY READING (PH UNIT)	TOLERANCE	RESULT
4.00	4.03	0.03	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.11	0.10	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(5) Salinity

EXPECTED READING (G/L)	DISPLAY READING (G/L)	TOLERANCE (%)	RESULT
10	9.93	-0.70	Satisfactory
20	19.88	-0.60	Satisfactory
30	30.19	0.63	Satisfactory

Tolerance of Salinity should be less than ± 0.0 (%)

(6) Temperature

READING OF REF. THERMOMETER (°C)	DISPLAY READING (°C)	TOLERANCE (°C)	RESULT
10	9.9	-0.1	Satisfactory
20	20.0	0.0	Satisfactory
40	40.0	0.0	Satisfactory

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

Remark(s)

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

--- END OF REPORT ---

Appendix E. Status of Environmental Permits and Licenses

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

Contract No.	Description	Location	Permit/ Reference No.	Status
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical	Site office of 3206	WPN 5213- 951-Z4035-01	Completion of Registration on 18 Nov 2016
	Waste Producer	Works area of 3206	WPN 5213- 951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0757- 21	Valid from 6 Oct 2021 to 2 Apr 2022
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951- F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286- 2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit	Works area of 3301	GW-RS0631-21	Valid from 22 Aug 2021 to 21 Feb 2022
	(General Works)	Works area of 3301 (Cable ducting works) (Special Case)	GW-RS0744-21	Valid from 2 Oct 2021 to 29 Mar 2022
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951- C4331-01	Completion of Registration on 4 Jan 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under	Works area of 3302	WT00034539- 2019	Valid from 11 Mar 2020 to 31 Mar 2025
	WPCO	Works area of 3302	WT00034541- 2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0842-21	Valid from 10 Nov 2021 to 8 May 2022
	(General Works)		GW-RS0501-21	Valid from 7 July 2021 to 6 Jan 2022
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Specified Process license under APCO	Works area of 3303	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3303	5213-951- S4174-01	Completion of Registration on 17 Jun 2019
	Discharge License under	Works area of 3303	WT00035689- 2020	Valid from 11 May 2020 to 31 May 2025
	WPCO	Works area of 3303	WT00036734- 2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0823-21	Valid from 16 Nov 2021 to 15 May 2022
		Works area of 3303 (Reclamation area)	GW-RS0803-21	Valid from 29 Oct 2021 to 26 Apr 2022
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oc 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951- A3024-01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oc 2019
3306	Registration as Chemical Waste Producer	Works area of 3306	8335-951- C4434-01	Completion of Registration on 1 Apr 2020
	Bill Account for disposal	Works area of 3306	A/C 7035868	Approval granted from EPD on 27 Nov 2019
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Ap 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951- P3379-01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926- 2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0562-21	Valid from 6 Aug 2021 to 5 Feb 2022

Contract No.	Description	Location	Permit/ Reference No.	Status
3308	Bill Account for disposal	Works area of 3308	A/C 7038988	Approval granted from EPD on 24 Nov 2020
	Construction Noise Permit (General Works)	Works area of 3308	GW-RS0655-21	Valid from 2 Sep 2021 to 28 Feb 2022
3310	Notification of Construction Work under APCO	Works area of 3310	474782	Receipt acknowledged by EPD on 10 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3310	5213-951- C4682-01	Completion of Registration on 21 Dec 2021
	Bill Account for	Works area of	A/C 7040969	Approval granted from EPD on 8 Jul 2021
	disposal	3310	RW02317	Re-application submitted on 10 Dec 2021
	Construction	Works area of	GW-RS0902-21	Superseded by GW-RS1038-21
	Noise Permit (General Works)	3310	GW-RS1038-21	Valid from 28 Dec 2021 to 27 Jun 2022
3402	Notification of Construction Work under APCO	Works area of 3402	464622	Receipt acknowledged by EPD on 18 Feb 2021
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
		Works area of 3403 (with Area 17 and Area 15)	475369	Receipt acknowledged by EPD on 28 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951- S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841- 2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0653-21	Valid from 4 Sep 2021 to 28 Feb 2022
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0909-21	Valid from 1 Dec 2021 to 31 May 2022
3404	Bill Account for disposal	Works area of 3404	A/C 7035158	Approval granted from EPD on 12 Sep 2019
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951- C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084- 2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit	Works area of 3405	GW-RS0807-21	Superseded by GW-RS0966-21
	(General Works)	Works area of 3405	GW-RS0966-21	Valid from 13 Dec 2021 to 12 Jun 2022

Contract No.	Description	Location	Permit/ Reference No.	Status
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Registration as Chemical Waste Producer	Works area of 3408	WPN 5218-951- B2621-01	Completion of Registration on 16 Jul 2021
	Discharge License under WPCO	Works area of 3408	WT00038836- 2021	Valid from 27 Sep 2021 to 30 Sep 2026
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0818-21	Valid from 29 Oct 2021 to 31 Mar 2022
3503	Notification of Construction	Works area of 3503	459394	Receipt acknowledged by EPD on 28 Aug 2020
	Work under APCO	Stockpiling area of 3503	459392	Receipt acknowledged by EPD on 28 Aug 2020
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
3508	Notification of Construction Work under APCO	Works area of 3508	459017	Receipt acknowledged by EPD on 19 Aug 2020
			459469	Receipt acknowledged by EPD on 4 Sep 2020
		Works area of 3508 (Area J)	467132	Receipt acknowledged by EPD on 3 May 2021
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951- G2898-01	Completion of Registration on 28 Sep 2020
	Discharge License under WPCO	Works area of 3508	WT00037209- 2020	Valid from 11 Mar 2021 to 31 Mar 2026
			WT00037523- 2021	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037225- 2020	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037549- 2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit	Works area of 3508	GW-RS0886-21	Superseded by GW-RS0979-21 on 19 Dec 2021
	(General Works)		GW-RS0979-21	Valid from 19 Dec 2021 to 31 May 2022
		Works area of 3508	GW-RS0778-21	Valid from 15 Oct 2021 to 12 Apr 2022
		Works area of 3508 (Area 10)	GW-RS0493-21	Valid from 27 Jun 2021 to 24 Dec 2021
		Works area of 3508 (Special Case)	GW-RS0963-21	Valid from 17 Dec 2021 to 27 May 2022
		Works area of 3508 (Special Case)	GW-RS0862-21	Valid from 13 Nov 2021 to 19 May 2022
		Works area of 3508 (Area 13)	GW-RS0999-21	Valid from 25 Dec 2021 to 31 May 2022

Contract No.	Description	Location	Permit/ Reference No.	Status
3601	Notification of Construction Work under APCO	Works area of 3601	451762	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951- C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 7029991	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3601	GW-RS0899-21	Valid from 1 Dec 2021 to 31 May 2022
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste	Works area of 3602	WPN 5296-951- N2673-01	Completion of Registration on 9 Oct 2017
	Producer	Site office of 3602	WPN 5296-951- N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0650-21	Valid from 1 Oct 2021 to 1 Mar 2022
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Site office of 3603	5296-951- S4069-01	Completion of Registration on 22 Jan 2018
		Test Loop Site of 3603	8334-512- S4273-01	Completion of Registration on 17 Sep 2020
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0878-21	Valid from 24 Nov 2021 to 23 May 2022
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951- C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0748-21	Valid from 6 Oct 2021 to 6 Mar 2022
3723	Notification of Construction	3723A	464440	Receipt acknowledged by EPD on 9 Feb 2021
	Work under APCO	3723B	464444	Receipt acknowledged by EPD on 9 Feb 2021
		3723A	WPN 5218-951- T3920-01	Completion of Registration on 9 Feb 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	3723B	WPN 5218-951- T3921-01	Completion of Registration on 9 Feb 2021
	Discharge License under WPCO	Works area of 3723A & 3723B	WT00039451- 2021	Valid from 28 Oct 2021 to 31 Oct 2023
	Bill Account for disposal	Works area of 3723A	A/C 7039755	Approval granted from EPD on 24 Feb 2021
		Works area of 3723B	A/C 7039754	Approval granted from EPD on 24 Feb 2021
	Construction Noise Permit (General Works)	Works area of 3723A & 3723B	GW-RS0697-21	Valid from 16 Sep 2021 to 13 Mar 2022
3728	Registration as Chemical Waste Producer	Works area of 3728	WPN 5111-951- S3467-03	Completion of Registration on 7 May 2021
	Discharge License under WPCO	Works area of 3728	WT00037809- 2021	Valid from 27 Jul 2021 to 31 Jul 2026
	Bill Account for disposal	Works area of 3728	A/C 7039409	Approval granted from EPD on 22 Jan 2021
3733	Notification of Construction Work under APCO	Works area of 3733	472772	Receipt acknowledged by EPD on 18 Oct 2021
	Registration as Chemical Waste Producer	Works area of 3733	474728	Receipt acknowledged by EPD on 9 Dec 2021
	Bill Account for disposal	Works area of 3733	7041945	Approval granted from EPD on 21 Oct 2021
3801	Notification of Construction	Works area of 3801	430372	Receipt acknowledged by EPD on 2 Feb 2018
	Work under APCO		435652	Receipt acknowledged by EPD on 16 Jul 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951- C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535- 2017	Valid from 30 Jul 2019 to 30 Nov 2022
		Stockpiling area of 3801	WT00037354- 2021	Valid from 8 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0634-21	Valid from 27 Aug 2021 to 26 Feb 2022
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
		Works area of 3802	WPN 5218-951- G2895-01	Completion of Registration on 28 Aug 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3802 (Existing Airport)	WPN 5218-951- G2945-01	Completion of Registration on 29 Sep 2020
	Discharge License under	Works area of 3802	WT00037032- 2020	Valid from 25 May 2021 to 31 May 2026
	WPCO	Works area of 3802	WT00039092- 2021	Valid from 30 Nov 2021 to 31 Nov 2026
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction	Works area of	GW-RS0808-21	Superseded by GW-RS0959-21
	Noise Permit (General Works)	3802	GW-RS0959-21	Valid from 13 Dec 2021 to 12 Jun 2022
	(Concrai Works)	Works area of 3802	GW-RS0888-21	Valid from 29 Nov 2021 to 19 May 2022
3901A	Notification of Construction Work under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024 Varied on 29 Nov 2021
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951- K3400-01	Completion of Registration on 17 Jul 2020
	Landfill disposal of waste concrete from batching plant	Works area of 3901A	EP195/01/18	Valid from 5 May 2021 to 2 Feb 2022
	Bill Account for disposal	Works area of 3901A	A/C 7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0597-21	Valid from 7 Aug 2021 to 4 Feb 2022
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901B	EP/RS/0000438 488	Approval granted on 26 Jun 2020
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024 Final VSP License issued by EPD on 30 Nov 2021
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951- G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0702-21	Valid from 16 Sep 2021 to 13 Mar 2022

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	2	0	0
From 28 December 2015 to end of the reporting period	47	2	2