

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

Construction Phase Monthly EM&A Report No. 89 (For May 2023)

June 2023

# This Monthly EM&A Report No. 89 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 June 2023



AECOM 12/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, Hong Kong 香港新界沙田鄉事會路 138 號新城 市中央廣場第 2 座 12 樓

www.aecom.com

+852 3922 9000 tel +852 3922 9797 fax

Our Ref: 60440482/C/RMKY230614

#### 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 June 2023

Dear Sir,

Contract No. 3102 3RS Independent Environmental Checker Consultancy Services

#### Submission of Monthly EM&A Report No. 89 (May 2023)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 89 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 June 2023.

We would like to inform you that we have no adverse comment and 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 9141.

Yours faithfully, AECOM Asia Co. Ltd.

Roy Man

Independent Environmental Checker

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# **Abbreviations**

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 89<sup>th</sup> Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 May 2023.

#### **Key Activities in the Reporting Period**

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, land improvement works and filling together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include 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	18
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 the information including ET's observations, records of Maritime Surveillance System (MSS), and contractors' site records, it is noted that environmental pollution control and mitigation measures were properly implemented and construction activities of the Project in the reporting period did not introduce adverse impacts to the sensitive receivers.

#### **Snapshots of EM&A Activities in the Reporting Period**



Impact Water Quality Monitoring conducted by ET



Dump Truck properly covered checked by ET



Chemical Spill Drill conducted by Contractor

#### **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, water quality, construction waste and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

#### **Summary of Upcoming Key Issues**

#### **Contract 3206 Main Reclamation Works**

Filling materials delivery.

#### **Airfield Works**

#### **Contract 3302 Eastern Vehicular Tunnel Advance Works**

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

#### **Contract 3305 Airfield Ground Lighting System**

- Enhanced vehicular warning light hardware installation;
- · Rectification work for airfield ground lighting system; and
- Cable containment installation.

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

Equipment installation.

#### Contract 3308 Foreign Object Debris Detection System

Rectification work for handover sensor system.

#### **Contract 3310 North Runway Modification Works**

- Architectural, builder's work and finishing works;
- Seawall construction;
- Construction of stormwater drainage;
- Piling works;
- Aviation fuel pipe works;
- Pipe pile works;
- Construction of box culvert; and
- Land improvement works (Transition layer and backfilling works).

#### **Third Runway Concourse:**

#### Contract 3403 New Integrated Airport Centres Building and Civil Works

- Builder's work for cable conduit; and
- Mechanical ventilation & air-conditioning & fire services works.

#### **Contract 3404 Integrated Airport Control System**

System maintenance.

#### Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Structure works;
- Setup of temporary drainage system; and
- Road formation.

#### **Contract 3408 Third Runway Concourse and Apron Works**

- Building services and architectural, builder's work and finishing works;
- Foundation works for concrete batching plant; and
- Excavation and reinforced concrete works.

#### **Terminal 2 Expansion:**

#### **Contract 3508 Terminal 2 Expansion Works**

- Bridge demolition, hoarding erection;
- Pier and temporary road construction;
- Pump station and electrical station works; and
- Architectural, builder's work and finishing works.

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

#### Contract 3601 New Automated People Mover System (TRC Line)

Guide beam installation.

#### **Contract 3602 Existing APM System Modification Works**

- Defect rectification work; and
- Concrete plinth construction.

#### Contract 3603 Baggage Handling System (BHS)

BHS installation.

#### **Construction Support (Facilities):**

#### **Contract 3721 Construction Support Infrastructure Works**

Provision of backup services.

#### **Airport Support Infrastructure:**

#### Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Dismantling works;
- Duct installation and concreting;
- Drainage construction; and
- Installation of steel decking formworks

#### Contract 3802 APM and BHS Tunnels and Related Works

- Excavation and lateral supports;
- Box culvert construction;
- Tunnel construction;
- Electrical and mechanical works; and

Architectural, builder's work and finishing works.

#### **Contract 3804 East and Landside Fire Stations**

- Site setup and formation works;
- Bored pile works; and
- Excavation and concreting.

#### **Contract 3805 New Airport District Police Operational Base**

- Ground investigation works;
- Bored pile works; and
- Construction of temporary working platform.

#### **Construction Support (Services / Licences):**

#### **Contract 3901A Concrete Batching Facility**

Operation of concrete batching plant and material conveyor belt.

#### **Contract 3901B Concrete Batching Facility**

Operation of concrete batching plant and material conveyor belt.

#### **Contract 3908 Quay Management Services**

- Provision of services of site management and logistic control of 3RS quays; and
- Provision of flat top barge and vehicle delivery services between the launching point in Hong Kong and 3RS quays.

#### **Contract 3913 Asphalt Batching Plant**

Operation of asphalt batching plant.

#### **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		√	No construction activities-related complaint was received during the reporting period.	Nil
Notification of any summons and status of prosecutions		√	No notification of summons nor prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:

<sup>^</sup> Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

## 1 Introduction

#### 1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1<sup>1</sup>. 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 89<sup>th</sup> Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 May 2023.

#### 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**.

**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 Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919

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

Party	Position	Name	Telephone
	Deputy Environmental Team Leaders	Heidi Yu	2828 5704
	ream Leauers	Ken Wong	2828 5817
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Roy Man	3922 9141
	Deputy Independent Environmental Checker	Jackel Law	3922 9376
Reclamation Works:			
Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint	Project Manager	Alan Mong	3763 1352
Venture)	Environmental Officer	Zhang Bin Wang	3763 1525
Airfield Works:			
Party	Position	Name	Telephone
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 3305 Airfield Ground Lighting System	Project Manager	Allam Al-Turk	2944 9725
(ADB Safegate Hong Kong Limited)	Environmental Officer	Ivan Ting	9222 9490
Contract 3306 Observation Facility Control System	Project Director	Dennis Yam	9551 9920
Supporting Interim 2RS and 3RS (Chinney Alliance Engineering Limited)	Environmental Officer	Richard Liu	9216 8990
Contract 3307 Fire Training Facility	Project Manager	Ken Tang	9640 5397
(Paul Y. Construction Company Limited)	Environmental Officer	Ferddy Leung	5585 6746
Contract 3308 Foreign Object Debris Detection System (DAS Aviation Services Group)	Project Manager	Jeffrey Yau	9873 7422
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 Enabling Works	Project Manager	Wyman Lau	6112 9753
(Wing Hing Construction Co., Ltd.)	Health Safety Environmental Manager	Mike Leung	6625 2550
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.)	Safety Officer	Keith Chau	9620 7515
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 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Director	Richard Ellis	6201 5637
	Environmental Officer	Fanny Law	6184 4650

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

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen	Project Manager	Hongdan Wei	158 6180 9450
Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Environmental Officer	H Y Yue	9185 8186

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification	Project Manager	Kunihiro Tatecho	9755 0351
Vorks Niigata Transys Co., Ltd.)	Environmental Officer	Y M Tong	5316 9801
Contract 3603 3RS Baggage Handling System	Project Manager	K C Ho	9272 9626
VISH Consortium)	Environmental Officer	Richard Ng	9802 9577
onstruction Support (F	Facilities):		
Party	Position	Name	Telephone
Contract 3721 Construction	Site Agent	Thomas Lui	9011 5340
Support Infrastructure Works China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	John Mak	6273 8703
Contract 3728 Minor Site Works Shun Yuen Construction	Contract Manager	C K Liu	9194 8739
Company Limited)	Environmental Officer	Dan Leung	6856 5899
Contract 3733 Emergency Repair Service	Project Manager	Michael Kan	9206 0550
Wing Hing Construction Co., _td.)	Safety Health Environmental Manager	Mike Leung	6625 2550
irport Support Infrastr	ucture:		
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
Contract 3804 East and Landside Fire Stations Beijing Urban	Project Manager	Mr. Zhang Xianda	4661 6818
Construction Group Company Limited - Beijing Urban Construction International Company Limited - Kin Shing Leung's) General Contractors Ltd Joint Venture)	Environmental Officer	Ms. Kimberly Wong	5542 1669

Party	Position	Name	Telephone
Airport District Police Operational Base (Chinney Construction Co., Ltd.)	Environmental Officer	Mike Li	6306 8547

#### **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	General Manager	Gabriel Chan	2435 3260
(Gammon Construction Limited)	Environmental Officer	Rex Wong	2695 6319
Contract 3908 Quay Management Services	Project Manager	Mr. Ian Li	9750 6438
(Gitanes – Crown Asia Joint Venture)	Environmental Officer	Mr. Tang Kai Fun	9406 3526
Contract 3913 Asphalt Batching Plant (SPR Joint Venture)	Project Manager	Xie Yi Sheng	6580 6005
	Environmental Officer	Kenneth Chan	9300 2182

#### 1.4 Summary of Construction Works

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

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

#### 1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. 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		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result was 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 was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going

Parameters	EM&A Requirements	Status
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 was 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 Plar 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 April 2022, regular DCM monitoring was ceased at all monitoring stations starting from 28 April 2022 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 was started from June 2021 and completed in 2022.
Details of the routine H <sub>2</sub> 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 H <sub>2</sub> S monitoring proposal was submitted to EPD in Apr 2023.
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.
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.

Parameters	EM&A Requirements	Status
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP
	Vessel line transect surveys: Two full surveys per month;	Condition 3.4.
	Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and	
	Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
Landscape & Visual		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
<b>Environmental Auditing</b>		
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
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, regular environmental management meetings were conducted during the reporting period, which are summarised as below:

• Sixteen environmental management meetings for EM&A review with works contracts: 10, 11, 17, 18, 22, 24, 25, 29 & 30 May 2023.

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)	16 Sep 2022	Appendix D of Monthly EM&A Report No. 83

#### 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 the Monthly EM&A Report No. 77 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 of 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	11 - 27	306	500
AR2	6 - 33	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 <sup>(1)</sup>	Tung Chung West Development	To be determined
NM3A <sup>(2)</sup>	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

#### Notes:

- (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** 

<b>Monitoring Stations</b>	Time Period	Action Level	Limit Level, L <sub>eq(30mins)</sub> 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) <sup>(1)</sup>

#### 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)	19 Mar 2023	Appendix D of Monthly EM&A Report No.87
Integrated Sound Level Meter	Rion NL-52 (Serial No. 01287679)	10 Oct 2022	Appendix D of Monthly EM&A Report No. 82
Acoustic Calibrator	Castle GA607 (Serial No. 040162)	19 Mar 2023	Appendix D of Monthly EM&A Report No.87
Acoustic Calibrator	Casella CEL-120 (Serial No. 2383737)	18 Jun 2022	Appendix D of Monthly EM&A Report No. 79

#### 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 of 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** 

<b>Monitoring Station</b>	Noise Level Range, dB(A)	Limit Level, dB(A)	
	Leq (30mins)	Leq (30mins)	
NM1A <sup>(1)</sup>	59 - 66	75	
NM4 <sup>(1) (3)</sup>	61 - 65	70 <sup>(2)</sup>	
NM5 <sup>(1) (3)</sup>	58 - 67	75	
NM6 <sup>(1) (3)</sup>	62 - 64	75	

#### Notes:

- (1) +3dB(A) Façade correction included;
- (2) The limit level will be reduced to 65dB(A) during school examination periods at NM4. School examination took place from 2 to 3, 9 to 10, and 30 to 31 May 2023 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 results.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were 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, school activities near NM4 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 14 water quality monitoring stations, comprising 6 impact (IM) stations, 5 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

<b>Monitoring Station</b>	Description	Coord	dinates	<b>Parameters</b>	
		Easting	Northing		
C1	Control Station	804247	815620	General Parameters	
C2	Control Station	806945	825682	DO, pH,	
C3 <sup>(2)</sup>	Control Station	817803	822109	<ul><li>Temperature,</li><li>Salinity, Turbidity, SS</li></ul>	
IM1 <sup>(4)</sup>	Impact Station	806458	818351	- ,,	
IM2 <sup>(4)</sup>	Impact Station	806236	819183	-	
IM7 <sup>(4)</sup>	Impact Station	806835	821349	-	
IM10 <sup>(4)</sup>	Impact Station	809838	822240	-	
IM11 <sup>(4)</sup>	Impact Station	810545	821501	-	
IM12 <sup>(4)</sup>	Impact Station	811519	821162	-	
SR1A <sup>(1)</sup>	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS	
SR2	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS	
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature,	
SR4A	Sha Lo Wan	807810	817189	Salinity, Turbidity, SS	
SR8 <sup>(3)</sup>	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) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.
- (4) With the seawall completion and removal of enhanced open sea silt curtains, these monitoring stations were relocated back to their original locations. For IM2, there was minor adjustment of the monitoring location.

#### 4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the 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 general water quality monitoring (excluding SR1A & SR8)						
Water Quality	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5mg/l Bottom 3.4mg/l		Surface and Middle 4.1mg/l Bottom 2.7mg/l		
Monitoring						
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control	
	Turbidity in NTU	22.6		36.1	station at the same tide of the same day, whichever is higher	
Action and Li	mit Levels SR1A					
SS (mg/l))		33		42		
Action and Li	mit 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
- (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 Stations
Flood Tide	
C1	IM1, IM2, IM7, SR3
SR2 <sup>(1)</sup>	IM7, IM10, IM11, IM12, SR1A, SR3, SR4A, SR8
Ebb Tide	
C1	SR4A
C2	IM1, IM2, IM7, IM10, IM11, IM12, SR1A, SR2, SR3, SR8

#### Note:

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

#### 4.2 Monitoring Equipment

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

**Table 4.4: Water Quality Monitoring Equipment** 

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 15M100005)	17 Mar 2023	Appendix D of Monthly EM&A Report No. 87
	YSI ProDSS (Serial No. 21G105356)	17 Mar 2023	Appendix D of Monthly EM&A Report No. 87

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

**Table 4.5: Other Monitoring Equipment** 

Equipment	Brand and Model
Water Sampler	Van Dorn Water Sampler
Positioning Device (measurement of GPS)	Garmin eTrex Vista HCx
Current Meter (measurement of current speed and direction, and water depth)	Sontek HydroSurveyor

#### 4.3 Monitoring Methodology

#### 4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22<sup>nd</sup> 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 including DO, turbidity and SS obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

#### 4.5 Conclusion

During the reporting period, all monitoring results were within their corresponding Action and Limit Levels. 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 contractors' information, construction waste generated in the reporting period is summarised in **Table 5.2**. The ET and IEC have carried out site audits regularly and reviewed the trip ticket system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel bar, metal strip, aluminium, paper and plastic are sorted on-site and transported off-site for recycling during this reporting period.

**Table 5.2: Construction Waste Statistics** 

			C&D Material Reused in other		Chemical Waste	Chemical Waste	General Refuse
	Reuse or	Project	Projects	Public Fill	(kg)	(1)	(tonne)
	Recycle <sup>(1)</sup>	(m <sup>3</sup> )	(m³)	(m³)			
	(m³)						
May 2023 <sup>(2)</sup>	124	10,154	1,353	27,703	0	0	3,006

#### Notes:

- (1) C&D refers to Construction and Demolition.
- (2) 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.

#### **5.3** Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual, Waste Management Plan and the proposal of Further Development on Treatment Level / Details and the Reuse Mode for Marine Sediment (hereinafter referred to as "Further Development Proposal") 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 and Further Development Proposal.

Backfilling works for treated marine sediment were conducted during the reporting period. The details of the marine sediment sampling, treatment and backfilling can be referred to Annual EM&A Report No.6.

# 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 quarterly <sup>(1)</sup> STG < 1.86 & ANI < 9.35	
Two consecutive running quarterly <sup>(2)</sup> (3-month) STG < 1.86 & ANI < 9.35	

Notes: (referring to the baseline monitoring report)

Action Level<sup>(3)</sup> Limit Level<sup>(3)</sup>

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

#### 6.2 CWD Monitoring Transects and Stations

#### **6.2.1** Small Vessel Line-transect Survey

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

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

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing				
		NE							
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	108	822513	823268				
5S	817537	820220	10N	822513	824321				
5N	817537	824613	11S	823477	823402				
6S	818568	820735	11N	823477	824613				
NWL									
1S	804671	814577	5S	808504	821735				
1N	804671	831404	5N	808504	828602				
2Sb	805475	815457	6S	809490	822075				
2Nb	805476	818571	6N	809490	825352				
2Sa	805476	820770	7S	810499	822323				
2Na	805476	830562	7N	810499	824613				
3S	806464	821033	8\$	811508	821839				
3N	806464	829598	8N	811508	824254				
4S	807518	821395	9S	812516	821356				
4N	807518	829230	9N	812516	824254				
		A۱							
1W	804733	818205	2W	805045	816912				
1E	806708	818017	2E	805960	816633				
		W	L						
1W	800600	805450	7W	800400	811450				
1E	801760	805450	7E	802400	811450				
2W	800300	806450	8W	800800	812450				
2E	801750	806450	8E	802900	812450				
3W	799600	807450	9W	801500	813550				
3E	801500	807450	9E	803120	813550				
4W	799400	808450	10W	801880	814500				
4E	801430	808450	10E	803700	814500				
5W	799500	809450	11W	802860	815500				
5E	801300	809450	12S/11E	803750	815500				
6W	799800	810450	12N	803750	818500				
6E	801400	810450	1214	000700	010000				
- OL	001700	SV	VI						
1S	802494	803961	6S	807467	801137				
1N	802494	806174	6N	807467	808458				
2S	803489	803280	7S	808553	800329				
2S 2N	803489	806720	7S 7N	808553	807377				
3S	804484	802509	88	809547	800338				
3N	804484	807048	8N	809547	807396				
4S	805478	802105	98	810542	800423				
4N	805478	807556	9N	810542	807462				
5S	806473	801250	10S	811446	801335				
5N	806473	808458	10N	811446	809436				

#### 6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

#### 6.3 CWD Monitoring Methodology

#### 6.3.1 Small Vessel Line-transect Survey

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

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

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL, 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 4, 9, 10, 11, 15, 16, 18 and 23 May 2023 covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 447.15 km of survey effort was collected from these surveys and around 445.45 km of these 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 the current reporting period, 13 sightings with 41 dolphins were sighted. All these sightings 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 the current reporting period is illustrated in **Figure 6.3**. In WL, CWD sightings were scattered at the waters between Tai O and Fan Lau. In SWL, the two CWD sightings were recorded at the waters near Fan Lau Tung Wan. There was no CWD sighting recorded in NEL and NWL survey areas during the reporting period.

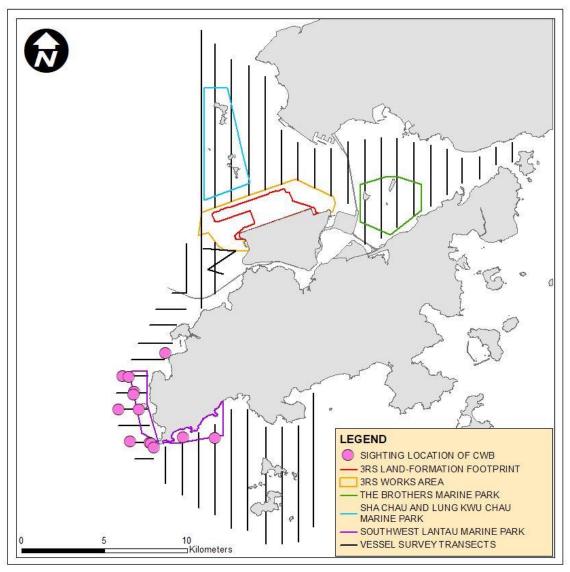


Figure 6.3: Sightings Distribution of Chinese White Dolphins

Remarks: (1) Please note that there are 13 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 this reporting period, a total of around 445.45 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 13 on-effort sightings with 41 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from March to May 2023), a total of around 1281.00 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 37 on-effort sightings and a total number of 162 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 reporting period and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. Both the running quarterly encounter rate STG and ANI remain above the Action Level, and the Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
May 2023	2.92	9.20
Running Quarter from March to May 2023 <sup>(1)</sup>	2.89	12.65
Action Level	Running quarterly <sup>(1)</sup> ST	TG < 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, 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 the current reporting period, 13 groups of 41 dolphins in total were sighted, and the average group size of CWDs was 3.15 dolphins per group. The majority of the CWD sightings was having medium group size (i.e. 3-9 dolphins). There was no CWD sighting with large group size (i.e. 10 or more dolphins) recorded in the current reporting period.

#### **Activities and Association with Fishing Boats**

There were three CWD sightings recorded engaging in foraging activities in the current reporting period in WL and SWL survey areas. Amongst these three sightings, one was observed in association with operating purse seiner in SWL.

#### **Mother-calf Pair**

In this reporting period, there were two sightings with the presences of mother-and-unspotted juvenile pair, recorded in WL.

Sighting Area

#### 6.4.2 Photo Identification

In the current reporting period, a total number of 22 different CWD individuals were identified for totally 31 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Individual

Date of

**Table 6.5: Summary of Photo Identification** 

Individual ID	Date of Sighting (dd-mmm- yy)	Sighting Group No.	Area
SLMM003	23-May-23	4	WL
SLMM023	04-May-23	4	WL
SLMM025	23-May-23	1	WL
		4	WL
SLMM027	04-May-23	2	WL
		4	WL
	23-May-23	1	WL
		3	WL
		4	WL
SLMM034	18-May-23	2	SWL
SLMM037	18-May-23	1	SWL
SLMM049	04-May-23	4	WL
SLMM050	04-May-23	2	WL
WLMM001	04-May-23	3	WL
WLMM007	04-May-23	2	WL
WLMM018	04-May-23	2	WL

ID	Sighting (dd-mmm- yy)	Group No.	
WLMM056	04-May-23	1	WL
WLMM065	04-May-23	6	WL
WLMM073	04-May-23	6	WL
	23-May-23	1	WL
		4	WL
WLMM079	04-May-23	2	WL
WLMM086	04-May-23	3	WL
WLMM111	04-May-23	5	WL
WLMM114	18-May-23	1	SWL
	23-May-23	4	WL
WLMM147	04-May-23	2	WL
WLMM152	04-May-23	5	WL
WLMM159	04-May-23	2	WL
		6	WL
WLMM187	04-May-23	6	WL

#### 6.4.3 Land-based Theodolite Tracking Survey

#### **Survey Effort**

Land-based theodolite tracking surveys were conducted at LKC on 24 May 2023 and at SC on 25 May 2023, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWDs were tracked neither off LKC Station nor SC 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**.

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 (LKC)	1	6:00	0	0
Sha Chau (SC)	1	6:00	0	0
TOTAL	2	12:00	0	0

#### 6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. 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 retrieved on 23 May 2023 and subsequently re-deployed and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.4**). Acoustic data would be reviewed to give an indication of CWD 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, one dolphin observation station and teams of at least two dolphin observers were deployed by the contractor for continuous monitoring of the DEZ for seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of DEZ monitoring were provided by the ET, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' records, no dolphin or other marine mammals were observed within or around the silt curtain during 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. 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 to audit the implementation of proper environmental pollution control and mitigation measures for the Project were conducted by ET and IEC on a weekly and bi-weekly basis, respectively. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Besides, ad-hoc site inspections were also 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 was 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 is summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The

contractor's works areas

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 was checked by ET during weekly site inspection and reported by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures	All works contracts
CM2 – Reduction of construction period to practical minimum	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 Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas	Tree Protection Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project.  The Contractors' performance on the implementation of the tree maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3508, 3801

#### 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 were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees would unavoidably be affected by the construction works.

3508, 3801

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 was currently monitored by ET annually.

CM10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical The advanced hydroseeding works around taxiways and To be implemented runways were partially completed at this stage and would resume in next phase.

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



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 using light hooding and minimisation of night working period (CM7)



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



General view of transplanted trees (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 trees and transplanted trees under the Project remained unchanged (i.e. 47 and 26 respectively) comparing to the previous reporting period.

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.	

Event Action Level		Action		
Non-conformity on one occasion	Identify source. Inform IEC and AAHK / PM. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Notify Contractor. Ensure remedial measures are properly implemented.	Amend working methods to prevent recurrence of nonconformity.  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.)	Transplan	ted (nos.)	To-be-transplanted (nos.)
		Establishment Period	Maintenance Period	
3302	9	0	0	0
3503	0	0	9	0
3508	35	0	12	0
3602	0	0	0	0
3801	3	0	5	0
Grand Total	47	0	26	0

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

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	Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Next inspection will be conducted in February 2024. Photos

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks	
CT1253	4 May 2018	Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	of the last inspection in February 2023 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No. 86.	
T835	22 Jan 2020	Long Term Management period Feb 2021 – Jan 2030	AAHK	Establishment Period was completed. Next inspection will be	
T836	13 Dec 2019	Long Term Management period Feb 2021 – Jan 2030	AAHK	conducted in February 2024. Photos of the last inspection in February 2023 can be referred to Table 7.7 of	
T838	22 Jan 2020	Long Term Management period Feb 2021 – Jan 2030	ААНК	the Construction Phase Monthly EM&A Report No. 86.	
T812	21 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	ААНК	Establishment Period was completed. Next inspection will be	
T814	20 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	<ul> <li>conducted in December 2023.</li> <li>Photos of the last inspection in December 2022 can be referred to</li> </ul>	
T815	15 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	Table 7.7 of the Construction Phase Monthly EM&A Report No.84.	
T829	18 Dec 2020	Long Term Management period  Jan 2022 – Dec 2031	AAHK	_	
T830	14 Dec 2020	Long Term Management period  Jan 2022 – Dec 2031	AAHK	_	
T831	19 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	-	
T1493	6 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	Establishment Period w completed. Next inspection will	
T1494	6 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	<ul> <li>conducted in July 2023. Photos of the last inspection in July 2022 can be referred to Table 7.7 of the</li> </ul>	
T1495	10 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	<ul> <li>Construction Phase Monthly EM&amp;A Report No.79.</li> </ul>	
T1496	5 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	-	
T1497	5 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	-	
T1498	29 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	_	
T1499	29 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	_	
T1500	30 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	_	
T1501	30 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	-	
T1502	5 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	_	
T1503	6 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	_	
T1504	24 Jun 2021	Long Term Management period	Contract 3508	_	

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
		Aug 2022 – Jul 2031		
CT1194	4 May 2018	Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. 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	Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. 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	Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. 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.

#### 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

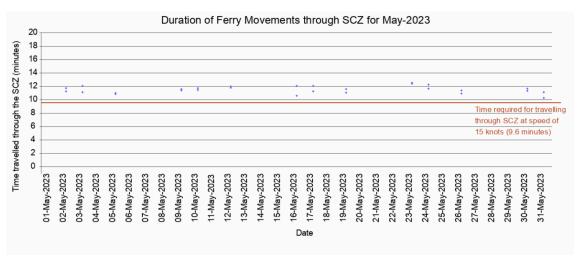
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on 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 operational needs, the SkyPier HSF services to/from Zhuhai has been suspended until further notice. Key audit findings for the SkyPier HSF travelling to/from Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.7**. The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 35 to 38 daily movements) were within the maximum daily cap of 125 daily

movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

In total, 28 ferry movements between HKIA SkyPier and Macau were recorded in May 2023 and the data are presented in **Appendix F**. The time spent by the SkyPier HSF travelling through the SCZ in May 2023 was presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all the SkyPier HSF spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for May 2023



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

One ferry was recorded with enter / leave the SCZ not through gate access points on 3 May 2023. ET's investigation found that the minor route deviation was due to strong tidal wave and current.

Table 7.7: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 May 2023
Total number of ferry movements recorded and audited for HSF to/from Macau	28
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation
Speed control in speed control zone	The average speed of all HSFs travelling through the SCZ ranged from 10.8 to 13.3 knots. All HSFs had travelled through the SCZ with average speed under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1.
A maximum daily cap of 125 movements for all SkyPier HSFs including those not using diverted route	35 to 38 daily movements

#### 7.5 Audit of Construction and Associated Vessels

The updated MTRMP-CAV was approved by EPD on 31 May 2022 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 by contractor's Environmental Officer.
   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, 2 skippers were trained by contractor's Environmental Officer. In total, 1889<sup>2</sup> skippers were trained from August 2016 to May 2023.
- 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 within the works area, and entering no entry zone 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 ET checked the contractors' dolphin sighting record and relevant records to audit the implementation of DEZ and there was no finding.

During the reporting period, there was no dolphin sighting within the 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 7.8**.

Table 7.8: 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	Accepted / approved by
2.11	Marine Mammal Watching Plan	- EPD
2.12	Coral Translocation Plan	_
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	

<sup>&</sup>lt;sup>2</sup> Based on the updated skipper training record, there were three skipper training sessions were held with four skippers by contractors' Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET in April 2023.

EP Condition	Submission	Status
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 latest statuses of the environmental licenses and permits in the reporting period are presented in **Appendix D**.

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

#### 7.9.1 Complaints

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

#### 7.9.2 Notifications of Summons or Status of Prosecution

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

#### 7.9.3 Cumulative Statistics

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

# 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**

Filling materials delivery.

#### Airfield Works:

#### **Contract 3302 Eastern Vehicular Tunnel Advance Works**

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

#### **Contract 3305 Airfield Ground Lighting System**

- Enhanced vehicular warning light hardware installation;
- Rectification work for airfield ground lighting system; and
- · Cable containment installation.

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

Equipment installation.

#### Contract 3308 Foreign Object Debris Detection System

Rectification work for handover sensor system.

#### **Contract 3310 North Runway Modification Works**

- Architectural, builder's work and finishing works;
- Seawall construction;
- Construction of stormwater drainage;
- Piling works;
- Aviation fuel pipe works;
- Pipe pile works;
- Construction of box culvert; and
- Land improvement works (Transition layer and backfilling works).

#### **Third Runway Concourse**

#### Contract 3403 New Integrated Airport Centres Building and Civil Works

- Builder's work for cable conduit; and
- Mechanical ventilation & air-conditioning & fire services works.

#### **Contract 3404 Integrated Airport Control System**

System maintenance.

#### Contract 3405 Third Runway Concourse Foundation and Substructure Works

Structure works:

- Setup of temporary drainage system; and
- Road formation.

#### **Contract 3408 Third Runway Concourse and Apron Works**

- Building services and Architectural, builder's work and finishing works;
- Foundation works for concrete batching plant; and
- Excavation and reinforced concrete works.

#### **Terminal 2 Expansion:**

#### **Contract 3508 Terminal 2 Expansion Works**

- Bridge demolition, hoarding erection;
- Pier and temporary road construction;
- · Pump station and electrical station works; and
- Architectural, builder's work and finishing works.

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

#### Contract 3601 New Automated People Mover System (TRC Line)

Guide beam installation.

#### **Contract 3602 Existing APM System Modification Works**

- Defect rectification work; and
- Concrete plinth construction.

#### Contract 3603 Baggage Handling System (BHS)

BHS installation.

#### **Construction Support (Facilities):**

#### **Contract 3721 Construction Support Infrastructure Works**

Provision of backup services;

#### **Airport Support Infrastructure:**

#### Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Dismantling works;
- Duct installation and concreting;
- Drainage construction; and
- Installation of steel decking formworks.

#### Contract 3802 APM and BHS Tunnels and Related Works

- Excavation and lateral supports;
- Box culvert construction;
- Tunnel construction;
- Electrical and mechanical works; and
- Architectural, builder's work and finishing works.

#### **Contract 3804 East and Landside Fire Stations**

- Site setup and formation works;
- Bored pile works; and
- Excavation and concreting.

#### **Contract 3805 New Airport District Police Operational Base**

- Ground investigation works;
- Bored pile works; and

Construction of temporary working platform.

#### Construction Support (Services / Licenses):

#### **Contract 3901A Concrete Batching Facility**

Operation of concrete batching plant and material conveyor belt.

#### **Contract 3901B Concrete Batching Facility**

Operation of concrete batching plant and material conveyor belt.

#### **Contract 3908 Quay Management Services**

- Provision of services of site management and logistic control of 3RS guays; and
- Provision of flat top barge and vehicle delivery services between the launching point in Hong Kong and 3RS quays.

#### **Contract 3913 Asphalt Batching Plant**

Operation of asphalt batching plant.

#### 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;
- DEZ monitoring for 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 are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, land improvement works and filling together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include 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, water quality, construction waste and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 35 to 38 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 28 HSFs movements under the SkyPier Plan were recorded in the reporting period. The average speed of all HSFs travelling through the SCZ ranged from 10.8 to 13.3 knots. All HSFs travelled through the SCZ with average speed under 15 knots in compliance with the SkyPier Plan. One deviation from the diverted routed in May 2023 was recorded in the HSF monitoring and ET's investigation found that the minor route deviation was due to strong tidal wave and current. In summary, the ET and IEC audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Deviations including speeding within the works area, and entering no entry zone 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**

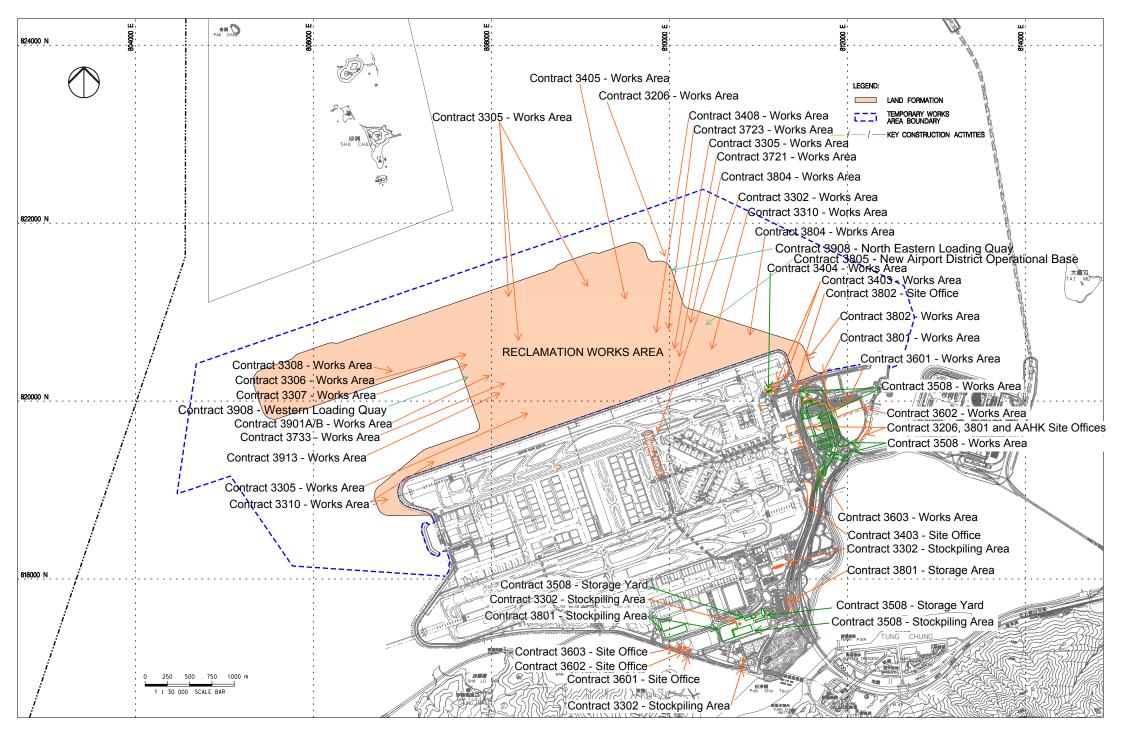
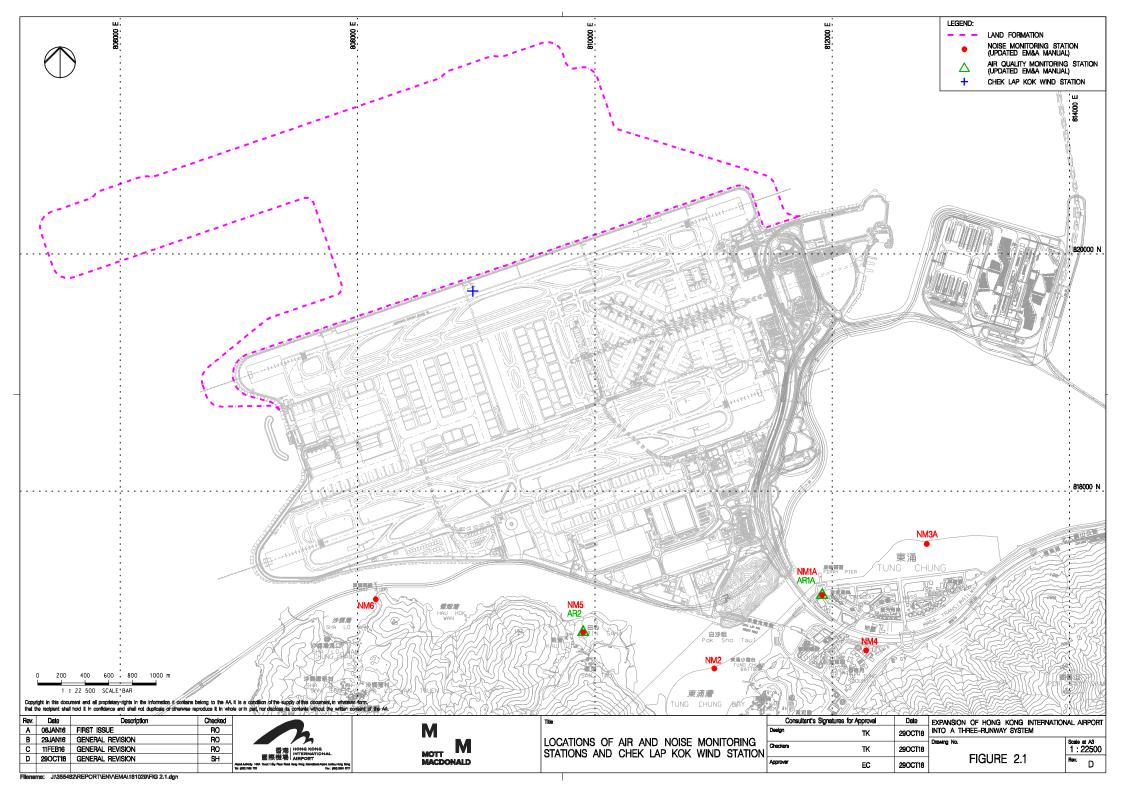
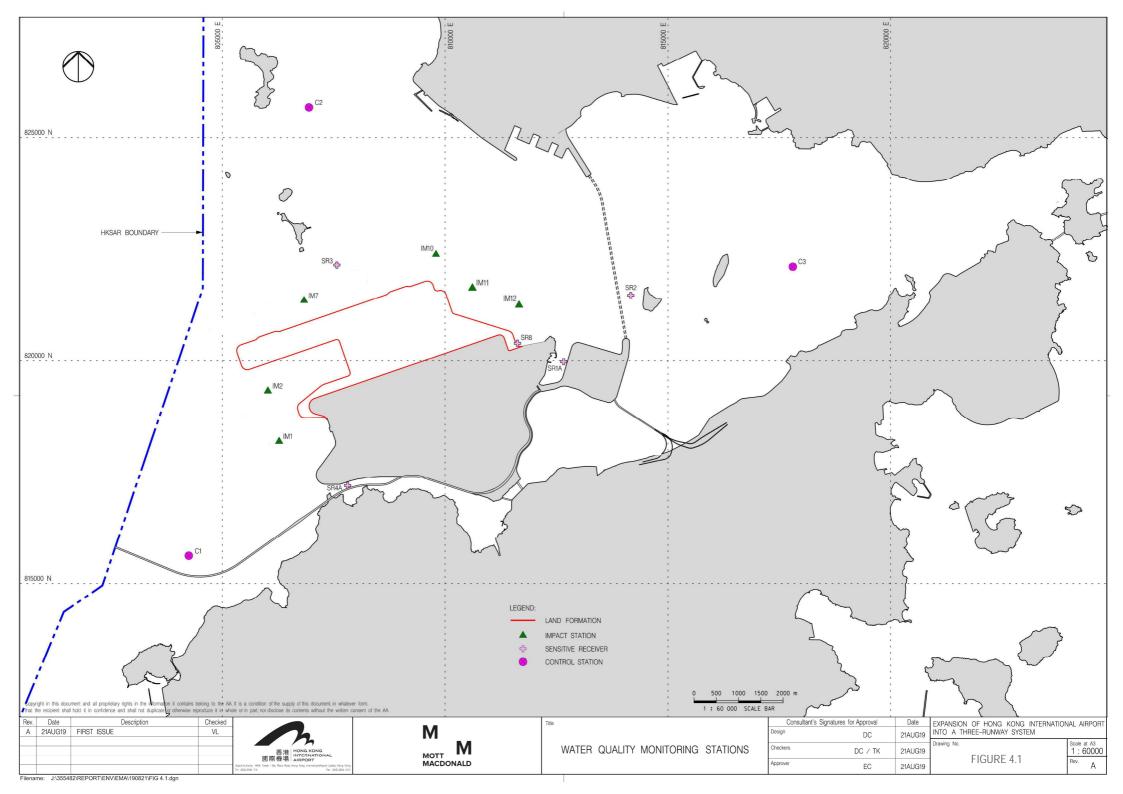
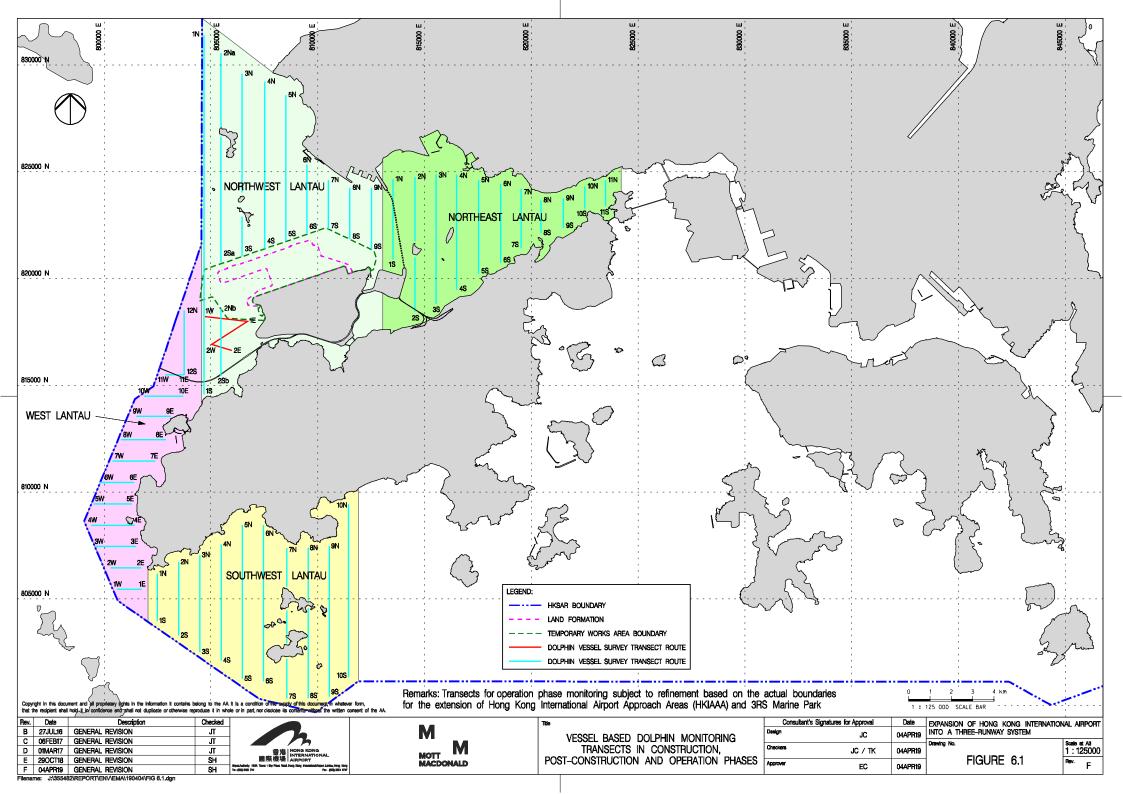
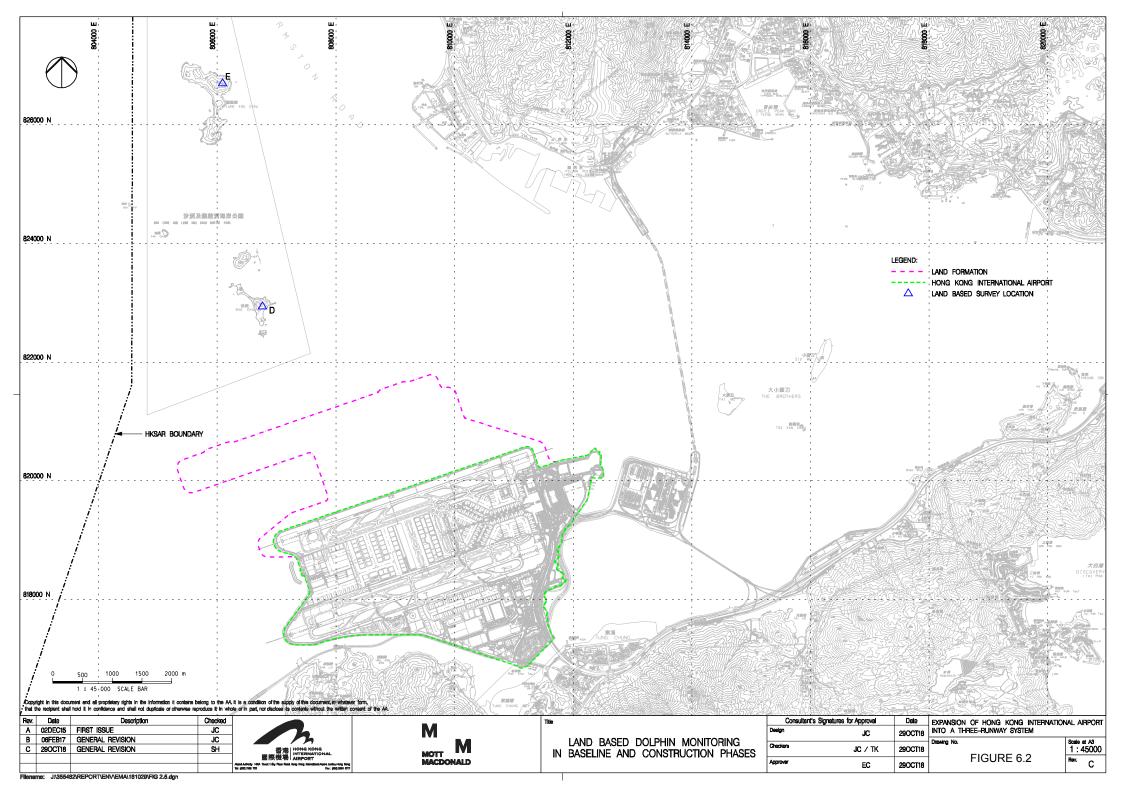


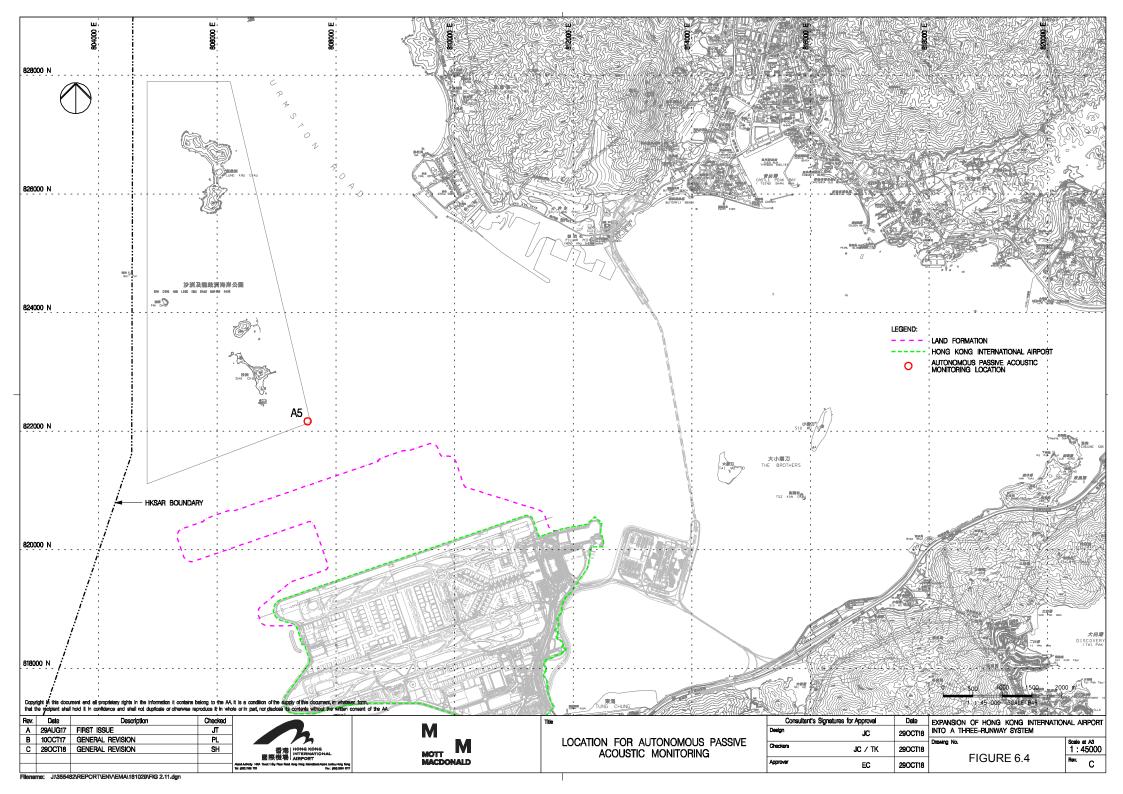
FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES











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	-	<ul> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	1
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
			<ul> <li>Exposed Earth</li> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	1

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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
				Timing of completion of measures	
			Loading, Unloading or Transfer of Dusty Materials	Within construction	1
			• All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	site / Duration of the construction phase	
			Debris Handling	Within construction	1
			Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and	site / Duration of the construction phase	
			■ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.		
			Transport of Dusty Materials	Within construction	1
			<ul> <li>Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material.</li> <li>The cover should extend over the edges of the sides and tailboards.</li> </ul>	site / Duration of the construction phase	
			Wheel washing	Within construction	1
			<ul> <li>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.</li> </ul>	site / Duration of the construction phase	
			Use of vehicles	Within construction	1
			<ul> <li>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;</li> </ul>	site / Duration of the construction phase	
			<ul> <li>Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and</li> </ul>		
			• Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.		
			Site hoarding	Within construction	1
			• Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	site / Duration of the construction phase	
5.2.6.5	2.1	-	Best Practices for Concrete Batching Plant	Within Concrete	1
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include:	Batching Plant / Duration of the construction phase	
			Cement and other dusty materials		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				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;		
			<ul> <li>Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit;</li> </ul>		
			<ul> <li>Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and</li> </ul>		
			<ul> <li>Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.</li> </ul>		
			Other raw materials	Within Concrete	1
			<ul> <li>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;</li> </ul>	Batching Plant / Duration of the construction phase	
			<ul> <li>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;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			• 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;		
			<ul> <li>All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals;</li> </ul>		
			<ul> <li>Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			<ul> <li>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;</li> </ul>		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
		_		Timing of completion of measures	implemented?"
			<ul> <li>The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side;</li> </ul>		
			• 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
			<ul> <li>All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and</li> </ul>	Batching Plant / Duration of the	
			<ul> <li>All access and route roads within the premises shall be paved and adequately wetted.</li> </ul>	construction phase	
			Housekeeping	Within Concrete	1
			• 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		
			<ul> <li>Release of the chimney shall be directed vertically upwards and not be restricted or deflected.</li> </ul>		
			Cold feed side	Within Concrete	I
			• 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;		
			<ul> <li>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;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			<ul> <li>All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and</li> </ul>		
			<ul> <li>All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures.</li> </ul>		
			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;	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;		
			<ul> <li>All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening.</li> <li>Gaskets shall be installed to seal off any cracks and edges of any inspection openings;</li> </ul>		
			<ul> <li>Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside.</li> <li>They shall be inspected daily for leakages;</li> </ul>		
			• 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		

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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			<ul> <li>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).</li> </ul>		
			Material transportation	Within Concrete	1
			<ul> <li>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;</li> </ul>	Batching Plant / Duration of the construction phase	
			<ul> <li>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</li> </ul>		
			<ul> <li>Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers.</li> </ul>		
			Control of emissions from bitumen decanting	Within Concrete	1
			<ul> <li>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;</li> </ul>	Batching Plant / Duration of the	
			<ul> <li>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;</li> </ul>	construction phase	
			<ul> <li>Proper chimney for the discharge of bitumen fumes shall be provided at high level;</li> </ul>		
			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
			<ul> <li>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.</li> </ul>	Batching Plant / Duration of the construction phase	
			Housekeeping	Within Concrete	I
			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
0.2.0.1			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;		
			<ul> <li>Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and</li> </ul>		
			<ul> <li>Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits.</li> <li>Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure.</li> </ul>		
			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
			<ul> <li>All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas.</li> </ul>		
			Belt conveyors	Within Concrete	N/A as there was
			<ul> <li>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;</li> </ul>	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
			<ul> <li>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.</li> </ul>	Batching Plant / Duration of the construction phase	no rock crushing plant at this stage

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EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul> <li>The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable;</li> </ul>	or modelico	
			<ul> <li>All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or</li> </ul>		
			• 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		
			<ul> <li>Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.</li> </ul>		
			Rock drilling equipment  Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was 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	I
Table 6.40	3.2	-	• An appropriate marine traffic management system should be established to minimize risk of ship collision.	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul> <li>Location of all existing hydrant networks should be clearly identified prior to any construction works.</li> </ul>	Construction Site / Construction Period	I
			Noise Impact – Construction Phase		
7.5.6	4.3	-	Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:	Within the Project site / During construction phase / Prior to	I
			<ul> <li>only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works;</li> </ul>	commencement of operation	
			<ul> <li>machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum;</li> </ul>		
			<ul> <li>plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs;</li> </ul>		
			■ mobile plant should be sited as far away from NSRs as possible; and		
			<ul> <li>material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>		



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	-	<ul> <li>Use of Movable Noise Barriers</li> <li>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.</li> </ul>	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	<ul> <li>Use of Noise Enclosure/ Acoustic Shed</li> <li>Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.</li> </ul>	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	<ul> <li>Marine Construction Activities</li> <li>General Measures to be Applied to All Works Areas</li> <li>Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation;</li> <li>Use of Lean Material Overboard (LMOB) systems shall be prohibited;</li> <li>Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved;</li> <li>Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly;</li> <li>Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;</li> <li>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;</li> <li>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</li> <li>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</li> </ul>	Within construction site / Duration of the construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul> <li>Specific Measures to be Applied to All Works Areas</li> <li>The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report;</li> </ul>	Within construction site / Duration of the construction phase	I – For marine filling
			<ul> <li>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;</li> </ul>		C – Completed in Nov 2020 for sand blanket
			<ul> <li>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;</li> </ul>		C – Completed in May 2018
			<ul> <li>Closed grab dredger shall be used to excavate marine sediment;</li> </ul>		I
			<ul> <li>Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and</li> </ul>		(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.	•	1
			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)
			<ul> <li>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</li> </ul>		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	Mitigation Measures
				Timing of completion of measures	Implemented?^
			Specific Measures to be Applied to Land Formation Activities during Marine Filling Works	Within construction	1
			<ul> <li>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;</li> </ul>	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		N/A
			filling activities;		(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul> <li>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</li> </ul>		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
			<ul> <li>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</li> </ul>	site / Duration of the construction phase	joint excavation works for the submarine cable diversion will no
			Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.		longer be conducted anymore
8.8.1.4	5.1	-	Modification of the Existing Seawall	At the existing	1
			• 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 Timing of completion of measures	Mitigation 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 5 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
			<ul> <li>For construction of the eastern approach lights at the CMPs</li> <li>Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works;</li> <li>Steel casings shall be installed to enclose the excavation area prior to commencement of excavation;</li> <li>The excavated materials shall be removed using a closed grab within the steel casings;</li> <li>No discharge of the cement mixed materials into the marine environment will be allowed; and</li> <li>Excavated materials shall be treated and reused on-site.</li> </ul>		C – Completed in Oct 2021
8.8.1.8	5.1	-	Construction of Site Runoff and Drainage  The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:  Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or 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 around legated on the oxisting Airport island) or as according to the powelland is completed (for works around the oxisting Airport island) or as according to the powelland is completed (for works around the oxisting Airport island) or as according to the powelland is completed.	Within construction site / Duration of the construction phase	I
			areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);  Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;		I



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;	•	I
			• In the event that contaminated groundwater is identified at excavation areas, this should be treated on- site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		I
			• All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
			<ul> <li>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;</li> </ul>		ſ
			<ul> <li>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</li> </ul>		T
			• 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  Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where	Within construction site / During	I
			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.	construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion	Mitigation Measures Implemented?^
			of measures		
8.8.1.10	5.1		General Construction Activities	Within construction	1
8.8.1.11			<ul> <li>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</li> </ul>	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	C – Completed in
8.8.1.13			To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:	site / During	Jan 2019
			<ul> <li>A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau;</li> </ul>	construction phase	
			<ul> <li>No bulk storage of chemicals shall be permitted; and</li> </ul>		
			• 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
			<ul> <li>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</li> </ul>	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
			<ul> <li>Priority should be given to collect and reuse suitable inert C&amp;D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;</li> </ul>	•	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul> <li>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;</li> </ul>		1
			<ul> <li>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</li> </ul>	•	1
			• 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.	•	ı
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include:	Project Site Area /	T
			<ul> <li>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;</li> </ul>	Construction Phase	
			<ul> <li>Training of site personnel in proper waste management and chemical waste handling procedures;</li> </ul>		
			<ul> <li>Provision of sufficient waste disposal points and regular collection for disposal;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			<ul> <li>Stockpiles of C&amp;D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust;</li> </ul>		
			<ul> <li>All dusty materials including C&amp;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;</li> </ul>		
			<ul> <li>C&amp;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;</li> </ul>		
			• 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
			<ul> <li>Use of steel or aluminium formworks and falseworks for temporary works as far as practicable;</li> </ul>	Construction Phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			<ul> <li>Adoption of repetitive design to allow reuse of formworks as far as practicable;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			<ul> <li>Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable;</li> </ul>		
			<ul> <li>Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and</li> </ul>		
			Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	1
10.5.1.5	7.1	-	Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	1
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments:  On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	1
			<ul> <li>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;</li> </ul>	•	1
			<ul> <li>All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;</li> </ul>		I
			• Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;		I
			<ul> <li>Treated and untreated sediment should be clearly separated and stored separately; and</li> </ul>		ı
			<ul> <li>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.</li> </ul>		1



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
			<ul> <li>Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material;</li> </ul>		submarine cable
			<ul> <li>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</li> </ul>		diversion will no longer be conducted anymore
			<ul> <li>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.</li> </ul>		unymore
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
			<ul> <li>Good quality containers compatible with the chemical wastes should be used;</li> </ul>		
			<ul> <li>Incompatible chemicals should be stored separately;</li> </ul>		
			<ul> <li>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</li> </ul>		
			<ul> <li>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.</li> </ul>		
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	1
10.5.1.21	7.1	-	The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	1
			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	Mitigation Measures
				Timing of completion of measures	Implemented?^
			<ul> <li>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.</li> </ul>		C – Completed in Jan 2018
			<ul> <li>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.</li> </ul>	_	l *(CAR for golf course and Terminal 2 emergency power supply system nos.1, 2, 3, 4 and 5 were submitted to EPD)
			<ul> <li>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.</li> </ul>		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
			<ul> <li>To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed;</li> </ul>		was found.
			<ul> <li>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;</li> </ul>		
			<ul> <li>Stockpiling of contaminated excavated materials on site should be avoided as far as possible;</li> </ul>		
			<ul> <li>The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out;</li> </ul>		
			<ul> <li>Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater;</li> </ul>		
			<ul> <li>Truck bodies and tailgates should be sealed to prevent any discharge;</li> </ul>		
			<ul> <li>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;</li> </ul>		
			<ul> <li>Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit;</li> </ul>		
			<ul> <li>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</li> </ul>		
			<ul> <li>Maintain records of waste generation and disposal quantities and disposal arrangements.</li> </ul>		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of 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 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretry  The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry;	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
			<ul> <li>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</li> </ul>		
			The containment pit at the daylighting location shall be covered or camouflaged.		
12.7.2.5	9.1	2.30	<ul> <li>Preservation of Nesting Vegetation</li> <li>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.</li> </ul>	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season  All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
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
			<ul> <li>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;</li> </ul>	_	1
			<ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;</li> </ul>		C – Completed in Oct 2021 for new approach lights
			<ul> <li>Avoid bored piling during CWD peak calving season (Mar to Jun);</li> </ul>		N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			Prohibition of underwater percussive piling; and	-	1
			<ul> <li>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.</li> </ul>	-	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			<ul> <li>Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;</li> </ul>	the construction phase	I
		<ul> <li>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);</li> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul>		I	
			<ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul>		C – Completed in Oct 2021 for new approach lights
			<ul> <li>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.</li> </ul>	-	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	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
			Timing of completion of measures	Implemented?^	
			<ul> <li>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;</li> </ul>		
			<ul> <li>Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works;</li> </ul>		
			<ul><li>Fines for infractions should be implemented; and</li></ul>		
			<ul> <li>Unscheduled, on-site audits shall be implemented.</li> </ul>		
13.11.1.13	-	-	<ul> <li>Good Construction Site Practices</li> <li>Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;</li> <li>Keep the number of working or stationary vessels present on-site to the minimum anytime; and</li> <li>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.</li> </ul>	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	<ul> <li>Minimisation of Land Formation Area</li> <li>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.</li> </ul>	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  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	Area between the footprint and SCLKC Marine Park during	1
			Zhuhai and Macau; and  The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	construction phase	C – Completed ii Sep 2016
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<ul> <li>Dolphin Exclusion Zone</li> <li>Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;</li> </ul>	Marine waters around land formation works area during construction phase	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			<ul> <li>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</li> </ul>		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
			<ul> <li>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</li> </ul>	area during construction phase	
			<ul> <li>Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.</li> </ul>		
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			<ul> <li>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).</li> </ul>	west of Lantau Island during construction phase	
			<ul> <li>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.</li> </ul>		
			Fisheries Impact – Construction Phase		
14.9.1.2 to	-		Minimisation of Land Formation Area	Land formation	1
14.9.1.5			<ul> <li>Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.</li> </ul>	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
			<ul> <li>Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;</li> </ul>	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?^
			<ul> <li>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;</li> </ul>		I
			<ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul>	-	C – Completed in Oct 2021 for new approach lights
					N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			<ul> <li>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.</li> </ul>	-	C – Completed in Jan 2019 for HDD works
14.9.1.11	-		Strict Enforcement of No-Dumping Policy	All works area during	I
			<ul> <li>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;</li> </ul>	the construction phase	
			<ul> <li>Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works;</li> </ul>		
			<ul><li>Fines for infractions should be implemented; and</li></ul>		
			<ul> <li>Unscheduled, on-site audits shall be implemented.</li> </ul>		
14.9.1.12	-		Good Construction Site Practices	All works area during	1
			<ul> <li>Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;</li> </ul>	the construction phase	
			<ul> <li>Keep the number of working or stationary vessels present on-site to the minimum anytime; and</li> </ul>		
			<ul> <li>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.</li> </ul>		
14.9.1.13	-		Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	I
to 14.9.1.18			<ul> <li>Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;</li> </ul>	the construction phase	
			• 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?^
			<ul> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul>	_	C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			<ul> <li>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.</li> </ul>		C – Completed on Jan 2019 for HDD work
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	<b>CM1</b> - The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	<b>CM4</b> - Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM5 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. — may be disassembled in phases.	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	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	-	<b>CM7</b> - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and	I
Table 15.6	12.3	-	<b>CM8</b> - All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall	All existing trees to be retained;	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	-	<b>CM9</b> - 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;	I
			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	-	<b>CM10</b> - Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around	To be implemented
				runways and verges/Duration of works;	*(The advanced hydroseeding works around taxiways and
				Upon handover and completion of works.	runways were partially completed at this stage and would resume in next phase)
			Cultural Heritage Impact – Construction Phase		
			Not applicable to the construction stage of this project.		
			Health Impact – Aircraft Emissions		



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

#### Notes:

<sup>&</sup>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.

<sup>&</sup>quot;I" Implemented and on-going where applicable.

<sup>&</sup>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

May-23

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
		Site Inspection	Site Inspection	Site Inspection	Site Inspection	
				NM4, NM6	AR1A, AR2 NM1A, NM5	
				NIVI4, NIVIO	NMTA, NM5	
		WQ General & Regular DCM		CWD Survey (Vessel)		WO 0
		mid-ebb: 11:2	6	WQ General & Regular DCM mid-ebb: 12:20	0	WQ General & Regular DCM mid-ebb: 13:24
	_	mid-flood: 05:2	1	mid-flood: 06:03	3	mid-flood: 06:51
7	8 Cita Innocation	9 Sita Ingrastian	10	11	12	13
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
				AR1A, AR2		
				NM1A, NM5	NM4, NM6	
	CWD Survey (Land-based)	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)		
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 15:2' mid-flood: 08:2'	9 3	mid-ebb: 17:18 mid-flood: 04:46		mid-ebb: 08:29 mid-flood: 12:52
14	15	16	17	18	19	20
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
			AD44 AD0			
			AR1A, AR2 NM1A, NM5	NM4, NM6		
	OWD 0	04/0 0				
	CWD Survey (Vessel)	CWD Survey (Vessel) WQ General & Regular DCM		CWD Survey (Vessel) WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 11:0 mid-flood: 16:5		mid-ebb: 12:16 mid-flood: 05:46		mid-ebb: 13:29 mid-flood: 06:38
21	22	23	24	25	26	27
	Site Inspection	Site Inspection	Site Inspection	Site Inspection		
		AD4A AD0				
	NM4, NM6	AR1A, AR2 NM1A, NM5				
	CIMD Common (Manager)	CIAID Common (Lond boood)				
	CWD Survey (Vessel)	CWD Survey (Land-based) WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 15:2 mid-flood: 08:0		mid-ebb: 16:44 mid-flood: 04:20		mid-ebb: 18:24 mid-flood: 05:59
28	29	mid-flood: 08:0 30	31	mid-1100d: 04:20	0	mid-flood: 05:59
	Site Inspection	Site Inspection	Site Inspection			
	AR1A, AR2					
	NM1A, NM5					
		WQ General & Regular DCM				
		mid-ebb: 10:00 mid-flood: 15:4				
		Notes:				
		CWD - Chinese White Dolphin				
		OVVD - Stillese Write Dolpfill	NM1A/AR1A - Man Tung Road Park			
		Air quality and Noise Monitoring Station	NM4 - Ching Chung Hau Po Woon Primary NM5/AR2 - Village House, Tin Sum	School		
			NM6 - House No. 1, Sha Lo Wan			
		WQ - Water Quality				

# Tentative Monitoring Schedule of Next Reporting Period

## Jun-23

			3011 20			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Site Inspection	2 Site Inspection	3
				NM4, NM6 CWD Survey (Vessel)	CWD Survey (Vessel)	AR1A, AR2
				WQ General & Regular DCM mid-ebb: 11:13 mid-flood: 17:43		WQ General & Regular DCM mid-ebb: 12:24 mid-flood: 19:29
4	5 Site Inspection	Site Inspection	7	8 Site Inspection	9 Site Inspection	10
	CWD Survey (Vessel)	CWD Survey (Vessel) WQ General & Regular DCM	CWD Survey (Land-based)	NM4, NM6  CWD Survey (Vessel)  WQ General & Regular DCM	AR1A, AR2 NM1A, NM5 CWD Survey (Vessel)	WQ General & Regular DCM
		mid-ebb: 14:36 mid-flood: 07:26		mid-ebb: 16:16 mid-flood: 08:58		mid-ebb: 06:29 mid-flood: 11:13
11	12 Site Inspection	13 Site Inspection	14	15 Site Inspection	16 Site Inspection	17
		CWD Survey (Vessel)	CWD Survey (Vessel)	AR1A, AR2 NM1A, NM5	NM4, NM6	
		WQ General & Regular DCM mid-ebb: 09:48 mid-flood: 15:34		WQ General & Regular DCM mid-ebb: 11:16 mid-flood: 04:29		WQ General & Regular DCM mid-ebb: 12:35 mid-flood: 05:29
18	19 Site Inspection	Site Inspection	21 Site Inspection	22	23 Site Inspection	24
	CWD Survey (Land-based)		AR1A, AR2 NM1A, NM5		NM4, NM6	
25	26	WQ General & Regular DCM mid-ebb: 14:29 mid-flood: 07:07  27	28	WQ General & Regular DCM mid-ebb: 15:42 mid-flood: 08:17  29	30	WQ General & Regular DCM mid-ebb: 16:56 mid-flood: 09:39
25	Site Inspection	Site Inspection	20	Site Inspection	Site Inspection	
		AR1A, AR2 NM1A, NM5 WQ General & Regular DCM		NM4, NM6  WQ General & Regular DCM		
		mid-ebb: 08:01 mid-flood: 13:25 Notes:		mid-ebb: 09:50 mid-flood: 16:30		
		CWD - Chinese White Dolphin  Air quality and Noise Monitoring Station  WQ - Water Quality	NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Prim NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan	nary School		

## **Appendix C.** Monitoring Results

Mott MacDonald   Expansion of Hong Kong International Airport into a Three-Runway System Construction Phase Monthly EM&A Report No. 89 (For May 2023)

**Air Quality Monitoring Results** 

#### 1-hour TSP Results

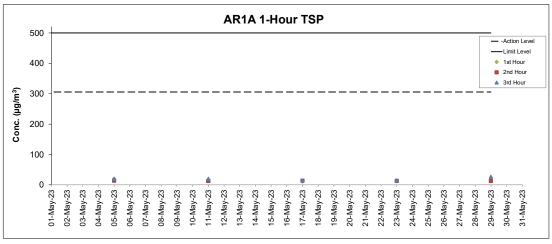
#### Station: AR1A- Man Tung Road Park

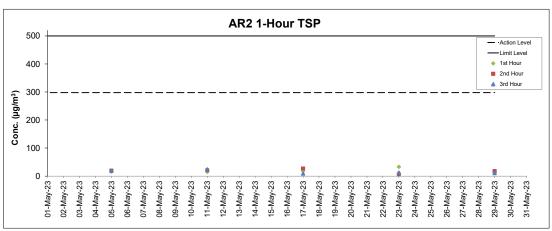
Date	Time	Weather	Wind Speed (m/s)	Wind Direction	1-hr TSP (μg/m³)	Action Level	Limit Level
			, , , ,	(deg)	- (1-0/ /	(μg/m³)	(μg/m³)
5-May-23	8:16	Cloudy	5.3	143	20	306	500
5-May-23	9:16	Cloudy	4.7	144	14	306	500
5-May-23	10:16	Cloudy	4.4	143	20	306	500
11-May-23	8:47	Cloudy	7.2	80	13	306	500
11-May-23	9:47	Cloudy	7.8	84	13	306	500
11-May-23	10:47	Cloudy	7.2	83	20	306	500
17-May-23	9:49	Cloudy	4.4	112	11	306	500
17-May-23	10:49	Cloudy	1.7	136	14	306	500
17-May-23	11:49	Cloudy	4.2	113	15	306	500
23-May-23	9:37	Cloudy	2.8	321	13	306	500
23-May-23	10:37	Cloudy	4.7	45	13	306	500
23-May-23	11:37	Cloudy	3.1	58	15	306	500
29-May-23	8:20	Sunny	2.2	44	23	306	500
29-May-23	9:20	Sunny	2.5	328	13	306	500
29-May-23	10:20	Sunny	2.8	274	27	306	500

#### 1-hour TSP Results

Station: AR2- Village House, Tin Sum

Station: AKZ- Villag	e nouse, IIII	Sum					
Date	Time	Weather	Wind Speed (m/s)	Wind Direction	1-hr TSP (μg/m³)	Action Level	Limit Level
Date	Tillie	weather	willu speeu (III/s)	(deg)	1-nr 15P (μg/m )	(μg/m³)	(μg/m³)
5-May-23	12:38	Cloudy	3.3	140	16	298	500
5-May-23	13:38	Cloudy	4.2	159	20	298	500
5-May-23	14:38	Cloudy	4.2	141	19	298	500
11-May-23	12:57	Cloudy	6.4	84	15	298	500
11-May-23	13:57	Cloudy	5.8	95	21	298	500
11-May-23	14:57	Cloudy	3.9	76	24	298	500
17-May-23	14:11	Cloudy	5.6	198	18	298	500
17-May-23	15:20	Cloudy	6.4	203	27	298	500
17-May-23	16:20	Cloudy	6.1	205	9	298	500
23-May-23	15:23	Cloudy	7.8	100	33	298	500
23-May-23	16:23	Cloudy	7.8	101	6	298	500
23-May-23	17:23	Cloudy	7.8	91	13	298	500
29-May-23	12:11	Sunny	3.1	260	12	298	500
29-May-23	13:11	Sunny	3.1	260	18	298	500
29-May-23	14:11	Sunny	3.1	253	11	298	500





- Indicate In Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.

  2. Weather conditions during monitoring are presented in the data tables above.

  3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

## **Noise Monitoring Results**

#### **Noise Measurement Results**

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured	Measured	1 2000 6
Date	weather	Time	<b>L</b> <sub>10</sub> dB(A)	<b>L</b> <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
5-May-23	Cloudy	9:02	57.7	54.0	
5-May-23	Cloudy	9:07	57.9	54.0	
5-May-23	Cloudy	9:12	58.4	53.7	59
5-May-23	Cloudy	9:17	57.8	54.0	] 39
5-May-23	Cloudy	9:22	56.9	53.6	
5-May-23	Cloudy	9:27	57.2	53.6	
11-May-23	Cloudy	8:13	60.2	55.8	
11-May-23	Cloudy	8:18	60.8	55.8	
11-May-23	Cloudy	8:23	60.3	56.1	61
11-May-23	Cloudy	8:28	60.5	56.5	7 61
11-May-23	Cloudy	8:33	59.3	55.3	
11-May-23	Cloudy	8:38	60.3	56.3	
17-May-23	Cloudy	7:57	60.2	56.9	
17-May-23	Cloudy	8:02	61.0	56.8	
17-May-23	Cloudy	8:07	60.8	56.4	62
17-May-23	Cloudy	8:12	60.8	56.0	02
17-May-23	Cloudy	8:17	60.1	56.2	
17-May-23	Cloudy	8:22	61.3	56.2	
23-May-23	Cloudy	10:09	60.8	56.9	
23-May-23	Cloudy	10:14	61.0	56.8	
23-May-23	Cloudy	10:19	59.8	56.2	62
23-May-23	Cloudy	10:24	60.0	56.0	02
23-May-23	Cloudy	10:29	60.8	56.3	
23-May-23	Cloudy	10:34	61.3	56.1	
29-May-23	Sunny	9:37	64.8	60.4	
29-May-23	Sunny	9:42	65.1	61.4	
29-May-23	Sunny	9:47	64.3	61.0	66
29-May-23	Sunny	9:52	64.3	60.6	00
29-May-23	Sunny	9:57	63.6	60.6	
29-May-23	Sunny	10:02	63.3	59.9	

#### **Noise Measurement Results**

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured	Measured	Ι
Date	Weather	Tille	<b>L</b> <sub>10</sub> dB(A)	<b>L</b> <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
4-May-23	Sunny	13:22	68.1	57.7	
4-May-23	sunny	13:27	61.4	57.3	
4-May-23	sunny	13:32	65.5	58.0	65
4-May-23	sunny	13:37	62.2	57.6	03
4-May-23	sunny	13:42	62.9	57.5	
4-May-23	sunny	13:47	63.1	58.1	
12-May-23	Overcast	11:23	64.3	59.3	
12-May-23	Overcast	11:28	60.9	57.4	
12-May-23	Overcast	11:33	61.1	57.1	63
12-May-23	Overcast	11:38	61.1	56.9	03
12-May-23	Overcast	11:43	60.7	56.0	
12-May-23	Overcast	11:48	60.7	57.6	
18-May-23	Sunny	13:45	60.5	55.7	
18-May-23	Sunny	13:50	59.8	55.8	
18-May-23	Sunny	13:55	59.9	55.8	61
18-May-23	Sunny	14:00	59.5	55.6	] 01
18-May-23	Sunny	14:05	59.7	56.6	1
18-May-23	Sunny	14:10	58.9	55.2	1
22-May-23	Sunny	9:45	60.2	56.2	
22-May-23	Sunny	9:50	60.1	56.5	]
22-May-23	Sunny	9:55	59.5	55.8	62
22-May-23	Sunny	10:00	61.4	57.3	] 02
22-May-23	Sunny	10:05	60.5	56.7	]
22-May-23	Sunny	10:10	60.9	57.7	]
Remarks:					

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

Remarks:

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

(\*) The measurement result was corrected with reference to the baseline monitoring levels.

#### **Noise Measurement Results**

Station: NM5- Village House. Tin Sum

		T	Measured	Measured	
Date	Weather	Time	<b>L</b> <sub>10</sub> dB(A)	L <sub>sn</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
5-May-23	Cloudy	13:08	69.8	55.3	
5-May-23	Cloudy	13:13	67.6	53.9	
5-May-23	Cloudy	13:18	68.9	54.2	67*
5-May-23	Cloudy	13:23	70.1	53.8	7 6/*
5-May-23	Cloudy	13:28	65.6	52.2	
5-May-23	Cloudy	13:33	57.6	51.8	
11-May-23	Cloudy	12:33	64.5	57.1	
11-May-23	Cloudy	12:38	63.9	58.1	
11-May-23	Cloudy	12:43	64.3	58.3	65*
11-May-23	Cloudy	12:48	65.9	58.9	7 65"
11-May-23	Cloudy	12:53	64.8	58.8	
11-May-23	Cloudy	12:58	66.3	58.0	
17-May-23	Cloudy	13:05	63.0	59.5	
17-May-23	Cloudy	13:10	63.6	59.3	
17-May-23	Cloudy	13:15	63.4	59.5	64*
17-May-23	Cloudy	13:20	63.1	59.2	] 04
17-May-23	Cloudy	13:25	62.4	59.4	
17-May-23	Cloudy	13:30	63.1	59.5	
23-May-23	Clouudy	13:15	56.9	51.6	
23-May-23	Clouudy	13:20	55.9	52.5	
23-May-23	Clouudy	13:25	56.5	52.9	58
23-May-23	Clouudy	13:30	55.9	52.3	7 36
23-May-23	Clouudy	13:35	56.7	52.7	
23-May-23	Clouudy	13:40	55.3	52.0	
29-May-23	Sunny	13:25	63.1	58.5	
29-May-23	Sunny	13:30	63.1	59.2	
29-May-23	Sunny	13:35	62.6	59.5	62*
29-May-23	Sunny	13:40	62.9	59.0	02.
29-May-23	Sunny	13:45	62.8	58.6	
29-May-23	Sunny	13:50	62.2	58.7	

#### **Noise Measurement Results**

Station: NM6- House No.1 Sha Lo Wan

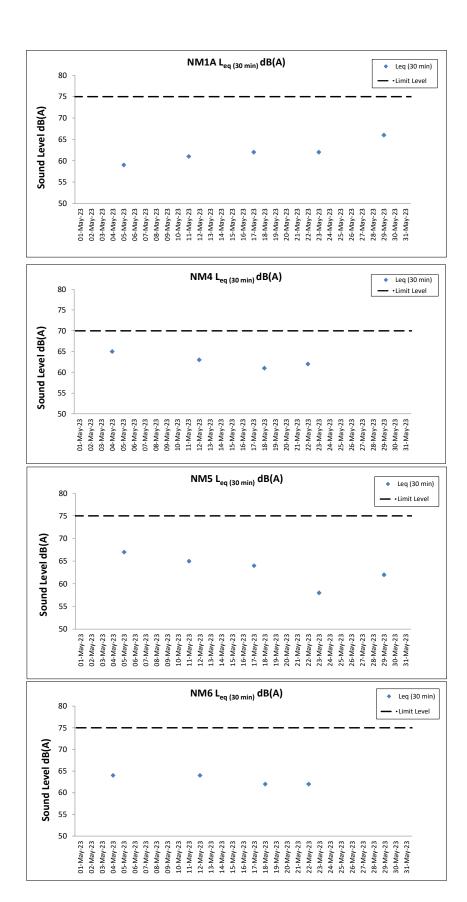
Date	Weather	Time	Measured	Measured	
Date	weather	Time	<b>L</b> <sub>10</sub> dB(A)	<b>L</b> <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
4-May-23	Sunny	15:51	63.4	50.0	
4-May-23	Sunny	15:56	68.5	48.4	
4-May-23	Sunny	16:01	62.7	48.8	64
4-May-23	Sunny	16:06	65.3	51.4	- 04
4-May-23	Sunny	16:11	60.9	47.4	
4-May-23	Sunny	16:16	59.2	46.5	
12-May-23	Overcast	9:51	64.4	57.8	
12-May-23	Overcast	9:56	61.4	57.4	
12-May-23	Overcast	10:01	63.1	57.6	64
12-May-23	Overcast	10:06	60.7	57.5	04
12-May-23	Overcast	10:11	60.8	57.0	
12-May-23	Overcast	10:16	60.9	57.7	
18-May-23	Sunny	15:36	66.9	49.2	
18-May-23	Sunny	15:41	64.8	46.8	
18-May-23	Sunny	15:46	59.5	48.7	62*
18-May-23	Sunny	15:51	63.2	47.7	02
18-May-23	Sunny	15:56	71.8	49.5	
18-May-23	Sunny	16:01	58.3	46.9	
22-May-23	Sunny	12:05	60.9	57.0	
22-May-23	Sunny	12:10	60.7	55.7	
22-May-23	Sunny	12:15	61.4	56.9	62
22-May-23	Sunny	12:20	61.4	56.4	] 02
22-May-23	Sunny	12:25	62.2	56.8	
22-May-23	Sunny	12:30	59.6	55.8	

Remarks:

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

(\*) The measurement result was corrected with reference to the baseline monitoring levels.

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



#### Notes

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

Wate	r Quality	<b>Monit</b>	oring R	esults		

Mott MacDonald | Expansion of Hong Kong International Airport into a Three-Runway System Construction Phase Monthly EM&A Report No. 89 (For May 2023)

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

Water Quality Monitoring Results on 02 May 23 during Mid-Ebb Tide

Water Quar	ity wont	oring Resu	112 011		02 May 23	auring Mia-	EDD HUG	;																
Monitoring	Weather	Sea	Sampling	Water	Sampling Deptl	n (m)	Current Speed	Current	Water Te	emperature (°C)	pН		Salinity	y (ppt)		aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Depti	1 (111)	(m/s)	Direction	Value	Average	Value Aver	age Va	/alue	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	209	24.0	24.0	8.3	3	31.9	31.9	111.8	111.6	7.8		2.4		6			
					Surface	1.0	0.3	213	24.0	24.0	8.3	3	31.9	31.9	111.4	0.111	7.8	7.7	2.4		7			
C1	Classida	Madazata	44.40	8.2	Middle	4.1	0.3	213	24.0	24.0	8.3 8.	3	32.0	32.0	107.9	108.0	7.5	1.1	2.0	2.3	6	5	045000	804253
Ci	Cloudy	Moderate	11:13	8.2	ivildale	4.1	0.3	218	24.0	24.0	8.3	3	32.0	32.0	108.1	108.0	7.5		1.9	2.3	4	э	815628	804253
					Bottom	7.2	0.4	206	24.0	24.0	8.3 8.	, 3	32.0	32.0	108.9	109.2	7.6	7.6	2.5		5			
					Bottom	7.2	0.3	208	24.0	24.0	8.3 8.3	3	32.0	32.0	108.9 109.4	109.2	7.6	7.6	2.7		4			
					Surface	1.0	0.2	160	24.7	24.7	8.2		29.5	29.5	113.2 112.5	112.9	7.9		3.3		4			
					Surface	1.0	0.2	162	24.7	24.7	8.2	2	29.5	29.5	112.5	112.9	7.9	7.5	3.4		4			
C2	Cloudy	Moderate	09:41	12.2	Middle	6.1	0.2	178	24.0	24.0	8.2	, 3	32.9	32.9	100.4	100.4	7.0	7.5	4.4	4.6	5	5	825698	806933
02	Cloudy	Moderate	09.41	12.2	ivildale	6.1	0.1	182	24.0	24.0	8.2	3	33.0	32.9	100.3	100.4	7.0		4.6	4.0	5	3	023090	000933
					Bottom	11.2	0.1	175	24.0	24.0	8.2 8.2		33.0	32.9	95.4 96.0	95.7	6.6	6.7	6.2		5			
					Bottom	11.2	0.1	180	24.0	24.0	8.2	3	32.9	32.9	96.0	95.7	6.7	6.7	5.5		5			
					Surface	1.0	0.3	68	23.2	23.2	8.2		30.3	30.3	126.1	126.1	9.1		2.2		6			
					Surface	1.0	0.3	63	23.2	23.2	8.2	3	30.3	30.3	126.1	120.1	9.1	8.8	2.2		5			
C3	Fine	Rough	11:33	10.2	Middle	5.1	0.3	82	23.1	23.1	8.1		30.3	30.3	118.9	118.9	8.6	0.0	1.8	2.1	5	5	822085	817795
U3	FILLE	Rough	11.33	10.2	ivildale	5.1	0.4	87	23.1	23.1	8.1	3	30.3	30.3	118.8	110.9	8.5		1.9	2.1	5	3	622063	617795
					Bottom	9.2	0.4	60	23.0	23.0	8.1 8.1		30.5	30.5	111.4 111.3	111.4	8.0	8.0	2.4		5			
					Bottom	9.2	0.4	60	23.0	23.0	8.1	3	30.5	30.5	111.3	111.4	8.0	6.0	2.4		5			
					Surface	1.0	0.2	169	24.1	24.1	8.4		31.9	31.9	112.5	112.3	7.8		3.8		5			
					Surface	1.0	0.1	169	24.0	24.1	8.4	3	32.0	31.9	112.0	112.3	7.8	7.7	3.8		4			
IM1	Cloudy	Moderate	10:51	6.1	Middle	3.1	0.2	188	24.0	24.0	8.3		32.2	32.2	107.6	107.4	7.5	7.7	4.3	3.9	5	5	818357	806475
IIVI	Cloudy	Woderate	10.51	0.1	Wildale	3.1	0.2	190	24.0	24.0	8.3	3	32.2	52.2	107.1	107.4	7.5		4.4	5.5	5	5	010007	000473
					Bottom	5.1	0.2	168	24.0	24.0	8.3	3	32.3	32.3	101.9	101.9	7.1	7.1	3.5		7			
					Bottom	5.1	0.2	171	24.0	24.0	8.3	3	32.3	52.5	101.9	101.3	7.1	7.1	3.5		6			
					Surface	1.0	0.1	183	24.1	24.1	8.3		31.7	31.7	111.0	110.8	7.7		3.0		5			
					Gunace	1.0	0.1	177	24.1	24.1	8.3	3	31.7	51.7	110.5	110.0	7.7	7.5	3.1		6			
IM2	Cloudy	Moderate	10:46	6.5	Middle	3.3	0.1	195	24.0	24.0	8.3		32.0	32.0	105.1	105.1	7.3	7.5	5.2	4.5	5	5	819202	806242
IIVIZ	Cloudy	Woderate	10.40	0.5	Wildele	3.3	0.2	199	24.0	24.0	8.3	3	32.0	32.0	105.1	103.1	7.3		5.2	4.5	6	3	013202	000242
					Bottom	5.5	0.1	201	24.0	24.0	8.3 8.3		32.0	32.0	105.7 106.0	105.9	7.4	7.4	5.2		5			
					Bottom	5.5	0.1	195	24.0	24.0	8.3	3	32.0	32.0	106.0	100.0	7.4	7.4	5.1		5			
					Surface	1.0	0.2	116	24.1	24.1	8.3		31.2	31.3	114.8	114.6	8.0		4.6	1	5			
					Odridoo	1.0	0.2	116	24.1	27.1	8.3	3	31.4	31.0	114.4	114.0	8.0	7.7	4.7	1	4			
IM7	Cloudy	Moderate	10:17	7.5	Middle	3.8	0.2	121	24.0	24.0	8.3		31.8	31.7	106.4	106.4	7.4		5.7	5.1	4	5	821369	806851
	Cloudy	Moderate	10.17	7.0	Middle	3.8	0.2	125	24.0	27.0	8.3	3	31.7	31.7	106.4	100.7	7.4		5.6	J 5.1	5	J	021009	000001
					Bottom	6.5	0.1	122	24.1	24.1	8.3 8.3		31.5	31.4	107.1	107.3	7.5	7.5	5.1	1	5			
					Bottom	6.5	0.1	126	24.1	2-7.1	8.3	3	31.3	31.4	107.5	107.0	7.5	7.0	4.8		5			

DA: Depth-Averaged

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

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

Water Quality Monitoring Results on 02 May 23 during Mid-Ebb Tide

Water Quar	ity illoint	orning reduce	1113 011		UZ IVIAY ZS	during wild-																		
Monitoring	Weather	Sea	Sampling	Water		h ()	Current Speed	Current	Water Te	emperature (°C)		рН	Salini	ity (ppt)		aturation (%)	Disso Oxyg		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	i	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					0.1	1.0	0.3	93	23.4	00.4	8.2		28.3		129.4	400.4	9.4		1.7		4			
					Surface	1.0	0.3	94	23.4	23.4	8.2	8.2	28.3	28.3	129.4	129.4	9.4		1.7		5			
						4.5	0.3	92	23.4		8.2		28.5		127.5	407.5	9.2	9.3	1.8		5	_		
IM10	Fine	Rough	09:48	8.9	Middle	4.5	0.3	91	23.4	23.4	8.2	8.2	28.4	28.4	127.4	127.5	9.2		1.7	2.2	5	5	822248	809834
						7.9	0.3	82	23.3		8.1		29.3		115.1		8.3		3.2		5			
					Bottom	7.9	0.2	85	23.3	23.3	8.1	8.1	29.3	29.3	115.0	115.1	8.3	8.3	3.3		4			
					0 (	1.0	0.5	93	23.4		8.2		28.2		123.3	400.0	8.9		2.0		6			ĺ
					Surface	1.0	0.4	86	23.4	23.4	8.2	8.2	28.2	28.2	123.2	123.3	8.9	0.7	2.1		5			
18444	F1	Daniel	40.04	7.0	NAC-L-III-	3.9	0.4	79	23.3	00.0	8.1	0.4	28.6	00.0	115.8	445.7	8.4	8.7	2.4		6	•	004500	040500
IM11	Fine	Rough	10:04	7.8	Middle	3.9	0.4	77	23.3	23.3	8.1	8.1	28.6	28.6	115.5	115.7	8.4		2.5	3.1	5	6	821500	810530
					Deller	6.8	0.5	77	23.1	00.4	8.1	0.4	29.9	00.0	105.4	405.4	7.6	7.0	4.8		7			
					Bottom	6.8	0.5	70	23.1	23.1	8.1	8.1	29.9	29.9	105.4	105.4	7.6	7.6	4.7		6			
					0(	1.0	0.4	102	23.4	00.4	8.2	0.0	28.2	00.0	124.4	404.0	9.0		1.9		5			
					Surface	1.0	0.4	103	23.4	23.4	8.2	8.2	28.2	28.2	124.1	124.3	9.0	0.0	1.9		5			
11.440	F1	Darrat	40.00	7.5	NAC-1-III-	3.8	0.5	114	23.4	00.4	8.2	0.4	28.3	00.0	120.5	400.4	8.7	8.9	2.2	0.5	4	-	004400	044500
IM12	Fine	Rough	10:09	7.5	Middle	3.8	0.5	118	23.4	23.4	8.1	8.1	28.3	28.3	120.3	120.4	8.7		2.2	2.5	5	5	821169	811528
					Deller	6.5	0.4	98	23.2	00.0	8.1	0.4	29.6	00.5	112.3	440.5	8.1	0.4	3.4		5			
					Bottom	6.5	0.4	103	23.2	23.2	8.1	8.1	29.5	29.5	112.6	112.5	8.1	8.1	3.4		4			
					0	1.0	0.0	128	23.4	00.4	8.2	0.0	28.0	00.0	125.3	405.0	9.1		2.3		4			
					Surface	1.0	0.1	135	23.4	23.4	8.2	8.2	28.0	28.0	125.3	125.3	9.1	0.4	2.3		6			
SR1A	Fin a	Moderate	40.45	F 2	Middle	2.6	0.0	153	-		-		-		-		-	9.1	-	2.5	-	5	040070	040004
SKIA	Fine	woderate	10:45	5.2	ivildale	2.6	0.0	159	-	-	-	1 -	-	-	-	-	-		-	2.5	-	э	819979	812664
					Bottom	4.2	0.0	129	23.3	23.3	8.2	0.2	28.5	28.5	119.8	119.9	8.7	8.7	2.6		4			
					DOLLOTT	4.2	0.0	123	23.3	23.3	8.2	8.2	28.5	20.5	119.9	119.9	8.7	0.7	2.6		5			
					Surface	1.0	0.5	43	23.0	23.0	8.1	8.1	30.3	30.3	113.1	113.0	8.2		2.2		5			
					Surface	1.0	0.5	48	23.0	25.0	8.1	0.1	30.3	30.3	112.9	113.0	8.1	8.2	2.2		5			
SR2	Fine	Moderate	11:03	4.8	Middle	-	0.4	28	-	_	-		-		-		-	0.2	-	2.3	-	5	821477	814177
ONZ	1 1110	Moderate	11.03	4.0	Wildale	-	0.4	23	-		-		-		-	_	-		-	2.5	-	3	021477	014177
					Bottom	3.8	0.4	67	23.0	23.0	8.1	8.1	30.4	30.4	111.6	111.6	8.0	8.0	2.4		5			
					Dottom	3.8	0.5	69	23.0	25.0	8.1	0.1	30.4	30.4	111.5	111.0	8.0	0.0	2.5		6			
					Surface	1.0	0.3	154	25.1	25.1	8.2	8.2	29.3	29.3	117.6	117.5	8.2		3.2		5			
					Curiaco	1.0	0.3	146	25.1	20.1	8.2	0.2	29.3	20.0	117.4	117.0	8.2	7.9	3.3		5			
SR3	Cloudy	Moderate	10:06	9.2	Middle	4.6	0.2	161	24.4	24.4	8.2	8.2	32.4	32.3	109.0	109.0	7.6	1.0	4.4	4.0	5	5	822142	807591
Orto	Cioday	Woderate	10.00	0.2	Wildele	4.6	0.2	157	24.4	23.3	8.2	0.2	32.3	02.0	109.0	100.0	7.6		4.4	4.0	5	J	022142	007001
					Bottom	8.2	0.3	150	24.3	24.3	8.2	8.2	32.7	32.7	101.9	101.9	7.1	7.1	4.5		5			
					Bottom	8.2	0.3	148	24.3	24.0	8.2	0.2	32.7	02.1	101.9	101.0	7.1	,	4.4		5			
					Surface	1.0	0.1	79	24.1	24.1	8.4	8.4	31.9	31.9	118.3	118.3	8.2		9.5		5			
					Cundoo	1.0	0.1	77	24.1		8.4	0	31.9	01.0	118.2		8.2	8.0	9.5		6			
SR4A	Cloudy	Moderate	11:40	9.4	Middle	4.7	0.0	81	24.0	24.0	8.3	8.3	32.3	32.3	111.0	111.0	7.7		4.4	6.1	5	5	817186	807825
0	Cioday	moderate		0	maaio	4.7	-	85	24.0	20	8.3	0.0	32.3	02.0	111.0		7.7		4.4	0	5	ŭ	011100	00.020
					Bottom	8.4	0.0	66	24.0	24.0	8.3	8.3	32.3	32.3	112.7	112.9	7.8	7.9	4.3		5			
			1			8.4	0.0	69	24.0	-	8.3		32.3		113.0		7.9		4.4		4			
					Surface	1.0	-	-	23.3	23.3	8.2	8.2	28.8	28.8	118.1	118.2	8.5		2.8		6			
						1.0	-	-	23.3		8.2		28.7		118.3		8.6	8.6	2.7	1	5			
SR8	Fine	Moderate	10:16	5.6	Middle	-	-	-	-	-	-		-	-	-	-	-		-	3.3	-	6	820382	811627
						-	-	-	-		-		-		-		-		-		-	-		
					Bottom	4.6	-	-	23.2	23.2	8.1	8.1	29.5	29.5	109.0	109.0	7.9	7.9	3.8		5			
				1		4.6	-	-	23.2		8.1	1	29.5		108.9		7.9		3.8		6			l

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

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

Water Quality Monitoring Results on 02 May 23 during Mid-Flood Tide

	ity ivioint				OL May 20	auring ima		-	_															1
Monitoring	Weather	Sea	Sampling	Water	Sampling Deptl	n (m)	Current Speed	Current	Water To	emperature (°C)	1	рН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Gampling Depti	· ()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	41	23.8	23.8	8.3	8.3	31.6	31.7	116.8	116.4	8.3		2.8		6			
					Surface	1.0	0.3	42	23.8	23.0	8.3	0.3	31.7	31.7	116.0	110.4	8.2	8.0	2.9	1	7			
C1	Cloudy	Moderate	04:49	8.2	Middle	4.1	0.3	52	23.8	23.8	8.3	8.3	31.8	31.8	108.8	108.8	7.7	0.0	5.0	4.3	6	6	815641	804248
Ci	Cloudy	Woderate	04.43	0.2	Middle	4.1	0.3	49	23.8	23.0	8.3	0.5	31.8	31.0	108.8	100.0	7.7		5.0	4.3	7	0	813041	004240
					Bottom	7.2	0.4	22	23.8	23.8	8.3	8.3	31.8	31.8	110.0	110.2	7.8	7.8	4.9		6			
					Bottom	7.2	0.3	24	23.8	25.0	8.3	0.3	31.8	31.0	110.4	110.2	7.8	7.0	4.9		6			
					Surface	1.0	0.4	338	24.4	24.4	8.2	8.2	27.0	27.2	115.3	115.3	8.2		3.0		5			
					Ourlace	1.0	0.4	333	24.3	24.4	8.2	0.2	27.3	21.2	115.3	110.0	8.2	7.7	3.1		4			
C2	Cloudy	Moderate	06:32	11.7	Middle	5.9	0.4	347	23.7	23.7	8.2	8.2	29.5	29.5	100.4	100.4	7.2		3.9	3.9	6	5	825673	806926
02	Cioday	moderate	00.02		da.c	5.9	0.3	341	23.7	20	8.2	0.2	29.5	20.0	100.4		7.2		3.9	0.0	6		0200.0	000020
					Bottom	10.7	0.3	333	23.6	23.6	8.2	8.2	29.8 29.8	29.8	94.6	94.5	6.8	6.8	4.6	_	6			
						10.7	0.3	326	23.5		8.2				94.4		6.7		4.8		5			
					Surface	1.0	0.4	280	23.0	23.0	8.0	8.0	30.7	30.7	110.6	110.5	8.0		2.9	1	4			
						1.0	0.4	285	23.0		8.0		30.7		110.4		7.9	7.6	2.9	4	4			
C3	Fine	Rough	03:52	9.8	Middle	4.9 4.9	0.4	268 261	22.9 22.9	22.9	8.0 7.9	7.9	30.9	30.9	101.6 101.6	101.6	7.3		3.8	3.8	5	5	822126	817795
						8.8	0.4	263	22.9		_								4.6	-	<u>4</u> 5			
					Bottom	8.8	0.3	256	22.9	22.9	7.9 7.9	7.9	30.9	30.9	101.5	101.5	7.3	7.3	4.6	1	6			
						1.0	0.3	7	23.9		8.3		32.0		115.0		8.1		3.3		6			1
					Surface	1.0	0.2	359	23.8	23.9	8.3	8.3	32.0	32.0	114.1	114.6	8.1		3.3	1	7			
						3.3	0.3	-	23.8		8.3		32.2		104.4		7.3	7.7	3.6	1	5	_		
IM1	Cloudy	Moderate	05:14	6.5	Middle	3.3	0.3	352	23.8	23.8	8.3	8.3	32.2	32.2	103.8	104.1	7.3		3.6	3.6	6	6	818339	806461
					Datter.	5.5	0.3	19	23.8	00.0	8.3	0.0	32.1	00.4	102.3	400.0	7.2	7.3	3.8	1	5			
					Bottom	5.5	0.4	24	23.8	23.8	8.3	8.3	32.1	32.1	103.3	102.8	7.3	7.3	3.9	1	4			
					Surface	1.0	0.3	352	23.8	23.8	8.3	8.3	31.5	31.6	117.4	117.1	8.3		3.6		6			
					Surface	1.0	0.3	349	23.8	25.0	8.3	0.5	31.6	31.0	116.7	117.1	8.3	8.0	3.8		6			
IM2	Cloudy	Moderate	05:18	6.7	Middle	3.4	0.3	14	23.8	23.8	8.3	8.3	31.9	31.9	108.2	108.0	7.7	0.0	4.2	4.8	6	5	819201	806249
IIVIZ	Cloudy	Woderate	05.10	0.7	Middle	3.4	0.3	19	23.8	25.0	8.3	0.5	31.9	31.3	107.7	100.0	7.6		4.2	4.0	5	3	013201	000243
					Bottom	5.7	0.2	354	23.8	23.8	8.3	8.3	31.8	31.8	107.4	107.5	7.6	7.6	6.6	_	4			
						5.7	0.3	356	23.8		8.3		31.8		107.5		7.6		6.4		4			
					Surface	1.0	0.1	10	24.1	24.1	8.3	8.3	30.3	30.3	116.1	116.0	8.3		3.2	4	5			
						1.0	0.2	10	24.0		8.3		30.4		115.9		8.3	7.8	3.5	4	5			
IM7	Cloudy	Moderate	05:51	8.3	Middle	4.2	0.1	6	23.8	23.8	8.3	8.3	31.8	31.8	103.3	103.3	7.3		5.2	4.4	5	5	821365	806818
	· ·					4.2	0.1	359	23.8		8.3		31.8		103.2		7.3		5.2	-	5			
					Bottom	7.3 7.3	0.2	344 339	23.8	23.8	8.3	8.3	31.9	31.9	104.0	104.2	7.4	7.4	4.5 4.6	1	<u>6</u> 5			
			l			1.3	0.2	339	23.8		გ.კ		31.9		104.3	l	7.4		4.6	l	5			

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher <u>Value exceeding Action Level is underlined;</u> <u>Value exceeding Limit Level is bolded and underlined</u>

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

Water Quality Monitoring Results on 02 May 23 during Mid-Flood Tide

Water Qua	iity woiiit	oring Resu	1112 011		UZ May 23	auring Mia-	rioou i	iue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspended (mg/l		Coordinate HK Grid	Coordinate HK Grid
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	(Northing)	(Easting)
					Surface	1.0	0.4	293	23.5	23.5	8.2	8.2	28.2	28.2	130.6	130.5	9.4		1.3		6			
					Surface	1.0	0.4	292	23.5	23.5	8.2	0.2	28.2	20.2	130.4	130.3	9.4	9.3	1.4		6			
IM10	Fine	Rough	05:37	8.1	Middle	4.1	0.4	313	23.4	23.4	8.2	8.2	28.6	28.6	125.8	125.6	9.1	3.5	1.9	2.0	6	6	822245	809826
111110	1 1110	rtougn	00.07	0.1	Wildalo	4.1	0.4	316	23.4	20.4	8.2	0.2	28.7	20.0	125.4	120.0	9.1		2.0	2.0	6	Ü	022240	000020
					Bottom	7.1	0.4	285	23.3	23.3	8.2	8.2	29.2	29.2	119.3	119.4	8.6	8.6	2.7		5			
						7.1	0.5	288	23.3		8.2		29.2		119.5		8.6		2.8		4			
					Surface	1.0	0.4	282	23.4	23.4	8.2	8.2	28.2	28.3	127.6	127.5	9.2		1.6		4			
						1.0	0.4	284	23.4		8.2		28.3		127.3		9.2	8.8	1.8		5			
IM11	Fine	Rough	05:21	7.4	Middle	3.7	0.4	292	23.2	23.2	8.1	8.1	29.2	29.2	116.2	116.1	8.4		3.2	2.6	4	5	821501	810563
						3.7	0.4	289	23.2		8.1		29.2		116.0		8.4		3.1		5			
					Bottom	6.4	0.5	285	23.2	23.2	8.1	8.1	29.4	29.4	112.3	112.3	8.1	8.1	3.0		5			
						6.4 1.0	0.4	280	23.2		8.1						8.1		3.0		5			
					Surface	1.0	0.4	273 266	23.3	23.3	8.1 8.1	8.1	29.4	29.4	116.6 116.4	116.5	8.4		2.0		7 6			
						3.6	0.4	275	23.2		8.1		29.4		110.4		7.9	8.2	2.8		6			
IM12	Fine	Rough	05:10	7.1	Middle	3.6	0.4	267	23.1	23.2	8.1	8.1	29.8	29.8	109.7	109.9	7.9		2.8	2.8	5	6	821176	811505
						6.1	0.4	281	23.0		8.1		30.2		101.0		7.3		3.6		5			
					Bottom	6.1	0.4	283	23.0	23.0	8.1	8.1	30.2	30.2	101.2	101.1	7.3	7.3	3.5		4			
						1.0	0.4	177	23.3		8.2		29.0		121.4		8.8		1.5		4			
					Surface	1.0	0.0	179	23.3	23.3	8.2	8.2	29.0	29.0	121.3	121.4	8.8		1.5		6			
						2.3	0.0	174	-		-		-		-		-	8.8	-		-			
SR1A	Fine	Moderate	04:29	4.5	Middle	2.3	0.1	180	-	-	-	-	-	-	_	-	_		_	1.9	_	6	819982	812655
					5	3.5	0.1	168	23.1	00.4	8.1		29.9		114.3		8.2		2.4		6			
					Bottom	3.5	0.0	161	23.1	23.1	8.1	8.1	29.9	29.9	114.3	114.3	8.2	8.2	2.3		6			
					Curfoss	1.0	0.1	260	23.0	22.0	8.0	0.0	30.7	20.7	111.7	444.7	8.0		4.3		4			
					Surface	1.0	0.1	256	23.0	23.0	8.0	8.0	30.7	30.7	111.6	111.7	8.0	8.0	4.3		5			
SR2	Fine	Rough	04:11	4.1	Middle	-	0.1	240	-	_	-		-		-		-	0.0	-	4.7	-	5	821446	814149
SINZ	Tille	Rough	04.11	4.1	ivildale	-	0.1	236	-	-	-	_	-	-	-		-		-	4.7	-	3	021440	014149
					Bottom	3.1	0.1	250	22.9	22.9	8.0	8.0	31.0	31.0	104.9	105.0	7.5	7.5	5.1		4			
					Bottom	3.1	0.2	251	22.9	22.5	8.0	0.0	31.0	31.0	105.0	103.0	7.5	7.5	5.1		5			
					Surface	1.0	0.2	354	24.0	24.0	8.2	8.2	26.8	26.7	115.9	115.7	8.4		3.0		4			
						1.0	0.3	356	24.0	20	8.2	0.2	26.7	20.7	115.4		8.3	7.9	3.1		5			
SR3	Cloudy	Moderate	05:58	8.5	Middle	4.3	0.2	323	23.9	23.9	8.2	8.2	29.5	29.5	104.4	104.4	7.4		3.6	3.8	4	5	822131	807554
	,					4.3	0.2	323	23.9		8.2		29.5		104.4		7.4		3.5		4			
					Bottom	7.5	0.2	356	23.9	23.9	8.2	8.2	30.2	30.2	104.9	104.9	7.4	7.4	4.9		5			
						7.5	0.2	357	23.9		8.2		30.2		104.9		7.4		4.8		5			
				1	Surface	1.0	0.0	132	23.8 23.8	23.8	8.3	8.3	31.7	31.7	114.3	114.2	8.1		3.6		6			
				1			0.0	127									8.1	8.0	3.6		5			
SR4A	Cloudy	Moderate	04:22	8.7	Middle	4.4	0.0	117 114	23.8	23.8	8.2	8.2	32.0 32.0	32.0	112.0 111.8	111.9	7.9 7.9		3.9 4.0	4.1	6 5	5	817174	807820
				1		7.7	0.0	114	23.8		8.2	<b> </b>				-			4.0		5			
				1	Bottom	7.7	0.0	118	23.8	23.8	8.2	8.2	32.2	32.2	107.4	107.5	7.6 7.6	7.6	4.7	1	5			
			1	1		1.0	-	-	23.2		8.1	l 	29.7		107.5		7.8		2.7		4			
				1	Surface	1.0	-	-	23.2	23.2	8.1	8.1	29.7	29.8	108.5	108.6	7.8		2.7		5			
				1		-	-	_	- 23.2		-	<b> </b>	29.0		-		-	7.8	- 2.1		-			
SR8	Fine	Moderate	05:01	4.9	Middle	-	-	-	-	-	<del>-</del>	-	<del>-</del>	-	<del>-</del>	-	_			3.2	-	5	820384	811621
				1	_	3.9	-	-	23.0		8.1		30.2		101.6		7.3		3.7	1	4			
				1	Bottom	3.9	-	-	23.0	23.0	8.1	8.1	30.2	30.2	101.8	101.7	7.3	7.3	3.8	1	5			
					l .	0.0	1		20.0		0.1		00.2		101.0		7.0		0.0		,			

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

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

Water Quality Monitoring Results on 04 May 23 during Mid-Ebb Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	th (m)	Current Speed	Current	Water Te	emperature (°C)	pН	ı	Salin	ity (ppt)		aturation (%)	Disso	olved gen	Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	n (m)	(m/s)	Direction	Value	Average	Value A	verage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5	207	25.0	25.0	8.1	8.1	31.0	31.1	117.0	116.8	8.1		2.6		4			
					Ourlace	1.0	0.5	207	24.9	25.0	8.1	0.1	31.1	31.1	116.6	110.0	8.1	7.7	2.5		5			
C1	Sunny	Moderate	12:19	8.0	Middle	4.0	0.4	216	24.8	24.8	8.1	8.1	31.8	31.8	106.0	106.0	7.3	l ''' l	2.9	4.0	6	6	815625	804264
01	Curriy	Moderate	12.10	0.0	Wilddie	4.0	0.4	219	24.8	24.0	8.1	0.1	31.8	01.0	105.9	100.0	7.3		2.9	4.0	6	Ŭ	010020	004204
					Bottom	7.0	0.4	222	24.8	24.8	8.1	8.1	31.9	31.9	105.0	105.0	7.3	7.3	6.7		6			
					20110111	7.0	0.4	222	24.8	20	8.1	0	31.9	01.0	105.0	100.0	7.3	7.0	6.4		7			
					Surface	1.0	0.2	181	24.7	24.7	8.1	8.1	30.7	30.7	105.8	105.7	7.4		5.5		4			
						1.0	0.2	186	24.7		8.1		30.7		105.6		7.4	7.4	5.5		5			
C2	Sunny	Moderate	10:44	12.0	Middle	6.0	0.2	188	24.7	24.7	8.1	8.1	30.9	30.9	105.4	105.5	7.4		7.5	7.4	6	5	825699	806948
			-	-		6.0	0.2	182	24.7		8.1		30.9		105.5		7.4		7.4		5	-		
					Bottom	11.0	0.2	149	24.7	24.7	8.1	8.1	30.8	30.8	106.0	106.1	7.4	7.4	9.1		6			
						11.0	0.2	145	24.7		8.1		30.8		106.2		7.4		9.2		6			
					Surface	1.0	0.4	68	23.5	23.5	8.0	8.0	30.0	30.0	100.9	100.7	7.2		4.9		5			
						1.0	0.5	71	23.5		8.0		30.0		100.4		7.2	7.2	4.9		4			
C3	Fine	Calm	11:53	9.6	Middle	4.8	0.4	58	23.5	23.5	8.0	8.0	30.0	30.1	100.0	99.9	7.2		5.1	5.3	4	5	822132	817811
						4.8	0.4	57	23.5		8.0				99.8		7.1		5.1		5			
					Bottom	8.6 8.6	0.4	65 70	23.5 23.5	23.5	7.9	7.9	30.1	30.1	99.5 99.3	99.4	7.1 7.1	7.1	6.0		<u>6</u> 5			
	] 					1.0	0.4	188	24.9		8.1						7.1		2.9		6			l I
					Surface	1.0	0.2	190	24.9	24.9	8.1	8.1	30.9	30.9	114.2	114.1	7.9		2.8		6			
						3.3	0.3	169	24.7		8.1		31.9		107.6		7.5	7.7	2.8		4			
IM1	Sunny	Moderate	11:54	6.5	Middle	3.3	0.3	168	24.7	24.7	8.1	8.1	31.9	31.9	107.7	107.7	7.5		2.8	2.9	4	5	818344	806454
					_	5.5	0.3	169	24.7		0.1		31.7		108.2		7.5		3.0		5			
					Bottom	5.5	0.3	173	24.7	24.7	8.1	8.1	31.6	31.7	108.4	108.3	7.5	7.5	3.0		4			
						1.0	0.2	179	24.7		8.1		31.5		105.8		7.4		3.5		4			
					Surface	1.0	0.1	180	24.7	24.7	8.1	8.1	31.5	31.5	105.8	105.8	7.4	1	3.5		5			
			44.50			3.4	0.2	210	24.7	0.4.7	0.1		31.6		105.2	105.0	7.3	7.4	3.7		5		0.40400	
IM2	Sunny	Moderate	11:50	6.8	Middle	3.4	0.2	204	24.7	24.7	8.1	8.1	31.6	31.6	105.1	105.2	7.3		3.7	3.8	6	6	819192	806248
					Dallan	5.8	0.2	204	24.7	04.7	8.1	0.4	31.7	04.7	104.3	404.0	7.2	7.0	4.0		7			
					Bottom	5.8	0.2	197	24.7	24.7	8.1	8.1	31.7	31.7	104.2	104.3	7.2	7.2	4.3		8			
					Curtoso	1.0	0.2	120	24.7	24.7	8.1	0.1	31.0	21.1	105.6	10E E	7.4		4.4		5			
					Surface	1.0	0.2	125	24.7	24.7	8.1	8.1	31.1	31.1	105.3	105.5	7.3	7.3	4.5		6			
IM7	Sunny	Moderate	11:16	8.2	Middle	4.1	0.2	117	24.7	24.7	8.1	8.1	31.4	31.4	104.5	104.5	7.3	7.3	4.5	4.4	6	5	821347	806822
livi <i>t</i>	Suring	wouerate	11.10	0.2	Mildule	4.1	0.2	109	24.7	24.1	8.1	0.1	31.4	31.4	104.5	104.5	7.3	L	4.5	4.4	5	ວ	02134/	000022
					Bottom	7.2	0.2	94	24.7	24.7	8.1	8.1	31.3	31.2	104.4	104.4	7.3	7.3	4.4		5			
					DOLLOIT	7.2	0.2	99	24.7	24.1	8.1	J. I	31.2	31.2	104.4	104.4	7.3	7.3	4.4		4			

DA: Depth-Averaged

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

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

Water Quality Monitoring Results on 04 May 23 during Mid-Ebb Tide

water Quar	ity illoinit	orning recou			U4 IVIAY 23	during wild																		
Monitoring	Weather	Sea	Sampling	Water	Complian Des	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)		aturation %)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	uri (M)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					0(	1.0	0.5	89	24.2	04.0	8.0	0.0	27.7	07.7	109.0	400.0	7.8		2.4		5			
					Surface	1.0	0.4	89	24.2	24.2	8.0	8.0	27.8	27.7	108.8	108.9	7.8		2.4	1	5			
		0.1	40.50			4.6	0.5	109	24.2	24.2	8.0		27.8		108.6	400.0	7.8	7.8	3.9	1	5	_		
IM10	Fine	Calm	10:58	9.2	Middle	4.6	0.6	110	24.2	24.2	8.0	8.0	27.8	27.8	108.6	108.6	7.8		3.9	3.5	5	5	822254	809815
					5	8.2	0.5	96	24.2	24.2	8.0		27.9		108.5	400.0	7.8		4.1	1	6			
					Bottom	8.2	0.5	92	24.3	24.3	8.0	8.0	27.8	27.8	108.6	108.6	7.8	7.8	4.1	1	5			
					Curtons	1.0	0.6	103	23.8	22.0	8.0	0.0	28.3	20.2	101.0	100.0	7.3		2.2		6			
					Surface	1.0	0.5	103	23.8	23.8	8.0	8.0	28.4	28.3	100.7	100.9	7.2	7.2	2.1	1	5			
IM11	Fine	Calm	11:04	8.0	Middle	4.0	0.6	77	23.8	23.8	7.9	7.0	28.4	28.4	100.1	99.9	7.2	7.2	3.7	3.4	6	6	821504	810524
IIVI I I	FIIIE	Callii	11.04	6.0	ivildale	4.0	0.6	72	23.8	23.0	7.9	7.9	28.4	20.4	99.6	99.9	7.2		3.7	3.4	5	6	021304	010324
					Bottom	7.0	0.6	74	23.8	23.8	7.9	7.9	28.4	28.4	98.6	98.2	7.1	7.1	4.3	1	7			
					DOLLOTT	7.0	0.6	75	23.8	23.0	7.9	7.9	28.3	20.4	97.7	90.2	7.0	7.1	4.4		6			
					Surface	1.0	0.6	97	23.7	23.7	8.0	8.0	28.8	28.8	100.0	99.8	7.2		3.4		6			
					Surface	1.0	0.6	99	23.7	23.1	8.0	0.0	28.8	20.0	99.6	99.0	7.2	7.2	3.5		5			
IM12	Fine	Calm	11:09	7.8	Middle	3.9	0.7	81	23.7	23.7	8.0	7.9	28.8	28.8	99.4	99.3	7.1	1.2	4.9	4.6	6	6	821162	811502
IIVIIZ	FIIIE	Callii	11.09	7.0	ivildale	3.9	0.7	78	23.7	23.1	7.9	7.9	28.8	20.0	99.2	99.3	7.1		5.0	4.6	6	6	021102	611302
					Bottom	6.8	0.6	105	23.7	23.7	7.9	7.9	28.8	28.8	99.0	98.9	7.1	7.1	5.6		6			
					BOILOITI	6.8	0.6	112	23.7	23.1	7.9	7.9	28.8	20.0	98.8	90.9	7.1	7.1	5.6		6			
					Surface	1.0	0.1	130	24.2	24.2	8.0	8.0	28.8	28.8	104.8	104.6	7.5		2.6		4			
					Sulface	1.0	0.1	128	24.2	24.2	8.0	0.0	28.8	20.0	104.3	104.0	7.4	7.5	2.6		5			
SR1A	Fine	Calm	11:23	4.6	Middle	2.3	0.0	143	-	_			-	_	-	_	-	7.5	-	3.0	-	5	819976	812663
OKIA	1 1116	Cairi	11.20	4.0	Wildale	2.3	0.1	138	-				-		-	_	-		-	3.0	-	3	013370	012003
					Bottom	3.6	0.0	104	24.2	24.2	8.0	7.9	28.8	28.8	103.4	103.2	7.4	7.4	3.5		4			
					Bottom	3.6	0.1	111	24.2		7.9		28.8	20.0	103.0	.00.2	7.3		3.4		5			
					Surface	1.0	0.5	34	24.3	24.3	7.9	7.9	28.3	28.3	106.0	104.1	7.6		2.8		5			
						1.0	0.5	34	24.2	20	7.9		28.3	20.0	102.2		7.3	7.5	2.8		4			
SR2	Fine	Calm	11:37	4.6	Middle	-	0.5	28	-	_	-	_	-	_	-	_	-	7.0	-	3.4	-	5	821472	814167
						-	0.5	28	-		-		-		-		-		-	1	-			
					Bottom	3.6	0.5	64	24.2	24.3	7.9	7.9	28.4	28.3	101.2	100.8	7.2	7.2	4.0		5			
						3.6	0.5	58	24.3		7.9		28.2		100.3		7.1		3.9		5			
					Surface	1.0	0.4	162	24.8	24.8	8.1	8.1	30.4	30.5	103.2	103.2	7.2		3.3	4	6			
						1.0	0.4	162	24.7		8.1		30.5		103.2		7.2	7.2	3.5	4	7			
SR3	Sunny	Moderate	11:10	9.1	Middle	4.6	0.4	153	24.7	24.7	8.1	8.1	30.8	30.9	103.3	103.4	7.2		4.5	4.3	5	5	822124	807589
						4.6	0.4	148	24.7		8.1		30.9		103.4		7.2		4.6	4	4			
					Bottom	8.1 8.1	0.4	153	24.8	24.8	8.1	8.1	31.0	31.0	103.2	103.2	7.2	7.2	5.1		5 4			
			1					157	24.8										5.0	1				
					Surface	1.0	0.0	63 62	25.2 25.1	25.2	8.2	8.2	29.6 29.8	29.7	118.1 117.6	117.9	8.2 8.2		2.8 3.0	-	7 6			
						4.5	0.0	52	24.8								7.7	8.0	4.7	-				
SR4A	Sunny	Moderate	12:49	9.0	Middle	4.5	-	45	24.8	24.8	8.1	8.1	31.2	31.2	111.0 110.4	110.7	7.7		4.7	4.1	6	6	817181	807796
					-	4.5 8.0	0.0	96	24.8		8.1	}	31.3		107.4		7.7		4.9	1	5			
					Bottom	8.0	0.0	96	24.8	24.8	8.1	8.1	31.3	31.3	107.4	107.5	7.5	7.5	4.6	1	4			
			1	<u> </u>		1.0	-	- 92	23.8		7.9	l 	28.4		107.3		7.2		3.2	<del>                                     </del>	4			
					Surface	1.0	-	-	23.8	23.8	7.9	7.9	28.5	28.5	100.5	100.7	7.2		3.2	1	4			
						1.0	<u> </u>		23.0		7.5		20.5		-		-	7.2		1	-			
SR8	Fine	Calm	11:13	4.6	Middle		-	-	-	-	-	1 -	-	-	-	-	-			4.1	-	4	820401	811604
					_	3.6	-		23.8		7.9	1	28.5		99.6		7.1		5.0	1	5			
					Bottom	3.6	-	-	23.9	23.9	7.9	7.9	28.4	28.4	99.1	99.4	7.1	7.1	5.0	1	4			
DA: Dooth Aver					l	0.0		_	20.0		1.0		∠∪.→		33.1		1.1		5.0		7			

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

Water Quality Monitoring Results on 04 May 23 during Mid-Flood Tide

water Quar	ity Mornit	oring Resu	its on		04 May 23	auring Mia-	riooa ii	ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	-	рН	Salin	ity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ın (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					0	1.0	0.3	42	24.7	04.7	8.1	0.4	30.2	00.0	108.7	400.4	7.6		3.1		5			
					Surface	1.0	0.3	48	24.7	24.7	8.1	8.1	30.2	30.2	108.1	108.4	7.6	7.0	3.0		4			
04	Oleventer		05:40	0.0	N.C. J. II.	4.4	0.4	43	24.7	04.7	8.0	0.0	32.3	00.0	96.6	96.7	6.7	7.2	1.8	4.0	5	_	045000	004000
C1	Cloudy	Moderate	05:43	8.8	Middle	4.4	0.4	38	24.7	24.7	8.0	8.0	32.3	32.3	96.7	96.7	6.7	i	1.9	4.2	4	5	815639	804266
					Deller	7.8	0.4	26	24.7	04.7	8.0	0.0	31.9	04.0	97.4	97.6	6.8	0.0	7.3		5			
					Bottom	7.8	0.3	31	24.7	24.7	8.0	8.0	31.7	31.8	97.4 97.7	97.6	6.8	6.8	7.9		6			
					Surface	1.0	0.4	340	24.7	24.7	8.1	0.4	30.7	30.7	105.2	105.1	7.3		7.4		7			
					Surface	1.0	0.4	343	24.7	24.7	8.1	8.1	30.8	30.7	105.0	105.1	7.3	7.3	7.7		6			
C2	Cloudy	Moderate	07:23	12.2	Middle	6.1	0.4	358	24.7	24.7	8.1	8.1	30.9	30.9	104.7	104.7	7.3	1.3	9.8	8.3	6	6	825686	806950
02	Cloudy	Moderate	07.23	12.2	Middle	6.1	0.4	356	24.7	24.7	8.1	0.1	30.9	30.9	104.7	104.7	7.3		9.7	0.3	6	0	023000	806930
					Bottom	11.2	0.4	332	24.7	24.7	8.1	8.1	30.9	30.9	104.8	104.8	7.3	7.3	7.7		5			
					Dollom	11.2	0.4	331	24.7	24.7	8.1	0.1	30.9	30.9	104.8	104.0	7.3	7.3	7.8		4			
					Surface	1.0	0.5	249	23.8	23.8	7.9	7.9	27.2	27.2	105.4	105.4	7.6		2.1		5			
					Gunace	1.0	0.6	241	23.8	23.0	7.9	7.3	27.2	21.2	105.4	103.4	7.6	7.6	2.1		6			
СЗ	Fine	Calm	06:34	11.8	Middle	5.9	0.5	248	23.9	23.9	7.9 7.9	7.9	26.9	26.9	105.3	105.3	7.6	7.0	3.7	3.4	5	5	822113	817799
00	1 1110	Odim	00.04	11.0	Wildalo	5.9	0.5	254	23.9	20.0		7.0	26.9	20.0	105.3	100.0	7.6		3.7	0.4	4	o	022110	011100
					Bottom	10.8	0.6	247	23.9	23.9	7.9 7.9	7.9	26.8 26.6	26.7	105.2 105.1	105.2	7.6	7.6	4.5		4			
						10.8	0.6	251	23.9								7.6		4.5		4			
					Surface	1.0	0.2	23	24.7	24.7	8.1	8.1	31.7	31.8	107.5	107.4	7.5		3.4		3			
						1.0	0.2	17	24.7		8.1		31.8		107.3	-	7.4	7.4	3.3		4			
IM1	Cloudy	Moderate	06:06	6.6	Middle	3.3	0.2	17	24.7	24.7	8.1	8.1	32.0	32.0	105.7	105.6	7.3	l	4.5	4.5	4	4	818359	806456
						3.3	0.2	24	24.7		8.1		32.0		105.4		7.3		4.6	_	4			
					Bottom	5.6	0.2	9	24.7	24.7	8.1	8.1	32.1	32.1	104.2	104.2	7.2	7.2	5.5	_	5			
						5.6 1.0	0.2	11 357	24.7		8.1				•				6.0	-	4			
					Surface	1.0	0.2	357	24.8 24.8	24.8	8.1	8.1	31.1	31.1	113.6 113.4	113.5	7.9 7.9	ł	3.3	-	3			
						3.5	0.3	20	24.8		8.1		31.6				7.9	7.7	3.3	-	4			
IM2	Cloudy	Moderate	06:10	6.9	Middle	3.5	0.2	17	24.7	24.7	8.1	8.1	31.6	31.6	108.5 108.5	108.5	7.5 7.5	ł	3.3	3.4	4	4	819192	806225
						5.9	0.2	9	24.7		8.1		31.8		107.2		7.4		3.6	-	5			
					Bottom	5.9	0.3	5	24.7	24.7	8.1	8.1	31.8	31.8	107.2	107.1	7.4	7.4	3.5	-	4			
						1.0	0.2	0	24.9		8.1		30.0				7.7		2.7		4			1
					Surface	1.0	0.3	352	24.9	24.9	8.1	8.1	30.0	30.0	109.9	109.9	7.7	1	2.8	1	3			
						4.0	0.2	20	24.7		8.1		31.3				7.3	7.5	4.3	1	4			
IM7	Cloudy	Moderate	06:45	8.0	Middle	4.0	0.2	16	24.7	24.7	8.1	8.1	31.3	31.3	105.4 105.2	105.3	7.3	1	4.4	5.2	5	5	821336	806833
					Deller	7.0	0.3	349	24.7	04.7	8.1	0.4	31.5	04.5	104.6	4047	7.3	7.0	8.3	1	6			
					Bottom	7.0	0.3	351	24.7	24.7	8.2	8.1	31.5	31.5	104.7	104.7	7.3	7.3	9.0	1	6			
DA: Dooth Avor					Bottom					24.7		8.1		31.5		104.7		7.3						

DA: Depth-Averaged

Water Quality Monitoring Results on 04 May 23 during Mid-Flood Tide

water Quai	ity wonin	orning Kesu	iilə Uii		04 May 23	auring Mia-	rioou i	lue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspender (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ur (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	290	24.0	24.0	8.0	8.0	28.2	28.2	107.8	107.6	7.7		3.0		4			
					Surface	1.0	0.3	286	23.9	24.0	8.0	0.0	28.2	20.2	107.3	107.0	7.7	7.5	3.0		4			
IM10	Fine	Calm	07:43	8.6	Middle	4.3	0.3	299	23.8	23.8	7.9	7.9	28.3	28.3	101.4	101.3	7.3	7.5	4.3	4.2	4	5	822238	809854
IIVITO	1 1116	Callii	07.43	8.0	Middle	4.3	0.2	301	23.8	25.0	7.9	1.5	28.3	20.3	101.2	101.5	7.3		4.2	4.2	5	3	022230	003034
					Bottom	7.6	0.4	283	23.9	23.9	7.9	7.9	28.3	28.2	101.2	101.2	7.3	7.3	5.4		6			
					Bottom	7.6	0.4	283	23.9	25.5	7.9	7.5	28.1	20.2	101.1	101.2	7.3	7.5	5.3		5			
					Surface	1.0	0.3	293	23.8	23.8	8.0	8.0	28.4	28.4	100.2	100.1	7.2		4.0		5			
					Curiaco	1.0	0.3	289	23.8	20.0	8.0	0.0	28.4	20.4	99.9	100.1	7.2	7.2	4.1		6			
IM11	Fine	Calm	07:36	8.0	Middle	4.0	0.3	283	23.8	23.8	7.9	7.9	28.4	28.4	99.5	99.4	7.2	7.2	5.4	5.3	5	5	821484	810522
	1 1110	Cairr	07.00	0.0	Iviidalo	4.0	0.3	284	23.8	20.0	7.9	7.0	28.4	20.4	99.2	00.4	7.1		5.4	0.0	5	o	021404	010022
					Bottom	7.0	0.3	275	23.8	23.8	7.9	7.9	28.4	28.4	98.6	98.4	7.1	7.1	6.6		4			
					20110111	7.0	0.3	270	23.8	20.0	7.9	7.0	28.4	20	98.2	00	7.1		6.6		4			
					Surface	1.0	0.3	295	24.0	24.0	8.0	7.9	28.2	28.2	106.0	105.7	7.6		3.2		4			
						1.0	0.3	298	23.9	20	7.9		28.2	20.2	105.4		7.6	7.5	3.2		4			
IM12	Fine	Calm	07:28	7.2	Middle	3.6	0.4	287	23.9	23.9	7.9	7.9	28.3	28.3	101.4	101.3	7.3		4.9	4.6	4	4	821169	811495
2		Cami	07.20		madio	3.6	0.4	280	23.9	20.0	7.9		28.3	20.0	101.1		7.3		4.8		4	·	0200	011100
					Bottom	6.2	0.4	278	23.9	24.0	7.9	7.9	28.3	28.1	100.7	100.6	7.2	7.2	5.7		4			
						6.2	0.4	276	24.0	=	7.9		28.0		100.4		7.2		5.7		4			
					Surface	1.0	-	209	23.9	23.9	7.9	7.9	29.0	29.0	100.5	100.3	7.2		4.5	ļ	5			
						1.0	0.0	213	23.9		7.9		29.0		100.1		7.2	7.2	4.6	ļ	4			
SR1A	Fine	Calm	07:07	4.0	Middle	2.0	0.0	198	-	-	-	_		-	-	-	-		-	4.8	-	6	819972	812660
						2.0	0.0	194	-		-		-		-		-		-	l	-			
					Bottom	3.0	0.0	192	23.9	23.9	7.9	7.9	29.0	29.0	99.4	99.2	7.1	7.1	5.0	l	6			
						3.0	0.0	195	23.9		7.9		29.0		99.0		7.1		5.0		7			
					Surface	1.0	0.1	281	23.8	23.8	7.9	7.9	27.7	27.6	105.3	105.3	7.6		3.0	ł	5			
						1.0	0.2	276	23.8				27.6		105.3		7.6	7.6	3.1	ł	6			
SR2	Fine	Calm	06:54	5.8	Middle	-	0.1	254 253	-	-	-	-	-	-	-	-	-		-	3.7	-	5	821480	814181
						4.8	0.1	253	23.8										4.4	ł	5			
					Bottom	4.8	0.1	291	23.8	23.8	7.9 7.9	7.9	27.4	27.4	105.4	105.4	7.6 7.6	7.6	4.4	ł	4			
						1.0	0.1	350	24.9				_				7.0		1.5					
					Surface	1.0	0.2	356	24.9	24.9	8.1	8.1	29.9	29.9	103.7	103.6	7.2		1.5	ł	5 6			
						4.5	0.2	335	24.9		8.1		30.3		103.5		7.1	7.2	2.8	ł	6			
SR3	Cloudy	Moderate	06:51	9.0	Middle	4.5	0.3	341	24.7	24.7	8.1	8.1	30.3	30.3	102.0	102.0	7.1		2.8	2.6	5	5	822146	807581
						8.0	0.3	5	24.7		8.1		30.3		101.6		7.1		3.5	ł	5			
					Bottom	8.0	0.3	2	24.7	24.7	8.1	8.1	30.7	30.6	101.5	101.6	7.1	7.1	3.4	ł	4			
						1.0	0.0	144	24.7			1	30.1				7.1		4.2		5			
					Surface	1.0	0.0	136	24.8	24.8	8.1 8.1	8.1	30.1	30.1	112.2	112.2	7.8		4.4		4			
						4.3	0.0	154	24.7		8.1	1	31.5		106.3		7.4	7.6	5.6		5			
SR4A	Cloudy	Moderate	05:18	8.6	Middle	4.3	0.0	158	24.7	24.7	8.1	8.1	31.5	31.5	106.2	106.3	7.4		5.6	5.2	5	5	817205	807827
					_	7.6	0.0	147	24.7		8.1		31.6		106.1		7.4		5.6		5			
					Bottom	7.6	0.0	145	24.7	24.7	8.1	8.1	31.6	31.6	106.1	106.1	7.4	7.4	5.6	1	6			
			1			1.0	-	-	23.9		7.9	<u> </u>	28.7		99.0		7.1		4.0		4			
					Surface	1.0	-	-	23.9	23.9	7.9	7.9	28.7	28.7	98.7	98.9	7.1		4.0	1	5			
			1			-	_	-	-		-		-		-		-	7.1	-	١	-			
SR8	Fine	Calm	07:24	5.0	Middle	_	_	-	-	-	-	1 -		-	_	-	-		_	4.2	-	5	820404	811626
					5	4.0	-	-	23.9	05 -	7.9		28.7		98.2	o= -	7.0		4.3		5			
					Bottom	4.0	-	-	23.9	23.9	7.9	7.9	28.7	28.7	97.5	97.9	7.0	7.0	4.3	1	6			
			1	1	i .	1.0	1		_0.0			1			07.0						,			

Water Quality Monitoring Results on 06 May 23 during Mid-Ebb Tide

water Quai	ity wont	oning Resu	112 011		06 May 23	auring Mia-	EDD HIGE	<del>:</del>																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	th (m)	Current Speed	Current	Water Te	emperature (°C)	ı	рН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspender (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Depi	iii (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5	202	25.4	25.4	8.1	8.1	31.7	31.8	102.8	102.3	7.1		5.4		8			
					Surface	1.0	0.5	196	25.3	25.4	8.1	8.1	31.8	31.8	101.7	102.3	7.0	6.8	5.7	1	7			
C1	Fin a	Madausta	13:18	0.4	Middle	4.2	0.5	215	25.3	25.3	8.1	8.1	32.0	32.0	96.0	96.1	6.6	6.8	8.5	8.2	6	7	815642	804233
CI	Fine	Moderate	13:18	8.4	Middle	4.2	0.6	215	25.3	25.3	8.1	8.1	32.0	32.0	96.1	96.1	6.6		8.7	8.2	6	/	813642	804233
					Bottom	7.4	0.5	227	25.3	25.3	8.1	8.1	32.0	32.0	97.5 97.7	97.6	6.7	6.7	10.3	1	6			
					Bottom	7.4	0.5	226	25.3	25.5	8.1	0.1	32.0	32.0	97.7	97.0	6.7	6.7	10.7	1	6			
					Surface	1.0	0.4	175	25.9	25.9	8.1	8.1	29.6	29.6	101.2	101.1	7.0		7.9		6			
					Surface	1.0	0.4	174	25.9	25.9	8.1	0.1	29.6	29.0	101.0	101.1	7.0	6.9	7.4	1	4			
00	Fin a	Madausta	44.40	44.4	Middle	5.7	0.3	153	25.4	25.4	8.1	8.1	30.8	30.8	98.1	98.1	6.8	6.9	10.0	8.9	4	4	825693	806941
C2	Fine	Moderate	11:43	11.4	Middle	5.7	0.3	157	25.4	25.4	8.1	8.1	30.8	30.8	98.1 98.0	98.1	6.8		10.0	8.9	2	4	823693	806941
					Dettern	10.4	0.3	154	25.5	25.5	8.1	8.1	30.4	30.4	97.9 97.9	97.9	6.8	6.8	9.0	1	3			
					Bottom	10.4	0.4	156	25.5	25.5	8.1	8.1	30.3	30.4	97.9	97.9	6.8	6.8	9.2	1	3			
					Surface	1.0	0.5	84	24.4	24.4	7.8	7.8	28.4	28.4	86.1	85.8	6.1		2.1		5			
					Surface	1.0	0.5	87	24.4	24.4	7.8	7.8	28.4	28.4	85.4	85.8	6.1	6.0	2.1	1	4			
00	Fin a	Color	12:38	40.0	Middle	5.0	0.5	81	24.4	24.4	7.8	7.8	28.5	28.5	83.5	82.8	5.9	6.0	3.1	3.4	3	4	822100	817821
C3	Fine	Calm	12:38	10.0	ivildale	5.0	0.5	80	24.4	24.4	7.8	7.8	28.5	28.5	83.5 82.1	82.8	5.9 5.8		3.1	3.4	3	4	822100	81/821
					Bottom	9.0	0.4	86	24.4	24.4	7.8	7.8	28.6	28.5	77.3	75.8	5.5	5.4	5.0	1	3			
					Bottom	9.0	0.4	80	24.4	24.4	7.8	7.0	28.4	20.5	74.3	75.6	5.3	5.4	5.0		3			
					Surface	1.0	0.3	199	26.1	26.1	8.1	8.1	30.3	30.3	103.0 103.0	103.0	7.0		3.0		4			
					Surface	1.0	0.3	204	26.0	20.1	8.1	0.1	30.4	30.3	103.0	103.0	7.0	7.0	3.0		5			
IM1	Fine	Moderate	12:58	6.7	Middle	3.4	0.3	170	25.7	25.7	8.1	8.1	31.1	31.2	100.7 100.5	100.6	6.9	7.0	9.5	7.3	5	5	818371	806457
IIVII	Tille	Moderate	12.30	0.7	Wildule	3.4	0.4	170	25.7	25.7	8.1	0.1	31.2	31.2	100.5	100.0	6.9		9.9	7.3	4	3	010371	800437
					Bottom	5.7	0.3	172	25.6	25.7	8.1	8.1	31.3	31.2	100.0	100.0	6.8	6.8	9.1		6			
					Bollom	5.7	0.3	173	25.7	25.7	8.1	0.1	31.2	31.2	100.0	100.0	6.8	0.0	9.4		5			
					Surface	1.0	0.4	208	25.5	25.5	8.1	8.1	31.3	31.4	98.6	98.6	6.8		7.3		8			
					Odnace	1.0	0.4	213	25.4	20.0	8.1	0.1	31.4	31.4	98.5	30.0	6.8	6.8	7.5		7			
IM2	Fine	Moderate	12:53	7.5	Middle	3.8	0.4	208	25.3	25.3	8.1	8.1	31.7	31.7	97.7 97.6	97.7	6.7	0.0	9.0	8.9	7	6	819179	806257
IIVIZ	1 1116	Moderate	12.55	7.5	Middle	3.8	0.5	203	25.3	25.5	8.1	0.1	31.7	31.7	97.6	91.1	6.7		8.9	0.9	6	U	019179	800237
					Bottom	6.5	0.4	214	25.4	25.4	8.1	8.1	31.7	31.6	97.6	97.6	6.7	6.7	10.1		5			
					Bollom	6.5	0.4	209	25.4	25.4	8.1	0.1	31.6	31.0	97.6	97.0	6.7	0.7	10.4		4			
					Surface	1.0	0.2	149	25.9	25.9	8.1	8.1	29.5	29.5	103.3	103.2	7.1		3.6		3			
					Suriace	1.0	0.2	142	25.8	23.3	8.1	0.1	29.6	25.5	103.0	103.2	7.1	7.0	3.8		4			
IM7	Fine	Moderate	12:23	8.3	Middle	4.2	0.2	125	25.7	25.7	8.1	8.1	30.6	30.6	100.6 100.5	100.6	6.9 6.9	7.0	8.3	7.2	4	4	821339	806827
11717	1 1116	woudlate	12.23	0.3	iviidale	4.2	0.2	123	25.7	23.7	8.1	0.1	30.7	30.6	100.5	100.6	6.9		8.3	1.2	4	4	021339	000027
					Bottom	7.3	0.2	161	25.7	25.7	8.1	8.1	30.5	30.5	100.4	100.5	6.9	6.9	9.8		4			
					Bollom	7.3	0.2	166	25.7	23.7	8.1	0.1	30.5	30.5	100.5	100.5	6.9	0.9	9.4		4			
A: Donth Avor												_										_		

DA: Depth-Averaged

Water Quality Monitoring Results on 06 May 23 during Mid-Ebb Tide

Water Quar	,				UU Way 23	during wild-																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)	рН		Salin	ity (ppt)		aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspender (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept		(m/s)	Direction	Value	Average	Value Av	erage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
İ					Surface	1.0	0.5	118	24.7	24.7	7.9	7.9	27.3	27.3	92.2	02.2	6.6		4.4		3			
					Surrace	1.0	0.5	124	24.7	24.7	7.9	1.9	27.3	27.3	92.1	92.2	6.6		4.4	1	4			
IMA	Eino	Colm	11.42	1 02	Middle	4.6	0.5	104	24.7	24.9	7.9 .	7.0	27.4	27.4	91.9	92.0	6.5	6.6	5.9	5.4	4	4	000050	900900
IM10	Fine	Calm	11:43	9.2	iviidale	4.6	0.5	98	24.8	24.8	7.9	7.9	27.4	27.4	92.0	92.0	6.5		5.8	5.4	3	4	822252	809820
				1	Bottom	8.2	0.5	114	24.8	24.9	7.9	7.9	27.5	27.4	92.1	92.2	6.5	6.5	6.1		4			
			<u> </u>	<u> </u>	BOILOITI	8.2	0.5	118	24.9	24.9	7.9	1.9	27.4	21.4	92.2	92.2	6.5	0.0	6.0		4			
					Surface	1.0	0.6	105	24.6	24.6	7.8 .	7.8	27.6	27.6	84.6	84.1	6.0		3.2		3			
					Surface	1.0	0.6	111	24.6	24.0	7.8	1.0	27.6	27.6	83.6	04.1	6.0	5.8	3.2		2			
IM11	Fine	Calm	11:49	7.8	Middle	3.9	0.6	88	24.5	24.5	7.8 .	7.8	27.7	27.7	80.7	78.5	5.8	5.0	4.6	4.4	3	3	821502	810558
IIVI I I	1 1116	Callii	11.49	1.0	iviidule	3.9	0.6	90	24.5	24.0	7.8	1.0	27.7	21.1	76.3	70.5	5.4		4.7	4.4	3	3	021302	010008
					Bottom	6.8	0.5	103	24.5	24.5	7.8 .	7.8	27.7	27.7	74.3	73.6	5.3	5.3	5.4		3			
					DOLLOITI	6.8	0.5	96	24.5	24.0	7.8	7.0	27.6	21.1	72.9	13.0	5.2	J.J	5.3		3			
					Surface	1.0	0.7	104	24.7	24.7	7.8	7.8	27.4	27.4	84.8	84.1	6.0		4.1		3			
					Juliace	1.0	0.7	109	24.7	24.1	7.8	1.0	27.4	21.4	83.3	04.1	5.9	5.7	4.1		2			
IM12	Fine	Calm	11:54	7.4	Middle	3.7	0.7	88	24.6	24.6	7.8 .	7.8	27.5	27.5	77.4	76.6	5.5	5.1	5.0	5.2	4	3	821138	811511
IIVI 1∠	1 1110	Callii	11.54	/.4	Mildule	3.7	0.6	83	24.6	24.0	7.8	1.0	27.5	21.5	75.8	70.0	5.4		5.1	J.2	3	3	021130	011311
					Bottom	6.4	0.7	75	24.6	24.6	7.8 .	7.8	27.6	27.6	71.6	70.4	5.1	5.0	6.4		4			
					DOLLOITI	6.4	0.6	81	24.6	24.0	7.8	1.0	27.5	21.0	69.2	70.4	4.9	3.0	6.5		4			
					Surface	1.0	0.0	110	24.5	24.5	7.8	7.8	27.9	27.9	84.4	84.2	6.0		5.4		4			
					Juliace	1.0	-	105	24.5	24.0	7.8	7.0	27.9	21.3	84.0	04.2	6.0	6.0	5.3		3			
SR1A	Fine	Calm	12:08	5.2	Middle	2.6	-	112	-	_	-	. 7	-	_	-		-	0.0	-	6.2	-	3	819973	812653
OKIA	1 1116	Cairi	12.00	J.2	Middle	2.6	0.1	110	-		-	•	-	_	-	_	-		-	0.2	-	3	010010	012000
					Bottom	4.2	0.0	90	24.5	24.5	7.8	7.8	28.0	28.0	82.3	81.9	5.9	5.9	7.0		3			
				<u> </u>	Dottom	4.2	0.1	87	24.5	27.0	7.8		28.0	20.0	81.4	01.0	5.8	0.0	7.0		2			
		<u> </u>			Surface	1.0	0.5	55	24.6	24.6	7.9	7.9	27.6	27.6	91.4	91.4	6.5		5.4		2			
				1	54.1400	1.0	0.5	52	24.6	21.0	7.9		27.6	-:	91.4	J	6.5	6.5	5.4	1	3			1
SR2	Fine	Calm	12:22	4.8	Middle	-	0.5	64	-	_	-	_	-	_	-	_	-	0.0	-	5.7	-	3	821457	814159
J. 12	0	Jann		1	daio	-	0.5	68	-		-		-		-		-		-	J,	-	3	32.407	5.4100
					Bottom	3.8	0.5	21	24.6	24.6	7.9	7.9	27.6	27.6	91.3	91.3	6.5	6.5	6.1		2			
					20110111	3.8	0.6	25	24.6	20	7.9	0	27.6	20	91.2	00	6.5	0.0	6.0		3			
					Surface	1.0	0.5	160	25.6	25.6	8.1	8.1	29.7	29.7	95.4	95.3	6.6		5.2		3			
						1.0	0.4	156	25.6	20.0	8.1		29.8		95.2	00.0	6.6	6.6	5.3		4			
SR3	Fine	Moderate	12:15	8.9	Middle	4.5	0.5	138	25.5	25.5	8.1	8.1	30.2	30.2	94.9	94.9	6.5		6.1	5.5	4	4	822147	807578
						4.5	0.5	133	25.5		8.1		30.2		94.9		6.6		6.1		4	-		
					Bottom	7.9	0.5	168	25.6	25.6	8.1	8.1	30.1	30.0	95.8	95.8	6.6	6.6	5.4		6			
				<u> </u>		7.9	0.5	163	25.6		8.1		30.0		95.8		6.6		5.3		5			
					Surface	1.0	0.0	30	25.7	25.7	8.1	8.1	30.8	30.8	99.0	98.9	6.8		4.4		6			
						1.0	0.0	36	25.7		8.1		30.8		98.8		6.8	6.7	4.5		7			
SR4A	Fine	Moderate	13:55	9.2	Middle	4.6	0.0	50	25.5	25.5	8.1	8.1	31.0	31.0	96.7	96.7	6.6		5.4	5.4	7	7	817165	807805
						4.6	-	44	25.5		8.1		31.0		96.6		6.6		5.6		7			
					Bottom	8.2	0.0	16	25.5	25.5	8.1	8.1	31.0	31.0	96.7	96.8	6.6	6.6	6.2		7			
				<u> </u>		8.2	0.0	10	25.5		8.1		31.0		96.8		6.6		6.2		7			
					Surface	1.0	-	-	24.7	24.7	7.8	7.8	27.5	27.5	87.1	86.5	6.2		5.3		2			
				1		1.0	-	-	24.7		7.8		27.5		85.9		6.1	6.2	5.3	4	2			1
SR8	Fine	Calm	11:58	5.4	Middle	-	-	-	-	-		-	-	-	-	-	-		-	6.0	-	3	820404	811641
				1		-	-	-					-		-		-			4	-			1
				1	Bottom	4.4	-	-	24.7	24.7	7.8	7.8	27.5	27.5	80.3	79.7	5.7	5.7	6.8		4			
			1	l		4.4	-	-	24.7		7.8		27.5	-	79.1		5.6		6.8		3			

Water Quality Monitoring Results on 06 May 23 during Mid-Flood Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Campling Dep	ui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	
					Surface	1.0	0.1	21	25.4	25.4	8.1	8.1	31.6	31.6	99.5	99.5	6.8		5.3		4			
					Surface	1.0	0.1	26	25.4	25.4	8.1	0.1	31.6	31.0	99.5	99.5	6.8	6.7	5.3		3			
C1	Cloudy	Moderate	05:50	8.9	Middle	4.5	0.2	16	25.1	25.1	8.1	8.1	32.2	32.2	95.4	95.3	6.6	0.7	7.1	7.6	3	3	815618	804259
01	Cioday	Moderate	03.30	0.5	Middle	4.5	0.1	15	25.1	20.1	8.1	0.1	32.2	52.2	95.2	35.5	6.5		7.0	7.0	3	3	013010	004233
					Bottom	7.9	0.2	1	25.2	25.2	8.1	8.1	32.3	32.3	95.9	96.0	6.6	6.6	10.6		3			
					Dottom	7.9	0.2	356	25.2	25.2	8.1	0.1	32.3	32.3	96.1	30.0	6.6	0.0	10.4		3			
					Surface	1.0	0.3	337	25.7	25.7	8.1	8.1	29.7	29.8	99.8	99.6	6.9		9.0		7			
					Gunace	1.0	0.3	334	25.6	20.1	8.1	0.1	29.8	23.0	99.4	33.0	6.9	6.9	8.7		8			
C2	Cloudy	Moderate	07:24	12.0	Middle	6.0	0.3	341	25.5	25.5	8.1	8.1	30.8	30.8	98.1 98.0	98.1	6.8	0.0	7.7	9.3	8	8	825667	806938
02	Oloudy	Moderate	07.24	12.0	Middle	6.0	0.3	340	25.5	20.0	8.1	0.1	30.8	00.0		50.1	6.8		7.1	0.0	9	Ü	020001	000000
					Bottom	11.0	0.3	349	25.5	25.5	8.1	8.1	30.8	30.8	97.7	97.7	6.7	6.7	11.4		9			
					Dotto	11.0	0.3	353	25.5	20.0	8.1	0	30.8	00.0	97.7	01	6.7	0	11.9		9			
					Surface	1.0	0.5	261	24.5	24.5	7.8	7.8	28.0	28.0	98.8	97.5	7.0		1.2		3			
						1.0	0.5	260	24.5		7.8		28.0		96.2		6.8	6.9	1.2		4			
C3	Fine	Calm	07:14	11.4	Middle	5.7	0.5	268	24.5	24.5	7.8	7.8	28.0	28.0	95.7 95.4	95.6	6.8		2.3	2.2	4	3	822086	817799
	-					5.7	0.5	269	24.5		7.8		28.0				6.8		2.2		3			
					Bottom	10.4	0.5	233	24.5	24.5	7.8	7.8	28.0	28.0	94.6	94.3	6.7	6.7	3.1		3			
						10.4	0.5	232	24.5		7.8	ļ	27.9		94.0		6.7		3.1		2			
					Surface	1.0	0.1	48	25.6	25.6	8.1	8.1	31.0	31.1	103.0 102.7	102.9	7.1		4.1		3			
						1.0	0.1	46	25.6		8.1		31.1				7.1	7.0	4.0		3			
IM1	Cloudy	Moderate	06:14	6.9	Middle	3.5	0.1	21	25.3	25.3	8.1	8.1	31.7	31.8	101.0	100.7	6.9		8.8	6.4	3	3	818371	806471
						3.5 5.9	0.1	17 47	25.3 25.3		8.1		31.8 31.7		100.4		6.9 6.7		8.9 6.5		3 4			
					Bottom	5.9	0.0	52	25.3	25.3	8.1 8.1	8.1	31.7	31.7	98.1 98.3	98.2	6.7	6.7	6.2		4			
						1.0	0.0	287	25.6		_						7.1		4.4		8			
					Surface	1.0	0.1	280	25.6	25.6	8.1 8.1	8.1	31.6 31.6	31.6	104.3	104.2	7.1		4.4		7			
						3.6	0.1	291	25.4		8.1		31.9		104.1		7.1	7.1	7.0		6			
IM2	Cloudy	Moderate	06:19	7.2	Middle	3.6	0.2	284	25.4	25.4	8.1	8.1	31.9	31.9	101.3	101.5	7.0		7.0	7.6	5	6	819178	806212
						6.2	0.2	283	25.3		8.1		32.0		101.4		6.9		11.0		4			
					Bottom	6.2	0.1	278	25.4	25.4	8.1	8.1	31.9	32.0	101.3	101.2	6.9	6.9	11.5		3			
i						1.0	0.1	318	25.9		8.1		28.7		101.5		7.0		3.0		6			
l					Surface	1.0	0.1	324	25.9	25.9	8.1	8.1	28.7	28.7	101.7	101.6	7.0		3.1		5			
						3.9	0.1	341	25.6		8.1		30.5		100.9			7.0	5.6		4			
IM7	Cloudy	Moderate	06:58	7.7	Middle	3.9	0.1	337	25.6	25.6	8.1	8.1	30.5	30.5	100.8	100.9	6.9		5.8	5.0	5	5	821355	806823
l					5	6.7	0.2	347	25.6	25.0	8.1		30.7		100.5	400.5	6.9		6.2		4			
					Bottom	6.7	0.2	347	25.6	25.6	8.1	8.1	30.7	30.7	100.5	100.5	6.9	6.9	6.0	1	4			

DA: Depth-Averaged

Water Quality Monitoring Results on 06 May 23 during Mid-Flood Tide

Trate: qua:		orning Nesu			UU Way 23	uuring wiu-		<u> </u>															
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	mperature (°C)	pН	Salir	nity (ppt)		aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling De		(m/s)	Direction	Value	Average	Value Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	305	24.6	24.6	7.8 7.8	27.5	27.5	84.9	84.5	6.0		3.4		2			
				1	Sullace	1.0	0.2	312	24.6	24.0	7.8	27.5	21.0	84.1	04.0	6.0	5.9	3.4	] ]	3			
IM10	Fine	Calm	08:23	9.0	Middle	4.5	0.2	277	24.5	24.5	7.8 7.8	27.7	27.7	81.1	80.5	5.8	5.5	4.8	4.7	2	3	822246	809861
IIVITO	1 1116	Cairii	00.23	3.0	Middle	4.5	0.3	277	24.5	24.5	7.8	27.7	21.1	79.9	00.0	5.7		4.9	٦.,	3	3	022270	003001
				1	Bottom	8.0	0.3	294	24.5	24.5	7.8 7.8	27.7	27.7	72.6	71.1	5.2	5.1	5.9	] ]	3			
					Dottom	8.0	0.3	297	24.5	27.0	7.8	27.7	21	69.6	7 11	5.0	0.1	5.8		3			
					Surface	1.0	0.3	274	24.6	24.6	7.8	27.6	27.6	84.8	84.3	6.0	· <u></u>	3.1	1 1	3			
[ ]						1.0	0.3	272	24.6		7.8	27.6	L	83.8		6.0	5.8	3.1	4 1	3			
IM11	Fine	Calm	08:16	8.2	Middle	4.1	0.3	263	24.6	24.6	7.8 7.8	27.6	27.6	80.9	79.0	5.8		4.2	4.4	2	3	821480	810524
[ ]						4.1	0.4	257	24.6		7.8	27.6		77.0		5.5		4.2	4	2			
I				1	Bottom	7.2	0.4	276	24.6	24.6	7.8 7.8	27.6	27.6	75.2	74.6	5.4	5.4	6.0	4	3			
				<u> </u>		7.2	0.4	281	24.6		7.8	27.5	-	74.0		5.3		6.0		2			
				1	Surface	1.0	0.4	284 288	24.6 24.6	24.6	7.9 7.8	27.7	27.7	87.0 86.5	86.8	6.2		3.0	4	3			
				1		3.7	0.4	288 295	24.6								6.1	3.1	4				
IM12	Fine	Calm	08:08	7.4	Middle	3.7	0.4	295	24.6	24.6	7.8 7.8	27.7	27.7	85.5 84.9	85.2	6.1		3.3	3.7	3	4	821164	811532
I				1		6.4	0.4	292	24.6		7.8	27.7		84.9		5.8		4.8	<del> </del>	4			
					Bottom	6.4	0.4	261	24.6	24.6	7.8 7.8	27.7	27.7	77.4	79.9	5.5	5.7	4.0	1	4			
	1		<u> </u>	<del> </del>	<u> </u>	1.0	0.4	205	24.6		7.8	27.6	<u> </u>	75.7	1	5.4		3.6		2		l	l
				1	Surface	1.0	0.0	203	24.8	24.9	7.8 7.8	27.6	27.6	71.0	73.4	5.0		3.6	1	3			
I j				1		2.1	0.0	183	-		-	-	<del>                                     </del>	-	<b>—</b>	-	5.2	-	1	-			
SR1A	Fine	Calm	07:47	4.2	Middle	2.1	0.0	179	<del>-</del> -	-	-	<del>-</del>	-	<del>-</del>	-	_			3.9		3	819971	812654
						3.2	-	197	24.8		7.8	27.7	<b> </b>	63.4		4.5		4.3	1	4			
I				1	Bottom	3.2	0.0	196	24.9	24.9	7.8	27.0	27.3	61.4	62.4	4.5	4.5	4.3	1	3			
					Ourford	1.0	0.1	225	25.0	05.0	70	26.6	00.0	85.2	04.7	6.1		4.4		2			
				1	Surface	1.0	0.2	222	25.0	25.0	7.8 7.8	26.6	26.6	84.2	84.7	6.0	0.4	4.4	1	2			
CDO	Fine.	Calaa	07.24	5.0	M: dalla	-	0.1	245	-		-	-		-		-	6.1	-	4.7	-	2	004.450	04.4400
SR2	Fine	Calm	07:34	5.6	Middle	-	0.1	242	-	-	-	-	1 -	-	1 - 1	-		-	4.7	-	3	821450	814166
					Bottom	4.6	0.1	253	25.0	25.0	7.8 7.8	26.7	26.6	73.4	72.8	5.2	5.2	5.0		2			
					DULLUIII	4.6	0.0	256	25.0	20.0	7.8	26.6	20.0	72.1	12.0	5.1	5.2	5.1		4			
					Surface	1.0	0.1	347	26.0	26.0	8.0	28.3	28.3	99.6	99.6	6.9		8.8		3			
					Juliace	1.0	0.1	349	26.0	20.0	8.0	28.3	20.3	99.5	33.0	6.9	6.8	8.9	] ]	4			
SR3	Cloudy	Moderate	07:03	8.6	Middle	4.3	0.1	347	25.5	25.5	8.0	29.8	29.8	95.6	95.6	6.6	0.0	5.4	6.8	4	4	822158	807568
0.10	Sidday	Moderate	07.00	0.0	Middle	4.3	0.1	352	25.5	20.0	8.0	29.8	20.0	95.5	55.5	6.6		5.5	0.0	4	-	022100	007000
					Bottom	7.6	0.1	356	25.5	25.5	8.0	30.1	30.1	94.8	94.8	6.6	6.6	6.1	4	5			
					20	7.6	0.1	357	25.5	20.0	8.0	30.1	00	94.8	00	6.5	0.0	6.1		4			
					Surface	1.0	0.0	178	25.5	25.5	8.1	31.0	31.0	100.1	100.1	6.9		5.8	4 1	4			
						1.0	0.1	176	25.5		8.1	31.0	1	100.1		6.9	6.9	5.8	4 1	3			
SR4A	Cloudy	Moderate	05:25	9.2	Middle	4.6	0.1	155	25.5	25.5	8.0	31.1	31.1	98.5	98.5	6.8		7.2	6.8	4	4	817185	807792
_	,					4.6	0.1	148	25.5		8.0	31.1		98.4		6.8		7.2	4	3			
					Bottom	8.2	0.0	152	25.5	25.5	8.0	31.1	31.1	98.3	98.3	6.7	6.7	7.4	4 1	4			
				1		8.2	0.0	150	25.5		8.0	31.1		98.2		6.7		7.5		4			
				1	Surface	1.0	-	-	24.8	24.8	7.8 7.8	27.6	27.6	81.7	79.2	5.8		5.0	4	2			
				1		1.0	-	-	24.8		7.8	27.6	1	76.7		5.4	5.6	5.1	<b> </b>	3			
SR8	Fine	Calm	08:04	5.0	Middle	-	-	-	-	-		-		-	-	-		-	5.6	-	3	820412	811610
						4.0	-	-	24.0		7.0	27.0	-			- 5 2		- 61	<del> </del>	3			
				1	Bottom	4.0	-	-	24.8 24.8	24.8	7.8 7.8	27.6	27.6	74.2 72.8	73.5	5.3	5.3	6.1 6.1	4	2			
						4.0			24.0		7.0	27.0		12.8		5.2		0.1	l				

Water Quality Monitoring Results on 09 May 23 during Mid-Ebb Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	р	Н	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ur (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.7	206	25.1	25.1	8.0	8.0	33.3	33.4	91.8	91.8	6.3		5.9		4			
					Sunace	1.0	0.7	199	25.1	23.1	8.0	0.0	33.4	33.4	91.8	91.0	6.3	6.3	5.9		5			
C1	Cloudy	Moderate	15:21	8.4	Middle	4.2	0.7	201	25.1	25.1	8.0	8.0	33.6	33.6	91.4	91.4	6.2	0.5	6.2	6.8	4	5	815626	804245
01	Cloudy	Woderate	13.21	0.4	Middle	4.2	0.7	206	25.0	23.1	8.0	0.0	33.6	55.0	91.3	31.4	6.2		6.7	0.0	4	3	013020	004243
					Bottom	7.4	0.7	196	25.0	25.0	8.0	8.0	33.6	33.6	91.3	91.4	6.2	6.3	8.1		5			
					Bottom	7.4	0.7	191	25.0	20.0	8.0	0.0	33.5	00.0	91.5	01.4	6.3	0.0	8.0		5			
					Surface	1.0	0.6	165	25.3	25.3	8.0	8.0	29.1	29.2	88.0	88.0	6.1		4.1		3			
					Gundoc	1.0	0.6	162	25.3	20.0	8.0	0.0	29.2	20.2	88.0	00.0	6.1	6.1	4.3		2			
C2	Cloudy	Moderate	13:47	11.7	Middle	5.9	0.5	179	25.2	25.2	8.0	8.0	29.5	29.5	87.8	87.8	6.1	0.1	4.9	4.5	3	3	825668	806958
02	Cloudy	Moderate	10.47	11.7	Wildelie	5.9	0.5	182	25.2	20.2	8.0	0.0	29.5	20.0	87.8	07.0	6.1		4.9	4.0	3	O	020000	000000
					Bottom	10.7	0.6	192	25.3	25.3	8.0	8.0	29.3	29.3	87.7	87.7	6.1	6.1	4.5		4			
					Bottom	10.7	0.6	193	25.3	20.0	8.0	0.0	29.2	20.0	87.6	07.7	6.1	0.1	4.4		4			
					Surface	1.0	0.5	59	24.1	24.1	8.0	8.0	28.9	29.0	85.1	85.0	6.1		2.2		4			
					Gundoe	1.0	0.5	64	24.1	2-1.1	8.0	0.0	29.0	20.0	84.8	00.0	6.0	6.0	2.3		4			
С3	Misty	Rough	14:54	10.0	Middle	5.0	0.6	87	23.9	23.9	8.0	8.0	30.3	30.3	82.9	82.9	5.9	0.0	3.9	3.8	3	4	822094	817822
00	iviloty	rtougii	14.04	10.0	Middle	5.0	0.5	89	23.9	20.0	8.0	0.0	30.3	00.0	82.8	02.0	5.9		4.0	0.0	4	-	022004	017022
					Bottom	9.0	0.6	71	24.0	24.0	8.0	8.0	30.3	30.3	82.4	82.4	5.8	5.8	5.1		3			
					Bottom	9.0	0.6	67	23.9	24.0	8.0	0.0	30.3	00.0	82.3	02.4	5.8	0.0	5.1		3			
					Surface	1.0	0.5	185	25.3	25.3	8.0	8.0	31.6	31.6	91.9	92.0	6.3		3.8		4			
					Guillago	1.0	0.5	190	25.2	20.0	8.1	0.0	31.7	01.0	92.0	02.0	6.3	6.3	3.8		4			
IM1	Cloudy	Moderate	15:00	7.4	Middle	3.7	0.4	195	25.1	25.1	8.0	8.0	33.0	33.0	91.4	91.4	6.3	0.0	7.6	7.7	3	4	818346	806434
	Cioday	moderate	10.00		madio	3.7	0.5	197	25.1	20	8.0	0.0	33.1	00.0	91.3	0	6.2		7.9		4	·	0.00.0	000.0.
					Bottom	6.4	0.5	172	25.0	25.0	8.0	8.0	33.5	33.4	90.0	89.9	6.2	6.2	11.7		3			
					Bottom	6.4	0.4	178	25.0	20.0	8.0	0.0	33.4	00.1	89.8	00.0	6.1	0.2	11.8		3			
					Surface	1.0	0.6	189	25.2	25.2	8.1	8.1	32.0 32.2	32.1	92.3	92.3	6.3		4.6		4			
						1.0	0.6	195	25.2		8.1				92.2		6.3	6.3	4.7		5			
IM2	Cloudy	Moderate	14:56	7.6	Middle	3.8	0.6	202	25.1	25.1	8.0	8.0	33.5	33.5	91.1	91.1	6.2	0.0	6.9	7.4	4	4	819199	806224
	,					3.8	0.5	209	25.1		8.0		33.5		91.1	*	6.2		7.1		4			
					Bottom	6.6	0.6	206	25.0	25.0	8.0	8.0	33.5	33.5	90.9	90.9	6.2	6.2	10.9		4			
					=	6.6	0.6	208	25.0		8.0		33.6		90.8		6.2		10.2		4			
					Surface	1.0	0.3	163	25.2	25.2	8.0	8.0	30.7	30.8	90.1	90.0	6.2		5.8	1	5			
					25.1000	1.0	0.3	165	25.2		8.0		31.0	- 5.0	89.9	23.0	6.2	6.2	6.5		5			
IM7	Cloudy	Moderate	14:26	8.1	Middle	4.1	0.3	164	25.1	25.1	8.0	8.0	32.1	32.1	89.5	89.5	6.2		8.3	8.2	4	5	821367	806855
	2.244)		20			4.1	0.3	171	25.1		8.0		32.1		89.5	23.0	6.2		8.1	]	5		22.007	220000
					Bottom	7.1	0.3	141	25.0	25.0	8.0	8.0	32.4	32.4	89.4	89.5	6.2	6.2	10.2	1	4			
DA: Denth-Aver						7.1	0.3	136	24.9	_5.0	8.0	2.0	32.4		89.5	23.0	6.2		10.6		5			

DA: Depth-Averaged

Water Quality Monitoring Results on 09 May 23 during Mid-Ebb Tide

Monitoring Station   Weather Condition	.3	Oxyg Value	ygen	Turbidity	1	Suspende (mg		Coordinate HK Grid	Coordinate
Surface   Condition   Condition   Time   Depth (m)   Condition	.3		DA	Value					
Surface 1.0 0.6 119 24.2 24.2 8.0 8.0 26.5 26.5 87.8 87.9 6	.3 63	0.0		value	DA	Value	DA	(Northing)	HK Grid (Easting)
1.0 0.6 119 24.2 8.0 26.5 87.8 6		6.3		3.6		5			
F4 06 414 244 00 005 070 0	6.3	6.3	1	3.6		4			
NACO   Mistry   Dough   40.50   40.0   Mistry   5.4   0.6   114   24.1   24.4   8.0   0.0   28.5   20.5   87.8   27.0   6	.3	6.3	6.3	4.8	٦.,	4	٦ _	000040	000055
		6.3	1	4.7	4.4	4	- 5	822246	809855
Pottom 9.8 0.6 111 24.1 24.4 8.0 9.0 28.8 28.9 88.9 90.4 6	.3 0.4	6.3	0.4	5.0		5			
		6.4	6.4	5.1		5			
1.0 0.7 92 24.3 34.0 7.9 7.0 27.2 84.0 83.0 6	.0	6.0		2.1		7			
Surface 1.0 0.7 89 24.3 7.9 7.9 27.2 83.7 83.9 6	.0	6.0	1	2.2		6			
M44 Mint David 0.0 Middle 4.5 0.8 107 24.2 04.0 7.9 7.0 27.5 07.5 82.3 0.0 5	.9 6.0	5.9	6.0	3.1	2.4	6		004504	040540
IM11 Misty Rough 14:01 9.0 Middle 4.5 0.7 113 24.2 24.2 7.9 7.9 27.5 82.1 82.2 5	.9	5.9	1	3.2	3.1	6	6	821521	810549
8.0 0.7 80 24.1 244 7.9 7.0 27.6 80.6 80.4 5	.8 = 0	5.8		4.1		5			
		5.8	5.8	4.1		4			
10 09 96 242 70 290 929 5		5.9		3.4		5			
	a	5.9	1	3.3		6			
50 08 113 242 79 286 813 5		5.8	5.9	4.2	_	6	-		
M12   Misty   Rough   14:06   10:0   Middle   Head   Head		5.8	1	4.3	4.2	5	5	821151	811536
90 07 100 242 79 284 803 5	7	5.7	1	5.0		4			
2/12		5.7	5.7	5.1		4			
		6.1		1.5		4		1	
Surface - 243 - 79 - 277 - 847 -	1	6.1	1	1.6	_	3	1		
22 00 05	6.1	-	6.1	- 1.0	-	-	-		
		<del>-</del>	1	<u> </u>	2.1	-	4	819981	812655
26 00 72 242 70 277 944 6	0	6.0				4			
		6.0	6.0	2.6		5	-		
	_			2.7		4		+	
1   Surface   243   79   280   834		6.0	4		_	4	4		
	6.0	6.0	6.0	2.8			-		
SR2   Misty   Rough   14:38   5.6   Middle			-		3.0	-	4	821472	814148
		-		- 2.4	_	-	_		
		5.9	5.9	3.1	_	4	-		
		5.8		3.2	+	4	-		
		6.2	1	3.8		3			
	- h 2	6.2	6.2	4.1	_	3	-		
		6.2	_	7.2	6.8	3	4	822154	807587
		6.2		7.4		4			
		6.2	6.2	9.0		4			
	.2	6.2		9.2		4			
		6.3	4	6.1	_	6	4		
1.0 0.0 19 25.3 8.0 31.9 91.3 6		6.3	6.2	6.3	_	6	4		
	.1	6.1	1	8.3	8.0	7	6	817167	807799
4.5 0.0 28 25.1 8.0 32.8 89.6		6.1		8.3		6	_l ĭ		
		6.2	6.2	9.6	_	6	1		
8.0 0.0 24 25.0 8.0 32.9 90.2 6	.2	6.2		9.3		7	1	1	
		5.8	1	2.8		3			
1.0 24.1 7.9 27.8 80.4 5		5.8	5.8	2.7		3			
SR8   Misty   Rough   14:11   5.4   Middle	-	-	] 0.0	-	3.1	-	3	820401	811601
One wisty reagn 14-11 5-4 windle	-	-		-		-	_ ĭ	320-101	011001
		5.7	5.7	3.5		4	1		
4.4 24.0 27.0 7.9 7.9 27.9 79.4 70.5	.7	5.7	0.7	3.5		3			

Water Quality Monitoring Results on 09 May 23 during Mid-Flood Tide

	ity wont	oring Resu	ito oii		09 May 23	auring Mia-	1 1000 11	uc																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	Ŀ	рΗ	Salin	ity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ın (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
ĺ					0.7	1.0	0.4	44	25.1	05.4	8.0		33.1	20.4	92.6		6.3		8.0		8			
					Surface	1.0	0.4	45	25.1	25.1	8.0	8.0	33.2	33.1	92.4	92.5	6.3		8.0		8			
0.4	01 1					3.9	0.4	28	25.0	05.0	8.0		33.6		92.2		6.3	6.3	6.4		10		0.15500	
C1	Cloudy	Moderate	08:07	7.8	Middle	3.9	0.3	24	25.0	25.0	8.0	8.0	33.6	33.6	92.2	92.2	6.3		6.8	7.9	8	8	815596	804239
					5	6.8	0.4	12	24.7	0.4.7	8.0		33.8		92.9		6.4		9.0		8			
					Bottom	6.8	0.4	9	24.6	24.7	8.0	8.0	33.8	33.8	92.9 93.3	93.1	6.4	6.4	9.0		8			
ĺ					Surface	1.0	0.4	336	25.3	25.3	8.0	0.0	29.0	20.0	87.8	87.8	6.1		3.9		5			
					Surface	1.0	0.4	338	25.3	25.3	8.0	8.0	29.0	29.0	87.8	87.8	6.1	6.1	4.2		4			
C2	Cloudy	Moderate	09:34	11.4	Middle	5.7	0.5	339	25.2	25.2	8.0	8.0	30.0	30.1	87.3	87.3	6.1	0.1	8.8	7.6	4	3	825690	806937
02	Cloudy	Moderate	09.34	11.4	ivildale	5.7	0.4	343	25.2	25.2	8.0	0.0	30.1	30.1	87.3	07.3	6.1		8.1	7.6	3	3	623690	000937
					Bottom	10.4	0.5	350	25.1	25.1	8.0	8.0	30.3	30.3	87.3	87.3	6.1	6.1	10.2		2			
					Bottom	10.4	0.5	354	25.1	23.1	8.0	0.0	30.3	30.3	87.2	07.5	6.1	0.1	10.0		2			
					Surface	1.0	0.4	250	24.0	24.0	7.9	7.9	29.8	29.9	85.6	85.5	6.1		2.8		4			
					Curiaco	1.0	0.5	255	24.0	24.0	7.9	7.0	30.0	20.0	85.4	00.0	6.1	6.1	2.8		4			
С3	Misty	Moderate	08:00	11.8	Middle	5.9	0.4	263	23.9	23.9	7.9 7.9	7.9	30.8	30.8	84.5	84.5	6.0	0.1	4.0	4.0	5	4	822113	817804
00		moderate	00.00		madio	5.9	0.4	256	23.9	20.0			30.8	00.0	84.4	0 1.0	6.0		4.1		4	·	022110	011001
					Bottom	10.8	0.4	233	23.9	23.9	7.9 7.9	7.9	30.8	30.8	84.1 84.0	84.1	6.0	6.0	5.1		5			
						10.8	0.5	229	23.9				30.8				5.9		5.2		4			
					Surface	1.0	0.3	14	25.1	25.1	8.0	8.0	31.9	31.9	92.6	92.6	6.4		5.8		8			
						1.0	0.3	9	25.1				31.9		92.6		6.4	6.4	5.9	_	8			
IM1	Cloudy	Moderate	08:32	6.9	Middle	3.5	0.3	18	25.1	25.1	8.0	8.0	32.8	32.9	91.9	91.8	6.3		8.4	7.7	7	7	818354	806435
						3.5	0.3	14	25.1		8.0		32.9		91.7		6.3		8.8		6			
					Bottom	5.9 5.9	0.2	33 39	25.1 25.1	25.1	8.0	8.0	33.3	33.3	91.4	91.4	6.2	6.2	8.5 8.9		5 6			
						1.0	0.2	39 7	25.1		8.0		31.4				6.3		4.2	1	8			
					Surface	1.0	0.2	4	25.2	25.2	8.1	8.0	31.5	31.4	91.9 92.0	92.0	6.3		4.4	-	8			
						3.7	0.2	19	25.2		8.1		32.7					6.3	9.3	-	6			
IM2	Cloudy	Moderate	08:36	7.4	Middle	3.7	0.2	14	25.1	25.1	8.0	8.0	32.8	32.7	91.5 91.4	91.5	6.3		9.9	7.6	6	7	819167	806218
						6.4	0.2	26	25.0				33.4				6.2		9.0	-	5			
					Bottom	6.4	0.3	25	24.9	25.0	8.0	8.0	33.5	33.4	90.9	90.9	6.2	6.2	8.6		6			
					Surface					25.3	8.0	8.0		29.9	90.0	90.1				1	4			
	01 1					3.9	0.2	355	25.1	05.4			31.4					6.2	8.0	1	4	_	004005	
IM/	Cloudy	Moderate	09:10	7.7	Middle	3.9	0.2	357	25.1	25.1	8.0	8.0	31.5	31.4	88.7	88.7	6.1		8.4	7.9	5	5	821326	806835
					Pottom	6.7	0.2	11	25.1	25.1	8.1	0.1	31.9	21.0	88.4	00.4	6.1	6.1	10.8	1	6			
					DOTTOM	6.7	0.2	8	25.1	∠5.1	8.1	<b>8.1</b>	31.9	31.9	88.4	88.4	6.1	0.1	11.1	1	5			
IM7	Cloudy	Moderate	09:10	7.7	Surface Middle Bottom	1.0 1.0 3.9 3.9 6.7	0.2 0.1 0.2 0.2 0.2	348 341 355 357	25.3 25.3 25.1 25.1 25.1	25.3 25.1 25.1	8.0 8.0 8.0 8.0 8.1	8.0 8.0 8.1	29.9 30.0 31.4 31.5 31.9	29.9 31.4 31.9	90.2 90.0 88.7 88.7 88.4	90.1 88.7 88.4	6.3 6.2 6.1 6.1 6.1	6.2	4.5 4.6 8.0 8.4 10.8	7.9	3 4 4 5 6	5	821	1326

DA: Depth-Averaged

Water Quality Monitoring Results on 09 May 23 during Mid-Flood Tide

water Quai	ity wonii	orning Nesu	115 011		09 May 23	auring Mia-	rioou ii	ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	iii (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5	298	24.3	24.3	8.0	8.0	26.4	26.4	87.6	87.5	6.3		2.9		3			
					Sunace	1.0	0.5	303	24.3	24.5	8.0	0.0	26.5	20.4	87.4	67.5	6.3	6.2	2.9		4			
IM10	Misty	Moderate	09:12	10.6	Middle	5.3	0.5	291	24.1	24.1	8.0	8.0	28.5	28.5	84.9	84.8	6.1	0.2	4.6	4.2	4	4	822236	809840
IIVITO	iviloty	Woderate	03.12	10.0	Middle	5.3	0.5	295	24.1	24.1	8.0	0.0	28.5	20.5	84.7	04.0	6.0		4.5	7.2	5	7	022230	003040
					Bottom	9.6	0.5	309	24.1	24.1	8.0	8.0	28.5	28.5	82.8	82.7	5.9	5.9	5.0		4			
					Bottom	9.6	0.5	310	24.0	2-1.1	8.0	0.0	28.5	20.0	82.6	02.7	5.9	0.0	5.1		5			
					Surface	1.0	0.6	283	24.3	24.3	7.9	7.9	27.2	27.2	83.4	83.3	6.0		2.2		4			
					- Curidoo	1.0	0.6	282	24.3	20	7.9		27.3		83.1	00.0	6.0	5.9	2.3		5			
IM11	Misty	Moderate	09:04	8.4	Middle	4.2	0.6	275	24.2	24.2	7.9	7.9	27.5	27.6	81.8	81.7	5.9	0.0	3.6	3.4	4	5	821477	810547
						4.2	0.6	270	24.2		7.9		27.6		81.5	•	5.8		3.7		5			
					Bottom	7.4	0.5	278	24.1	24.1	7.9	7.9	27.7	27.7	80.6	80.5	5.8	5.8	4.2		5			
						7.4	0.5	274	24.0		7.9		27.7		80.4		5.8		4.3		4			
					Surface	1.0	0.5	272	24.3	24.3	7.9	7.9	27.5	27.5	83.5	83.4	6.0		1.1	ļ	3			
						1.0	0.5	266	24.3		7.9	-	27.6		83.2		6.0	5.9	1.2	ļ	4			
IM12	Misty	Moderate	08:57	10.0	Middle	5.0	0.5	275	24.2	24.2	7.9	7.9	28.0	28.0	81.4	81.3	5.8		2.8	2.6	4	4	821147	811519
	,					5.0	0.4	271	24.2		7.9		28.0		81.1		5.8		2.7	l	4			
					Bottom	9.0	0.5	293	24.0	24.0	7.9	7.9	28.1	28.1	79.7	79.6	5.7	5.7	3.9	ł	4			
						9.0	0.5	291	23.9		7.9		28.2		79.4		5.7		3.9		4			
					Surface	1.0	0.0	175	24.0	24.0	7.9	7.9	27.0	27.0	78.7	78.6	5.7		2.1	ł	2			
						1.0	-	168	24.0		7.9		27.0		78.5		5.7	5.7	2.2	ł	3			
SR1A	Misty	Moderate	08:37	4.8	Middle	2.4	0.1	169	-	-		-	-	-	-	-	-		-	2.6	-	4	819983	812654
						2.4	0.1	174	-		-		-		-		-		-	ł	-			
					Bottom	3.8	0.1 0.1	193 188	23.7 23.6	23.7	7.9 7.9	7.9	27.5	27.5	77.5 77.1	77.3	5.6 5.6	5.6	3.0	ł	5 4			
				l I		1.0	0.1	255											2.5		4			
					Surface	1.0	0.2	249	24.2 24.2	24.2	7.9 7.9	7.9	27.4	27.4	82.0 81.8	81.9	5.9 5.9		2.6	ł	3			
						-	0.2	258	-		-		-		-		-	5.9	-		-			
SR2	Misty	Moderate	08:20	4.6	Middle		0.1	263	-	-	<del>-</del>	-	-	-		-	-			3.9	-	3	821462	814185
						3.6	0.1	239	24.2		7.9		27.4		81.1		5.8		5.3	ł	3			
					Bottom	3.6	0.2	242	24.2	24.2	7.9	7.9	27.4	27.4	80.9	81.0	5.8	5.8	5.2	ł	3			
						1.0	0.4	332	25.3		8.0		29.0		88.6		6.2		3.8		5			
					Surface	1.0	0.4	326	25.3	25.3	8.0	8.0	29.1	29.0	88.6	88.6	6.2		4.0		4			
						4.2	0.4	347	25.2		8.0		30.3		88.8		6.2	6.2	7.0		4			
SR3	Cloudy	Moderate	09:17	8.4	Middle	4.2	0.3	352	25.2	25.2	8.0	8.0	30.5	30.4	88.8	88.8	6.2		7.5	6.3	4	4	822136	807547
					5	7.4	0.4	354	25.2	05.0	8.0		30.7		88.8		6.2		7.7	i	4			
					Bottom	7.4	0.4	349	25.2	25.2	8.0	8.0	30.7	30.7	88.8	88.8	6.2	6.2	7.7	1	3			
					Ountere	1.0	0.0	177	25.2	05.0	8.0	0.0	31.7	04.7	91.8	04.0	6.3		7.1		9			
					Surface	1.0	0.0	184	25.2	25.2	8.0	8.0	31.7	31.7	91.7	91.8	6.3	6.3	7.3	1	8			
SR4A	Claudu	Madagata	07.40	0.4	Middle	4.7	0.0	185	25.1	25.4	8.0	0.0	32.2	22.2	91.4	04.5	6.3	6.3	8.6	7.0	9	0	047470	007700
SR4A	Cloudy	Moderate	07:40	9.4	Middle	4.7	0.1	178	25.1	25.1	8.0	8.0	32.2	32.2	91.5	91.5	6.3		8.4	7.6	8	9	817172	807792
					Bottom	8.4	0.0	190	25.1	25.1	8.0	8.0	32.2	32.2	92.3	92.4	6.3	6.3	7.1	1	9			
					DOLLOITI	8.4	0.0	185	25.1	23.1	8.0	0.0	32.2	32.2	92.4	34.4	6.3	0.5	7.1		9			
					Surface	1.0	-	-	24.2	24.2	7.9	7.9	28.1	28.1	80.3	80.2	5.7		2.6		4			
					Gunace	1.0	-	-	24.2	27.2	7.9	1.0	28.1	20.1	80.1	00.2	5.7	5.7	2.5	]	4			
SR8	Misty	Moderate	08:52	5.8	Middle	-	-	-	-	_	-		-	_	-	_	-	5.7	-	3.1	-	4	820408	811620
0110	iviloty	Moderate	00.02	0.0	Wildelie	-	-	-	-		-		-		-		-		-	0.1	-	7	320-100	011020
					Bottom	4.8	-	-	23.9	23.9	7.9	7.9	28.3	28.3	79.4	79.4	5.7	5.7	3.6		3			
					201.0111	4.8	-	-	23.9	20.0	7.9		28.3	_0.0	79.3		5.7	٥	3.6		4			

Water Quality Monitoring Results on 11 May 23 during Mid-Ebb Tide

Monitoring Station Condition Time Depth (m)  Weather Sea Sampling Water Sampling Depth (m)  Sampling Depth (m)  Condition Condition Time Depth (m)  Sampling Depth (m)  Current Speed (m/s)  Current Speed (m/s)  Current Direction Direction Value Average Value DA Value	(NTU)	Suspen	ded Solide		
		) (n	ng/L)	Coordinate HK Grid	Coordinate HK Grid
	DA	Value	DA	(Northing)	(Easting)
Surface 1.0 0.7 226 25.0 25.0 8.0 8.0 32.2 32.3 93.7 93.6 6.5 7.4		2			
Surface 1.0 0.7 226 25.0 25.0 8.0 8.0 32.2 32.3 93.7 93.6 6.5 7.7 7.7		3			
C1 Cloudy Moderate 17:02 8.3 Middle 4.2 0.6 217 24.9 24.9 8.0 8.0 32.9 32.9 93.9 93.9 6.5 6.5 7.8	8.0	2	3	815609	804252
C1 Cloudy Moderate 17:02 8.3 Middle 4.2 0.6 217 24.9 24.9 8.0 8.0 32.9 32.9 93.9 93.9 6.5 7.8 7.8	8.0	3	3	815609	804252
Bottom 7.3 0.7 202 24.9 24.9 8.0 8.0 32.8 32.8 95.1 95.3 6.6 6.6 8.6 8.9	1	3			
7.3 0.7 209 24.9 8.0 0.0 32.7 52.0 95.4 95.3 6.6 0.0 8.9		3			
Surface 1.0 0.4 166 25.0 25.0 8.0 8.0 28.4 28.5 91.2 91.2 6.4 2.1		3			
1 1.0 0.4 172 25.0 8.0 28.5 91.1 6.4 6.4 2.3 1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	1	2			
C3   Cloudy   Moderate   15:33   13:3   Middle   6.2   0.4   188   25:0   25:0   8:0   9:0   29:0   90:1   90:0   6:3   2:5	2.4	2	3	825679	806956
6.2 0.4 193 25.0 8.0 0.0 29.1 29.0 89.8 90.0 6.3 2.5	2.4	2	3	623679	600936
Bottom 11.3 0.4 159 25.0 25.0 8.0 8.0 30.7 30.6 88.6 92.0 90.3 6.2 6.3 2.5 2.4		2			
11.3 0.5 165 25.0 8.0 30.6 30.6 92.0 92.0 6.4 3.5 2.4		4			
Surface 1.0 0.5 57 23.8 23.8 23.8 7.9 7.9 30.2 83.8 83.7 6.0 1.1 1.1		2			
		3			
C2   Minty   Moderate   45:42   40.4   Middle   5.2   0.5   52   23.8   23.9   7.9   7.0   30.5   20.5   83.4   22.5   5.9   1.6	1.7	. 3	3	822102	817792
	1.7	3		822102	017792
Bottom 9.4 0.5 74 23.8 23.8 7.9 7.9 7.9 30.5 84.3 84.5 6.0 6.0 2.4 2.4		4			
9.4 0.6 66 23.8 25.6 7.9 7.9 30.5 30.5 84.6 64.3 6.0 6.0 2.4		2			
Surface 1.0 0.4 191 25.0 25.0 8.0 8.0 31.1 31.1 95.2 95.2 6.6 4.1 4.1 31.1 31.1 31.1 31.1 31.1 31.1 3		3			
		4			
MM   Cloudy   Modorate   16:40   6.2   Middle   3.1   0.4   183   24.9   24.0   8.0   8.0   8.0   32.0   23.1   93.7   03.7   6.5   6.2	6.7	. 2	3	818360	806456
	0.7	2	_	010000	000400
Bottom 5.2 0.4 178 24.9 24.9 8.0 8.0 32.8 32.8 94.2 94.3 6.5 6.5 9.3 9.6		2			
		<2			
Surface 1.0 0.5 197 24.9 24.9 24.9 8.0 8.0 31.8 31.9 93.8 93.7 6.5 8.0 8.0 8.0 31.8 31.9 93.6 93.7 6.5 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0		2			
		2			
M32   Cloudy   Moderate   16:24   7.5   Middle   3.8   0.4   196   24.9   24.0   8.0   8.0   8.0   32.6   32.7   93.2   93.2   6.4   9.0	8.7	<2	2	819198	806227
	↓ °	<2		3.5.50	333227
Bottom 6.5 0.5 218 24.9 24.9 24.9 8.0 8.0 32.8 32.8 94.7 95.0 6.5 6.5 8.7 8.2	1 1	2	_		
		<2		1	ļ
Surface 1.0 0.3 169 25.0 25.0 8.0 8.0 28.2 28.2 93.0 93.0 6.6 4.5 4.5 4.4	4	2	_		
	1 1	2	_		
1   24.9     8.0     93.5     6.5   8.5	7.1	<2 3	2	821360	806855
	4 <sup></sup>			32.000	
Bottom 7.5 0.3 178 24.7 24.7 8.0 8.0 31.5 31.6 94.5 94.7 6.6 6.6 8.2	1 1	3	_		
PAL Porth Averaged		2		1	

DA: Depth-Averaged

Water Quality Monitoring Results on 11 May 23 during Mid-Ebb Tide

		ornig Kesu			11 Way 23	during wild-																		
Monitoring	Weather	Sea	Sampling	Water	Occupation 2	h ()	Current Speed	Current	Water Te	emperature (°C)		рН	Salini	ity (ppt)		aturation (%)	Disso Oxyg		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		Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					0.1	1.0	0.5	96	23.9		7.9		26.8		92.2		6.7		1.8		4			
					Surface	1.0	0.5	94	23.9	23.9	7.9	7.9	27.0	26.9	92.0	92.1	6.6		1.9		5			
						4.9	0.5	107	24.0		7.9		28.0		86.1		6.2	6.4	3.0		3			
IM10	Misty	Moderate	15:36	9.8	Middle	4.9	0.5	113	24.0	24.0	7.9	7.9	28.0	28.0	86.1	86.1	6.2		3.1	3.0	4	4	822255	809852
					_	8.8	0.5	103	24.0		7.9		28.1		87.0		6.2		4.1		3			
					Bottom	8.8	0.5	106	23.9	24.0	7.9	7.9	28.1	28.1	87.2	87.1	6.3	6.3	4.1		2			
	1					1.0	0.6	102	24.0		7.9		28.0		86.4		6.2		1.9		2			
					Surface	1.0	0.6	101	24.0	24.0	7.9	7.9	28.0	28.0	86.3	86.4	6.2		2.0		2			
						4.3	0.6	111	24.0		7.9		28.3		86.2		6.2	6.2	3.1		3			
IM11	Misty	Moderate	15:44	8.6	Middle	4.3	0.6	109	24.0	24.0	7.9	7.9	28.3	28.3	86.6	86.4	6.2		3.2	3.2	3	3	821496	810546
						7.6	0.6	112	23.8		7.9		28.4		87.2		6.3		4.6		3			
					Bottom	7.6	0.6	109	23.8	23.8	7.9	7.9	28.4	28.4	87.7	87.5	6.3	6.3	4.6		3			
						1.0	0.6	110	24.0		7.9		28.6		86.7		6.2		2.6		2			
					Surface	1.0	0.6	108	24.0	24.0	7.9	7.9	28.6	28.6	86.7	86.7	6.2		2.7		2			
						4.3	0.6	97	24.0		7.9		28.6		87.6		6.3	6.3	3.0		2			
IM12	Misty	Moderate	15:51	8.6	Middle	4.3	0.6	98	24.0	24.0	7.9	7.9	28.6	28.6	87.9	87.8	6.3		3.1	3.0	2	2	821150	811533
						7.6	0.6	118	23.9		7.9		28.6		89.4		6.4		3.4		3			
					Bottom	7.6	0.7	121	23.9	23.9	7.9	7.9	28.6	28.6	89.6	89.5	6.4	6.4	3.5		2			
-						1.0	-	103	23.9				28.0				6.3		1.6		3			l I
					Surface	1.0	0.0	103	23.8	23.9	7.9	7.9	28.0	28.0	87.0 87.0	87.0	6.3		1.5		2			
									_				_					6.3	-					
SR1A	Misty	Moderate	16:05	5.6	Middle	2.8 2.8	0.0	88 93	-	-	-	-	-	-	-	-	-		-	2.0	-	2	819978	812654
									_				_											
					Bottom	4.6	0.0	67	23.8	23.8	7.9	7.9	28.0	27.9	87.4	87.4	6.3	6.3	2.5		2			
-						4.6	-	71	23.8		7.9		27.9		87.4		6.3		2.5		2			
					Surface	1.0	0.6	58	23.9	23.9	7.9	7.9	28.4	28.4	90.2	90.2	6.5		1.5		<2			
						1.0	0.6	59	23.9		7.9		28.4		90.2		6.5	6.5	1.5		<2			
SR2	Misty	Moderate	16:24	5.4	Middle	-	0.6	58	-	-	-	-	-	-	-	-	-		-	1.5	-	2	821482	814163
						-	0.6	65	-		-		-		-		-		-		-			
					Bottom	4.4	0.6	44	23.9	23.9	7.9	7.9	28.5	28.5	90.1	90.1	6.5	6.5	1.5		<2			
						4.4	0.6	49	23.9		7.9		28.5		90.1		6.5		1.6		2			
					Surface	1.0	0.5	161	25.0	25.0	8.0	8.0	28.9	29.0	91.5	91.5	6.4		3.4		3			
						1.0	0.5	155	25.0		8.0		29.1		91.4		6.4	6.4	3.8		2			
SR3	Cloudy	Moderate	15:54	8.9	Middle	4.5	0.6	153	24.9	24.9	8.0	8.0	29.8	29.9	91.9	92.0	6.4		9.9	7.4	3	3	822143	807562
						4.5	0.6	158	24.9		8.0		29.9		92.0		6.4		9.8	4	3			
					Bottom	7.9	0.5	167	24.9	24.9	8.0	8.0	30.3	30.2	92.5	92.7	6.5	6.5	8.9	-	2			
						7.9	0.4	173	24.9		8.0		30.2		92.9		6.5		8.6		2			
					Surface	1.0	0.0	12	25.0	25.0	8.0	8.0	31.9	31.9	92.3	92.4	6.4		7.2		2			
						1.0	0.0	8	25.0		8.0		31.9		92.4		6.4	6.4	7.6		2			
SR4A	Cloudy	Moderate	17:29	8.9	Middle	4.5	0.0	37	24.9	24.9	8.0	8.0	32.0	32.0	93.3	93.4	6.4		9.4	8.9	2	2	817187	807828
	,					4.5	-	31	24.9	-	8.0		32.0		93.5		6.5		9.7	1	<2			· · · · ·
					Bottom	7.9	0.0	16	24.9	24.9	8.0	8.0	32.0	32.0	93.9	94.1	6.5	6.5	9.7	4	<2			
						7.9	0.0	9	24.9	-	8.0		32.0	-	94.2		6.5		9.9		2			
					Surface	1.0	-	-	23.9	23.9	7.9	7.9	28.5	28.5	86.8	86.8	6.2		2.0	1	2			
						1.0	-	-	23.9		7.9		28.5		86.8		6.2	6.2	2.1		<2			
SR8	Misty	Moderate	15:55	5.2	Middle	-	-	-	-	-	-		-	_	-	ļ .	-	0	-	2.1	-	2	820413	811629
	5.,				3010	-	-	-	-		-		-		-		-		-	1	-	-		1
					Bottom	4.2	-	-	23.9	23.9	7.9	7.9	28.6	28.5	89.5	89.6	6.4	6.4	2.2	1	3			
					Dottom	4.2	-	-	23.9	20.0	7.9	7.0	28.5	20.0	89.7	00.0	6.4	0.4	2.3		2			

Water Quality Monitoring Results on 11 May 23 during Mid-Flood Tide

water Quai	ty Wonit	oring Resu	its on		11 May 23	during Mid-	Flood III	ae																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water T	emperature (°C)	t	рН	Sali	nity (ppt)	DO S	Saturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	un (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					0 /	1.0	0.0	109	25.0	0.5.0	8.0		31.9		92.7	00.7	6.4		9.7		2			
					Surface	1.0	0.0	115	25.0	25.0	8.0	8.0	32.1	32.0	92.6	92.7	6.4		9.7		2			
04	01	Madana	04.00	0.0	NAC-L-III-	4.1	0.1	85	24.9	04.0	8.0	0.0	32.7	00.7		00.0	6.4	6.4	6.2		<2		045040	004040
C1	Cloudy	Moderate	04:29	8.2	Middle	4.1	0.1	78	24.9	24.9	8.0	8.0	32.8	32.7	92.5 92.6	92.6	6.4		6.1	7.7	2	2	815642	804246
					D-#	7.2	0.1	95	24.9	05.0	8.0	0.0	32.8	00.7	93.1	00.0	6.4	0.4	7.6		2			
					Bottom	7.2	0.1	99	25.0	25.0	8.0	8.0	32.7	32.7	93.3	93.2	6.4	6.4	7.2		2			
					Surface	1.0	0.2	187	25.0	25.0	8.0	8.0	28.4	28.4	92.3	92.3	6.5		2.1		3			
					Surface	1.0	0.2	192	25.0	25.0	8.0	8.0	28.4	28.4	92.3 92.2	92.3	6.5	6.3	2.1		4			
C2	Cloudy	Moderate	05:50	11.2	Middle	5.6	0.3	185	25.0	25.0	8.0	8.0	28.5	28.5	87.4	87.3	6.2	0.3	2.1	4.1	3	3	825678	806953
02	Cloudy	Woderate	03.30	11.2	Middle	5.6	0.2	184	25.0	23.0	8.0	6.0	28.5	20.5	87.1	01.3	6.1		2.0	4.1	4	3	023070	800933
					Bottom	10.2	0.2	187	24.9	24.9	8.0	8.0	30.8	30.7	87.5	87.6	6.1	6.1	8.5		2			
					Dottom	10.2	0.2	193	24.9	24.9	8.0	0.0	30.7	30.7	87.6	07.0	6.1	0.1	8.1		2			
					Surface	1.0	0.1	77	23.8	23.8	7.8	7.8	29.0	29.1	88.5 88.4	88.5	6.3		1.0		3			
					Gundee	1.0	0.1	84	23.8	20.0	7.8	7.0	29.1	20.1			6.3	6.1	1.0		3			
СЗ	Misty	Moderate	05:19	11.4	Middle	5.7	0.1	50	23.8	23.8	7.9	7.9	30.1	30.2	83.2 83.0	83.1	5.9	0	1.4	1.8	2	3	822116	817787
						5.7	0.1	55	23.8		7.9		30.2				5.9		1.5		<2	-		
					Bottom	10.4	0.1	74	23.8	23.8	7.9	7.9	30.1	30.0	83.2 83.3	83.3	5.9	5.9	2.8		3			
						10.4	0.1	69	23.8		7.9		29.8				5.9		2.8		2			
					Surface	1.0	0.0	51	24.9	24.9	8.0	8.0	31.5	31.6	93.3	93.3	6.5		5.6	_	4			
						1.0	0.0	48	24.9		8.0		31.7				6.5	6.5	5.8	4	3			
IM1	Cloudy	Moderate	04:50	6.4	Middle	3.2	0.1	40	24.9 24.9	24.9	8.0	8.0	32.5 32.5	32.5	93.8	93.9	6.5 6.5		9.2	8.9	2	3	818371	806459
						3.2 5.4	0.0	40 66									6.5		9.3	_	2			
					Bottom	5.4	0.1	60	24.9 24.9	24.9	8.0	8.0	32.6 32.6	32.6	94.7 95.0	94.9	6.5	6.5	11.7 11.7	_	<2			
						1.0	0.1	33	24.9		8.0		31.3				6.4		6.6		<2			
					Surface	1.0	0.0	40	24.9	24.9	8.0	8.0	31.5	31.4	92.2 92.1	92.2	6.4		6.7	_	2			
						3.5	0.0	40	24.9		8.0		32.2				6.3	6.4	7.8	-	<2			
IM2	Cloudy	Moderate	04:55	6.9	Middle	3.5	0.0	33	24.9	24.9	8.0	8.0	32.3	32.2	91.7 91.7	91.7	6.3		7.9	7.6	<2	2	819165	806241
						5.9	0.0	33	24.9		8.0		32.5				6.3		8.3	-	2			
					Bottom	5.9	0.0	30	24.9	24.9	8.0	8.0	32.5	32.5	91.8	91.9	6.3	6.3	8.4	-	2			
						1.0	0.1	139	25.0		8.0		28.4				6.5		3.4		2			
					Surface	1.0	0.1	141	25.0	25.0	8.0	8.0	28.4	28.4	92.4 92.3	92.4	6.5		3.9	1	3			
						3.8	0.0	148	24.9	24.2	8.0		28.7				6.5	6.5	5.7	۱.,	2		201015	
IM7	Cloudy	Moderate	05:27	7.5	Middle	3.8	0.0	145	24.9	24.9	8.0	8.0	28.7	28.7	92.9 92.9	92.9	6.5		6.1	5.8	3	3	821340	806855
					Datter	6.5	0.1	136	24.9	24.9	8.0	0.0	31.4	24.4		93.9	6.5	C.F.	8.0	1	3			
					Bottom	6.5	0.0	132	24.9	24.9	8.0	8.0	31.4	31.4	93.7 94.1	93.9	6.5	6.5	8.0	1	3			

DA: Depth-Averaged

Water Quality Monitoring Results on 11 May 23 during Mid-Flood Tide

water Quai	ity Moint	orning ivesu	iita oii		11 May 23	auring Mia-	<u> 1 1000 11</u>	ue																
Monitoring	Weather	Sea	Sampling	Water	Compliana	th ()	Current Speed	Current	Water T	emperature (°C)		рН	Salin	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspender (mg/		Coordinate	
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ui (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	113	23.9	23.9	7.9	7.9	26.6	26.7	92.6	92.5	6.7		1.5		3			
					Surface	1.0	0.2	114	23.9	23.9	7.9	7.9	26.8	20.7	92.6 92.4	92.5	6.7	6.5	1.5	1	4			
IM10	Misty	Moderate	06:25	10.0	Middle	5.0	0.2	129	24.0	24.0	7.9	7.9	28.0	28.0	86.3	86.3	6.2	6.5	3.7	3.2	3	3	822229	809814
110110	iviisty	Woderate	00.23	10.0	Wildule	5.0	0.2	128	24.0	24.0	7.9	7.5	28.0	20.0	86.2	00.5	6.2		3.8	3.2	2	3	022229	009014
					Bottom	9.0	0.1	122	23.9	23.9	7.9	7.9	27.5	27.5	90.1	90.2	6.5	6.5	4.2		3			
					Bottom	9.0	0.2	122	23.9	20.0	7.9	7.0	27.5	27.0	90.2	00. <u>2</u>	6.5	0.0	4.2		2			
					Surface	1.0	0.2	94	23.9	24.0	7.9	7.9	27.7	27.7	90.2	90.0	6.5		1.4		2			
						1.0	0.2	92	24.0		7.9		27.8		89.8		6.5	6.4	1.4		3			
IM11	Misty	Moderate	06:18	7.0	Middle	3.5	0.3	103	24.0	24.0	7.9	7.9	28.2	28.2	86.3	87.0	6.2		1.8	1.8	<2	2	821508	810566
						3.5	0.3	97	24.0		7.9		28.3		87.6		6.3		1.9		2			
					Bottom	6.0	0.3	80	23.9	23.9	7.9	7.9	28.4	28.4	88.8	88.9	6.4	6.4	2.2		<2			
						6.0	0.3	81	23.9		7.9		28.4		89.0		6.4		2.3		2			
					Surface	1.0	0.3	92	23.9	23.9	7.9	7.9	28.2	28.2	88.0	87.9	6.3		2.1	1	<2			
						1.0	0.3	96	23.9		7.9		28.3		87.7		6.3	6.3	2.0	1	2			
IM12	Misty	Moderate	06:12	9.6	Middle	4.8	0.3	89	24.0	24.0	7.9	7.9	28.5	28.5	87.6	87.7	6.3		2.5	2.3	2	2	821158	811508
	,					4.8	0.3	95	24.0		7.9		28.5		87.8		6.3		2.5	1	<2			
					Bottom	8.6	0.3	114	23.8	23.8	7.9	7.9	28.6	28.6	89.1	89.2	6.4	6.4	2.5	1	2			
						8.6	0.3	112	23.8		7.9		28.6		89.2		6.4		2.5		2			
					Surface	1.0	0.0	157	23.8	23.8	7.9	7.9	27.5 27.5	27.5	89.3 89.3	89.3	6.5		1.7		2			
						1.0		156	23.8								6.5	6.5	1.7	-	3			
SR1A	Misty	Moderate	05:52	5.4	Middle	2.7	0.0	158 155	-	-	-	-	-	-	-	-	-		-	2.1	-	3	819973	812659
						4.4	0.1													4	2			
					Bottom	4.4	0.1	170 166	23.5	23.5	7.9	7.9	27.9	27.9	89.7 90.2	90.0	6.5 6.5	6.5	2.7	-	3			
						1.0	0.1	54	_												4			1
					Surface	1.0	0.2	60	23.8	23.8	7.9	7.9	28.4	28.4	89.7 89.6	89.7	6.4 6.4		2.9	4	3			
						-	0.2	30	-		-		- 20.4		-		-	6.4	-	1	-			
SR2	Misty	Moderate	05:37	5.6	Middle	-	0.3	25	-	-	-	-	-	-		-				3.6	-	4	821461	814174
						4.6	0.2	42	23.5		7.9		28.7		90.3		6.5		4.3	1	3			
					Bottom	4.6	0.2	45	23.4	23.5	7.9	7.9	28.7	28.7	90.6	90.5	6.6	6.6	4.3	1	4			
						1.0	0.1	153	25.0		8.0		28.9		91.6		6.4		2.9	1	2			
					Surface	1.0	0.3	150	25.0	25.0	8.0	8.0	28.9	28.9	91.6	91.6	6.4		2.9	1	3			
						4.4	0.2	133	24.9		8.0		29.9		90.6		6.3	6.4	6.0	1	<2			
SR3	Cloudy	Moderate	05:32	8.8	Middle	4.4	0.3	140	24.9	24.9	8.0	8.0	30.1	30.0	90.5	90.6	6.3		6.1	5.1	2	2	822125	807552
					_	7.8	0.2	174	24.9		8.0		30.1				6.3		6.8	1	3			
					Bottom	7.8	0.2	168	24.9	24.9	8.0	8.0	30.0	30.1	90.2	90.3	6.3	6.3	6.2	1	2			
						1.0	0.0	103	24.8		8.0		30.0		92.4		6.5		4.2		4			
					Surface	1.0	0.0	110	24.8	24.8	8.0	8.0	30.0	30.0	92.2	92.3	6.4		4.2	1	3			
05.44	O					4.1	0.1	131	24.9	04.0	8.0		30.9		89.3		6.2	6.3	4.7	1	2		0.47000	
SR4A	Cloudy	Moderate	04:05	8.2	Middle	4.1	0.0	124	24.9	24.9	8.0	8.0	31.0	30.9	89.2	89.3	6.2		4.7	4.7	2	3	817208	807796
					Dallana	7.2	0.1	113	25.0	05.0	8.0	0.0	31.5	04.5	89.5	00.0	6.2	0.0	5.2	1	3			
					Bottom	7.2	0.1	107	25.0	25.0	8.0	8.0	31.5	31.5	89.6	89.6	6.2	6.2	5.1	1	4			
					Surface	1.0	-	-	24.0	24.0	7.9	7.0	27.7	27.7	90.2	00.1	6.5		2.0		3			
					Suriace	1.0	-	-	24.0	24.0	7.9	7.9	27.7	27.7	90.0	90.1	6.5	6.5	2.0	1	3			
SR8	Mioty	Moderate	06:00	5.0	Middle	-	-	-	-		-		-		-		-	6.5	-	2.0	-	3	820400	811615
SKØ	Misty	woderate	06:08	5.0	ivildale	-	-	-	-	1 -	-	1 -	-	1 - 1	-	Ī -	-		-	2.0	-	3	820400	811015
					Bottom	4.0	-	-	23.7	23.7	7.9	7.9	28.5	28.5	89.6	89.7	6.4	6.5	2.0	1	<2			
					DULLUIII	4.0	-	-	23.7	23.1	7.9	1.9	28.5	20.5	89.7	09.7	6.5	0.0	2.1	1	<2			
A: Depth-Aver			•	•		•			•	•	•	•				•			•	•				•

Water Quality Monitoring Results on 13 May 23 during Mid-Ebb Tide

		orning recou	1		TO May 20	during ima	Current		I						DO S	aturation	Disso	lved			Suspende	d Solide		
Monitoring	Weather	Sea	Sampling	Water			Speed	Current	Water Te	emperature (°C)	р	Н	Salin	ity (ppt)		(%)	Oxy		Turbidity	(NTU)	(mg		Coordinate	Coordinate
Station	Condition	Condition	Time	Danth (m)	Sampling Dept	h (m)		Direction	Value	A.,	Value	A	Value	A		ì	i i		Value	Б.		DA	HK Grid (Northing)	HK Grid (Easting)
	Condition	Condition	Time	Depth (m)			(m/s)		value	Average	Value	Average	value	Average	value	Average	Value	DA	value	DA	Value	DA	(Northing)	(Easing)
					Surface	1.0	0.1	218	24.7	24.7	8.2	8.2	30.8	30.8	93.8	93.8	6.5		3.0		4			
						1.0	0.1	220	24.7		8.2		30.8		93.8		6.5	6.5	3.0		4			
C1	Cloudy	Moderate	07:49	7.6	Middle	3.8	0.1	187	24.6	24.6	8.2	8.2	32.6	32.6	93.1	93.1	6.4		2.3	3.5	4	4	815627	804254
	,					3.8	0.1	183	24.6		8.2		32.6		93.0		6.4		2.4	1	5			
					Bottom	6.6 6.6	0.1	195 201	24.6	24.6	8.2	8.2	33.2 33.2	33.2	90.4	90.5	6.2	6.2	5.0		5			
						1.0	0.1 0.2	157	24.6				28.7						5.1 1.3		4 5			
					Surface	1.0	0.2	163	24.9 24.9	24.9	8.2 8.2	8.2	28.7	28.7	92.6 92.6	92.6	6.5		1.3	-	4			
						4.6	0.2	181	24.9		8.2		30.3		88.0		6.1	6.3	3.4	1	4			
C2	Cloudy	Rough	09:35	9.1	Middle	4.6	0.2	173	24.8	24.8	8.2	8.2	30.3	30.3	88.0	88.0	6.1		3.5	3.0	5	4	825661	806943
						8.1	0.2	166	24.7		8.2		31.1		89.0		6.2		4.2	1	2			
					Bottom	8.1	0.3	171	24.7	24.7	8.2	8.2	31.1	31.1	89.0	89.0	6.2	6.2	4.2	1	2			
						1.0	0.1	60	23.7		7.9		29.1		85.8		6.1		1.2		2			
					Surface	1.0	0.1	64	23.7	23.7	7.9	7.9	29.2	29.2	85.6	85.7	6.1	0.4	1.2	1	3			
62	Daise	Calm	00.04	10.4	M: della	6.2	0.0	61	23.7	22.7	7.9	7.0	29.6	20.7	84.8	84.8	6.1	6.1	2.3	2.4	3	2	000404	047700
C3	Rainy	Calm	08:01	12.4	Middle	6.2	0.0	67	23.6	23.7	7.9	7.9	29.7	29.7	84.7	84.8	6.1		2.3	2.4	4	3	822121	817796
					Bottom	11.4	0.1	67	23.6	23.6	7.9	7.9	30.0	30.0	86.7	86.9	6.2	6.2	3.8		4			
					Dottom	11.4	0.1	62	23.6	23.0	7.9	1.5	29.9	30.0	87.1	00.9	6.2	0.2	3.8		4			
					Surface	1.0	0.1	201	24.6	24.6	8.2	8.2	30.5	30.5	94.7	94.7	6.6		2.0		4			
					Curraco	1.0	0.1	195	24.6	20	8.2	0.2	30.5	00.0	94.7	0	6.6	6.5	2.0		4			
IM1	Cloudy	Moderate	08:17	6.7	Middle	3.4	0.1	183	24.7	24.7	8.2	8.2	33.0	33.0	92.3	92.3	6.4		3.5	3.6	3	4	818338	806473
	,					3.4	0.1	176	24.7		8.2		33.0		92.3		6.4		3.5		4			
					Bottom	5.7 5.7	0.1	188	24.6	24.6	8.2 8.2	8.2	33.2 33.2	33.2	89.5 89.5	89.5	6.2	6.2	5.3		3			
						1.0	0.1	194	24.6								6.2		5.4		7			
					Surface	1.0	0.1	199 192	24.6 24.6	24.6	8.2	8.2	30.9	30.9	92.4 92.3	92.4	6.5		3.2		6			
						3.3	0.1	215	24.7		8.2		32.9		91.3		6.3	6.4	4.5		6			
IM2	Cloudy	Moderate	08:30	6.5	Middle	3.3	0.1	217	24.7	24.7	8.2	8.2	32.9	32.9	91.4	91.4	6.3		4.5	4.4	6	6	819161	806237
					_	5.5	0.1	201	24.6		8.2		33.3		90.7		6.3		5.2	1	5			
					Bottom	5.5	0.1	198	24.6	24.6	8.2	8.2	33.3	33.3	90.8	90.8	6.3	6.3	5.3	1	5			
					0.1	1.0	0.1	209	24.6	0.4.0	8.2		30.8		94.9	04.0	6.6		2.0		4			
					Surface	1.0	0.1	206	24.6	24.6	8.2	8.2	30.8	30.8	94.8	94.9	6.6	6.6	2.0	1	3			
IM7	Cloudy	Moderate	08:53	7.8	Middle	3.9	0.1	180	24.6	24.6	8.2	8.2	31.1	31.1	94.2	94.2	6.6	0.0	2.2	2.9	3	3	821371	806833
11017	Cioudy	wouerate	00:53	7.8	iviidale	3.9	0.1	181	24.6	24.0	8.2	0.2	31.1	31.1	94.1	94.2	6.6		2.2	2.9	2	3	0213/1	000833
					Bottom	6.8	0.1	187	24.6	24.6	8.2	8.2	33.1	33.1	91.0	91.0	6.3	6.3	4.7		2			
	anad				Dottom	6.8	0.0	183	24.6	24.0	8.2	0.2	33.1	55.1	91.0	31.0	6.3	0.5	4.6		3			

DA: Depth-Averaged

Water Quality Monitoring Results on 13 May 23 during Mid-Ebb Tide

Trutter Quar		<b>g</b>			10 May 20	auring wia	_	-																
Monitoring	Weather	Sea	Sampling	Water	Compling Desi	th (m)	Current Speed	Current	Water To	emperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	in (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Confess	1.0	0.1	119	23.9	22.0	7.9	7.0	27.1	27.2	90.3	00.0	6.5		2.2		5			
					Surface	1.0	0.1	113	23.9	23.9	7.9	7.9	27.2	27.2	90.0	90.2	6.5		2.1	1	5			
13.440	Determ	0-1	00.00	0.0	B AC JULI	4.4	0.1	121	23.8	00.0	7.9	7.0	28.0	00.0	86.1	00.0	6.2	6.4	3.9	1	4		000057	000000
IM10	Rainy	Calm	09:08	8.8	Middle	4.4	0.1	122	23.8	23.8	7.9	7.9	28.1	28.0	86.2	86.2	6.2		3.9	4.3	3	4	822257	809829
					5	7.8	0.1	125	23.7		7.9		28.2		86.9	07.4	6.3		6.9	1	2			
					Bottom	7.8	0.1	130	23.7	23.7	7.9	7.9	28.2	28.2	87.2	87.1	6.3	6.3	6.8	1	2			
						1.0	0.2	102	23.8		7.9		27.0		87.7		6.4		2.7		6			
					Surface	1.0	0.2	99	23.8	23.8	7.9	7.9	27.2	27.1	87.5	87.6	6.3		2.9	1	5			
						3.9	0.2	110	23.8		7.9		27.5		87.4		6.3	6.3	3.4	1	4	_		
IM11	Rainy	Calm	09:01	7.8	Middle	3.9	0.2	106	23.7	23.8	7.9	7.9	27.6	27.6	87.3	87.4	6.3		3.5	3.6	3	4	821487	810550
						6.8	0.2	115	23.2		7.9		28.4		88.4		6.4		4.5	1	4			
					Bottom	6.8	0.2	119	23.1	23.2	7.9	7.9	28.5	28.5	89.2	88.8	6.5	6.5	4.4	1	3			
			1			1.0	0.2	72	23.8		7.9		26.2		89.2		6.5		1.9		3			
					Surface	1.0	0.2	72	23.8	23.8	7.9	7.9	26.2	26.2	87.9	88.6	6.4		1.9	1	2			
						4.3	0.2	67	23.8		7.9		28.3		84.5		6.1	6.3	2.6		2			
IM12	Rainy	Calm	08:55	8.6	Middle	4.3	0.2	68	23.8	23.8	7.9	7.9	28.4	28.4	84.6	84.6	6.1		2.7	2.6	2	3	821144	811513
						7.6	0.2	60	23.8		7.9		29.2		86.7		6.2		3.2	1	4			
					Bottom	7.6	0.2	60	23.8	23.8	7.9	7.9	29.2	29.2	87.6	87.2	6.3	6.3	3.2	1	3			
			1			1.0	0.2	145	23.4	l	7.9		27.0		88.1		6.4		1.7		2			
					Surface	1.0	0.0	138	23.4	23.4	7.9	7.9	27.0	27.1	88.1	88.1	6.4		1.8	1	2			
													_		_			6.4		1				
SR1A	Rainy	Calm	08:37	4.8	Middle	2.4	0.0	145	-	-	-	-	-	-	-	-	-		-	2.8	-	2	819980	812654
						2.4		150					+		+				-	4	-			
					Bottom	3.8	0.0	132	22.9	22.9	7.9	7.9	27.6	27.6	88.5	88.6	6.5	6.5	3.8		2			
			-		1	3.8	0.0	138	22.8		7.9		27.6		88.7		6.5		3.8	1	3			
					Surface	1.0	0.2	39	23.8	23.8	7.9	7.9	26.7	26.8	88.8	88.8	6.4		4.1		2			
						1.0	0.2	39	23.8		7.9		26.8		88.7		6.4	6.4	4.1	_	2			
SR2	Rainy	Calm	08:21	4.8	Middle	-	0.2	33	-	-	-	-	-	-	-	-	-		-	4.6	-	3	821443	814151
	•						0.3	36	-		-		-		-		-		-	1	-			
					Bottom	3.8	0.2	63	23.8	23.8	7.9	7.9	26.9	26.8	88.7	88.9	6.4	6.5	5.1		3			
						3.8	0.2	61	23.8		7.9		26.6		89.0		6.5		5.1		4			
					Surface	1.0	0.4	146	24.9	24.9	8.2	8.2	28.3	28.3	91.9	91.9	6.5		1.3		2			
						1.0	0.4	153	24.9		8.2		28.3		91.9		6.5	6.3	1.3		2			
SR3	Cloudy	Rough	09:13	8.7	Middle	4.4	0.3	166	24.7	24.7	8.2	8.2	31.4	31.4	88.5	88.5	6.1		3.0	3.4	3	3	822162	807584
	,					4.4	0.2	160	24.7		8.2		31.4		88.5		6.1		3.0		2	-		
					Bottom	7.7	0.3	151	24.7	24.7	8.2	8.2	31.8	31.8	87.9	88.0	6.1	6.1	5.9		3			
					20110111	7.7	0.3	148	24.7		8.2	0.2	31.8	01.0	88.0	00.0	6.1	0	5.9		3			
					Surface	1.0	0.1	88	24.7	24.7	8.2	8.2	30.5	30.5	90.3	90.3	6.3		3.7		6			
					Gundoe	1.0	0.0	91	24.7	2-1.7	8.2	0.2	30.5	00.0	90.2	50.0	6.3	6.2	3.8		6			
SR4A	Cloudy	Calm	07:24	9.4	Middle	4.7	0.0	103	24.7	24.7	8.2	8.2	31.6	31.6	87.9	87.9	6.1	0.2	3.3	4.1	5	5	817185	807795
OINA	Cioday	Cairi	07.24	3.4	Wilddie	4.7	0.0	106	24.7	24.7	8.2	0.2	31.6	31.0	87.9	07.5	6.1		3.3	4.1	4	3	017103	007733
					Bottom	8.4	0.0	91	24.7	24.7	8.2	8.2	32.0	32.0	86.1	86.1	6.0	6.0	5.2		4			
					Dottom	8.4	0.1	96	24.7	24.1	8.2	0.2	32.0	32.0	86.1	00.1	6.0	0.0	5.3		5			
_					Surface	1.0	-	-	23.8	23.8	7.9	7.9	26.6	26.6	88.9	88.8	6.5		1.5		2			
					Suitace	1.0	-	-	23.8	23.0	7.9	7.9	26.7	20.0	88.7	00.0	6.4	6.5	1.5	1	3			1
SR8	Boin:	Colm	00.54	F 0	Middle	-	-	-	-		-		-		-		-	0.5	-	1	-	2	920292	011600
SKØ	Rainy	Calm	08:51	5.0	Middle	-	-	-	-	1 -	-	1 -	-	1 -	-	-	-		-	1.9	-	3	820383	811630
					Dettern	4.0	-	-	23.8	22.0	7.9	7.0	27.1	27.0	89.0	00.4	6.4	C F	2.3	1	3			
					Bottom	4.0	-	-	23.8	23.8	7.9	7.9	26.9	27.0	89.2	89.1	6.5	6.5	2.3	1	3			
			•				•			•	_	•								•				•

Water Quality Monitoring Results on 13 May 23 during Mid-Flood Tide

10																								
ivionitoring	Weather	Sea	Sampling	Water	Sampling Deptl	o (m)	Current Speed	Current	Water Te	emperature (°C)	рH	ı	Salin	ity (ppt)		aturation %)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinat HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Depti	1 (111)	(m/s)	Direction	Value	Average	Value A	verage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					0(	1.0	0.2	39	24.7	04.7	8.2	0.0	31.1	04.4	95.7	05.7	6.7		2.8		3			
					Surface	1.0	0.3	45	24.7	24.7	8.2	8.2	31.1	31.1	95.7	95.7	6.7		2.8	1	3			
0.4			40.00			4.1	0.2	14	24.7	0.1.7	8.2		31.1		94.2		6.6	6.7	3.8		3		0.1500.1	
C1	Rainy	Rough	12:38	8.2	Middle	4.1	0.2	13	24.7	24.7	8.2	8.2	31.1	31.1	94.2	94.2	6.6		3.8	4.3	2	3	815604	804228
					Datter	7.2	0.3	51	24.6	04.0	8.2	0.0	32.4	00.4	93.1	93.1	6.4	6.4	6.2	1	2			
					Bottom	7.2	0.3	52	24.6	24.6	8.2	8.2	32.4	32.4	93.1 93.1	93.1	6.4	6.4	6.2	1	2			
					Surface	1.0	0.1	357	24.9	24.9	8.2	8.2	28.6	20.0	93.2	93.2	6.6		1.4		2			
					Surface	1.0	0.1	0	24.9	24.9	8.2	8.2	28.6	28.6	93.2	93.2	6.6	6.5	1.4	1	2			
C2	Rainy	Rough	11:08	9.8	Middle	4.9	0.1	336	24.8	24.8	8.2	8.2	28.7	28.7	91.3	91.3	6.4	6.5	1.5	1.8	2	2	825695	806957
02	Ralliy	Rougii	11.00	9.0	ivildale	4.9	0.2	338	24.8	24.0	8.2	0.2	28.7	20.7	91.3	91.3	6.4		1.5	1.0	3	2	623693	600937
					Bottom	8.8	0.2	3	24.8	24.8	8.2	8.2	30.5	30.5	89.1	89.2	6.2	6.2	2.4		2			
					Dottom	8.8	0.1	9	24.8	24.0	8.2	0.2	30.5	30.3	89.3	09.2	6.2	0.2	2.4		2			
					Surface	1.0	0.4	261	23.7	23.7	7.9	7.9	28.2	28.2	87.9	87.7	6.3		1.4		3			
					Odnace	1.0	0.3	261	23.6	25.7	7.9	7.3	28.2	20.2	87.4	01.1	6.3	6.1	1.5		2			
C3	Rainy	Calm	12:16	9.0	Middle	4.5	0.4	275	23.6	23.6	7.9 7.9	7.9	30.3	30.3	82.8	82.7	5.9	0.1	2.2	2.4	3	3	822123	817804
	ramy	Cami	12.10	0.0	IVIIdalo	4.5	0.4	278	23.6	20.0		7.0	30.4	00.0	82.6	02.1	5.9		2.2	2.7	3	O	022120	017004
					Bottom	8.0	0.4	274	23.6	23.6	7.9 7.9	7.9	30.8	30.8	81.9 81.9	81.9	5.8	5.8	3.6		4			
					Bottom	8.0	0.4	277	23.6	20.0			30.8	00.0		00	5.8	0.0	3.5		3			
					Surface	1.0	0.2	2	24.8	24.8	8.2	8.2	30.6	30.6	95.6	95.6	6.7		2.4	_	3			
						1.0	0.2	359	24.8		8.2		30.6		95.6		6.7	6.7	2.4	_	4			
IM1	Rainy	Rough	12:14	7.5	Middle	3.8	0.2	358	24.7	24.7	8.2	8.2	31.3	31.2	94.6	94.6	6.6		3.0	4.5	2	3	818356	806467
	·	•				3.8	0.1	1	24.7		8.2		31.2		94.6		6.6		3.1	4	3			
					Bottom	6.5	0.1	33	24.6	24.6	8.2	8.2	33.3	33.3	91.1	91.1	6.3	6.3	8.0	4	2			
						6.5	0.1	30 343	24.6		8.2		33.3		91.1		6.3		8.1		3			
					Surface	1.0	0.1	343	24.7 24.7	24.7	8.2	8.2	30.7	30.7	95.4 95.4	95.4	6.7		1.5	4	<2			
						3.6	0.2	344	24.7									6.6	1.5 3.2	1	<2			
IM2	Rainy	Rough	12:04	7.2	Middle	3.6	0.2	306	24.7	24.7	8.2 8.2	8.2	32.5 32.4	32.5	93.8	93.8	6.5 6.5		3.2	3.2	<2 <2	2	819195	806254
						6.2	0.2	318	24.7				33.3		93.8		6.3		4.9	-	2			
					Bottom	6.2	0.2	319	24.6	24.6	8.2	8.2	33.3	33.3	91.0	91.0	6.3	6.3	4.9	1	2			
						1.0	0.2	299	24.9		8.2		28.3		91.8		6.5		2.3		2			
					Surface	1.0	0.1	301	24.9	24.9	8.2	8.2	28.3	28.3	91.7	91.8	6.5		2.3	1	2			
						4.3	0.1	295	24.8		8.2		29.9		91.1		6.4	6.5	3.4	1	<2			
IM7	Rainy	Rough	11:41	8.5	Middle	4.3	0.1	295	24.8	24.8	8.2	8.2	29.9	29.9	91.1	91.1	6.4		3.5	3.7	<2	2	821358	806844
					5.0	7.5	0.1	315	24.8	24.2	8.2		31.5		90.2		6.3		5.2	1	<2			
	l l		1		Bottom	7.5	0.1	308	24.8	24.8	8.2	8.2	31.5	31.5	90.2	90.2	6.3	6.3	5.3	1	<2			l

DA: Depth-Averaged

Water Quality Monitoring Results on 13 May 23 during Mid-Flood Tide

Water Quar	,	<u> </u>			10 May 20	auring mia			_														,	,
Monitoring	Weather	Sea	Sampling	Water	Sampling Days	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	(111)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	276	23.8	23.8	7.9	7.9	27.7	27.7	86.7	86.6	6.3		1.4		<2			
					Surface	1.0	0.3	272	23.8	23.0	7.9	7.9	27.8	21.1	86.5	00.0	6.2		1.5	1	<2			
IM10	Daine	Calm	11:09	40.0	Middle	5.0	0.3	294	23.8	23.8	7.9	7.0	28.2	28.2	86.2	86.2	6.2	6.2	1.7	2.2	<2	.0	822254	809849
IIVITO	Rainy	Calm	11:09	10.0	Middle	5.0	0.3	294	23.8	23.8	7.9	7.9	28.2	28.2	86.2	86.2	6.2		1.8	2.2	<2	<2	822254	809849
					Bottom	9.0	0.3	263	23.8	23.8	7.9	7.9	28.2	28.2	86.7	87.0	6.2	6.3	3.4	1	<2			
					Bottom	9.0	0.3	265	23.8	23.0	7.9	7.9	28.2	20.2	87.2	67.0	6.3	6.3	3.4	1	<2			
					Surface	1.0	0.2	283	23.8	23.8	7.9	7.9	27.5	27.6	86.0	86.0	6.2		1.2		<2			
					Sulface	1.0	0.3	277	23.8	25.0	7.9	7.5	27.7	21.0	85.9	00.0	6.2	6.2	1.2		<2			
IM11	Rainy	Calm	11:17	7.4	Middle	3.7	0.2	282	23.7	23.7	7.9	7.9	28.0	28.0	86.2	86.3	6.2	0.2	2.6	2.6	<2	2	821481	810534
IIVIII	ixairiy	Callii	11.17	7.4	Middle	3.7	0.2	284	23.7	23.7	7.9	7.5	28.0	20.0	86.3	00.5	6.2		2.6	2.0	<2	2	021401	010334
					Bottom	6.4	0.2	294	23.5	23.5	7.9	7.9	28.2	28.2	86.8	86.9	6.3	6.3	3.9		3			
					Bottom	6.4	0.2	289	23.5	23.3	7.9	7.5	28.3	20.2	87.0	00.9	6.3	0.5	3.9		2			
					Surface	1.0	0.3	290	23.8	23.8	7.9	7.9	26.1	26.1	89.1	88.6	6.5		1.9		<2			
					Sulface	1.0	0.3	296	23.8	25.0	7.9	7.5	26.2	20.1	88.1	00.0	6.4	6.2	1.9		<2			
IM12	Rainy	Calm	11:23	9.0	Middle	4.5	0.3	304	23.8	23.8	7.9	7.9	28.7	28.7	82.6	82.4	5.9	0.2	2.6	2.7	2	2	821157	811530
IIVITZ	ixairiy	Callii	11.23	9.0	Middle	4.5	0.3	309	23.8	25.0	7.9	7.5	28.7	20.7	82.2	02.4	5.9		2.5	2.7	2	2	021137	011330
					Bottom	8.0	0.3	316	23.5	23.5	7.9	7.9	29.1	29.0	82.6	83.3	5.9	6.0	3.6		2			
					Bottom	8.0	0.3	309	23.4	23.3	7.9	1.5	29.0	29.0	84.0	03.3	6.1	0.0	3.5		2			
					Surface	1.0	0.0	186	23.8	23.8	7.9	7.9	26.4	26.4	91.3	91.3	6.6		1.0		<2			
					Surface	1.0	0.0	182	23.8	23.0	7.9	7.5	26.4	26.4	91.2	5	6.6	6.6	1.0		<2			
SR1A	Rainy	Calm	11:37	4.4	Middle	2.2	0.0	197	-	_	-		-	_	-	_	-	0.0	-	1.2	-	2	819982	812658
OKIA	reality	Callii	11.57	7.7	Wilddie	2.2	0.0	200	-		-		-	_	-		-		-	1.2	-	2	013302	012030
					Bottom	3.4	0.0	192	23.8	23.8	7.9	7.9	26.5	26.5	90.1	90.0	6.5	6.5	1.4		2			
					Dottom	3.4	0.1	185	23.8	25.0	7.9	7.5	26.5	20.5	89.8	30.0	6.5	0.5	1.5		2			
					Surface	1.0	0.1	306	23.8	23.8	7.9	7.9	27.8	27.9	88.3	88.3	6.4		1.1		<2			
					Ourlace	1.0	0.1	304	23.7	25.0	7.9	7.5	27.9	21.5	88.2	00.0	6.4	6.4	1.1		<2			
SR2	Rainy	Calm	11:57	5.8	Middle	-	0.1	290	-	_	-	J .	-	_	-	_	-	0.4	-	1.5	-	2	821471	814172
OILE	rainy	Odiiii	11.07	0.0	Wilddie	-	0.1	289	-		-		-		-		-		-	1.0	-	_	021471	014172
					Bottom	4.8	0.1	289	23.2	23.2	7.9	7.9	28.7	28.7	89.1	89.3	6.5	6.5	2.0		2			
					Bottom	4.8	0.1	294	23.1	20.2	7.9	7.0	28.7	20.1	89.5	00.0	6.5	0.0	1.9		3			
					Surface	1.0	0.0	168	24.8	24.8	8.2	8.2	29.6	29.6	91.0	91.0	6.4		2.0		4			
					Cunaco	1.0	0.1	170	24.8	20	8.2	0.2	29.6	20.0	91.0	01.0	6.4	6.4	1.9		3			
SR3	Rainy	Rough	11:26	9.1	Middle	4.6	0.0	152	24.8	24.8	8.2	8.2	31.1	31.1	90.6	90.6	6.3		2.9	3.0	3	3	822161	807548
	,					4.6	0.0	146	24.8		8.2		31.1		90.6		6.3		2.9		4	-		
					Bottom	8.1	0.1	157	24.7	24.7	8.2	8.2	31.7	31.7	89.1	89.1	6.2	6.2	4.1		2			
					=	8.1	0.1	154	24.7		8.2		31.7	•	89.0		6.2		4.2		3			
					Surface	1.0	0.0	117	24.7	24.7	8.2	8.2	31.3	31.3	89.8	89.8	6.3		2.6		4			
						1.0	0.0	117	24.7		8.2		31.4		89.8		6.3	6.3	2.6		4			
SR4A	Rainy	Moderate	13:03	10.3	Middle	5.2	0.1	135	24.7	24.7	8.2	8.2	32.0	32.0	89.1	89.1	6.2		3.4	3.1	3	3	817199	807814
	. ,					5.2	0.1	141	24.7		8.2		32.0		89.0		6.2		3.5		3			
					Bottom	9.3	0.0	106	24.6	24.6	8.2	8.2	32.3	32.3	88.3	88.3	6.1	6.1	3.3		3			
						9.3	0.0	106	24.6		8.2	<u> </u>	32.3		88.3		6.1		3.3	<u> </u>	2			
					Surface	1.0	-	-	23.7	23.7	7.9	7.9	26.4	26.4	91.4	91.4	6.7		1.2	4	<2			
						1.0	-	-	23.6		7.9	ļ	26.5		91.3		6.7	6.7	1.3	4	<2			
SR8	Rainy	Calm	11:27	5.8	Middle	-	-	-	-	-	-	4 -	-	-	-	-	-		-	2.1	-	<2	820378	811611
	•					-	-	-	-		-		-		-		-		-	1				
					Bottom	4.8	-	-	23.1	23.1	7.9	7.9	27.2	27.0	90.7	90.9	6.7	6.7	2.9	4	<2			
					ĺ	4.8	-	-	23.0		7.9		26.8		91.0		6.7		2.9		<2			

DA: Depth-Averaged

Water Quality Monitoring Results on 16 May 23 during Mid-Ebb Tide

water Quai	ity wont	oning Kesu	its on		16 May 23	auring Mia-	EDD HIGE	:																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	th (m)	Current Speed	Current	Water Te	emperature (°C)	р	Н	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspender (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Затіріігід Бері	(111)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	206	24.6	24.6	8.1	8.1	24.6	24.6	92.3	92.3	6.7		1.5		2			
					Surface	1.0	0.4	200	24.6	24.0	8.1	0.1	24.6	24.6	92.3 92.2	92.3	6.7	6.5	1.6	1	3			
C1	Cloudy	Moderate	10:32	8.6	Middle	4.3	0.3	208	24.3	24.3	8.1	8.1	28.8	28.9	88.0	87.9	6.3	6.5	3.4	3.1	3	3	815624	804265
Ci	Cloudy	Moderate	10.32	0.0	Middle	4.3	0.4	212	24.2	24.3	8.1	0.1	29.0	20.9	87.8	67.9	6.2		3.5	3.1	3	3	013024	604265
					Bottom	7.6	0.4	209	24.2	24.2	8.0	8.0	29.8	29.7	88.4 88.6	88.5	6.3	6.3	4.1		3			
					Bollom	7.6	0.4	201	24.2	24.2	8.0	0.0	29.7	25.1	88.6	00.5	6.3	0.5	4.3		4			
					Surface	1.0	0.7	163	24.9	24.9	8.2	8.2	23.5	23.6	90.2	90.1	6.5		1.8		<2			
					Ounace	1.0	0.7	169	24.9	24.5	8.2	0.2	23.6	25.0	89.9	30.1	6.5	6.2	1.9		<2			
C2	Cloudy	Moderate	12:13	11.1	Middle	5.6	0.7	182	24.5	24.5	8.2	8.2	27.6	27.6	83.0 83.2	83.1	5.9	0.2	2.6	2.6	<2	2	825663	806925
02	Cloudy	Moderate	12.15		Middle	5.6	0.7	186	24.5	24.0	8.2	0.2	27.6	21.0		00.1	5.9		2.7	2.0	<2	2	023003	000323
					Bottom	10.1	0.7	166	24.6	24.6	8.1	8.1	27.5	27.5	84.9 85.1	85.0	6.0	6.1	3.4		2			
					Bottom	10.1	0.7	170	24.6	24.0	8.1	0.1	27.5	21.0		00.0	6.1	0.1	3.3		2			
					Surface	1.0	0.3	93	24.2	24.2	7.7	7.7	25.3	25.3	90.3	90.2	6.6		2.0		2			
					Cunado	1.0	0.2	96	24.2	2-1.2	7.7		25.3	20.0	90.1	00.2	6.5	6.4	2.1		3			
C3	Misty	Calm	09:25	11.0	Middle	5.5	0.2	101	24.1	24.1	7.7	7.7	27.2	27.1	87.1 87.3	87.2	6.3	0.4	3.1	2.9	2	2	822123	817779
00	iviloty	Cami	00.20	11.0	Wildale	5.5	0.2	107	24.1	2-1.1	7.7		27.0	27.1		07.2	6.3		3.2	2.0	2	_	022120	011110
					Bottom	10.0	0.2	94	24.1	24.1	7.7	7.7	26.8	26.7	87.5 87.5	87.5	6.3	6.3	3.6		2			
					Bottom	10.0	0.2	88	24.1	2-4.1	7.7		26.6	20.1		07.0	6.3	0.0	3.6		3			
					Surface	1.0	0.2	195	24.7	24.7	8.1	8.1	24.8	24.8	90.4	88.8	6.5		2.7		<2			
					Cunado	1.0	0.2	202	24.6	2-1.7	8.1	0.1	24.8	24.0	87.1	00.0	6.3	6.3	2.9		<2			
IM1	Cloudy	Moderate	10:53	6.7	Middle	3.4	0.2	170	24.6	24.6	8.1	8.1	27.6	27.6	87.1 87.2	87.2	6.2	0.0	3.4	3.5	<2	2	818369	806470
						3.4	0.2	166	24.6		8.1		27.6						3.3		<2	_		
					Bottom	5.7	0.2	172	24.2	24.2	8.1	8.1	29.8	29.8	87.8	87.9	6.2	6.2	4.5		2			
						5.7	0.3	176	24.2		8.1		29.8		87.9		6.2		4.2		2			
					Surface	1.0	0.3	199	24.9	24.9	8.1	8.1	25.4	25.4	89.6	89.6	6.4		1.7		5			
						1.0	0.3	205	24.9		8.1		25.4		89.6		6.4	6.3	1.8		4			
IM2	Cloudy	Moderate	10:57	7.3	Middle	3.7	0.3	205	24.4	24.4	8.0	8.0	29.0	29.1	88.1 88.2	88.2	6.2		8.3	4.9	4	4	819163	806216
	,					3.7	0.3	206	24.3		8.0		29.1				6.3		8.5	1	4			
					Bottom	6.3	0.3	197	24.3	24.3	8.0	8.0	29.3	29.3	88.8	89.0	6.3	6.3	4.5		4			
						6.3	0.3	198	24.3		8.0		29.3		89.1		6.3		4.5		3			
					Surface	1.0	0.3	196	24.8	24.8	8.2	8.2	26.4	26.4	86.4	86.4	6.2		1.8	4	2			
						1.0	0.3	191	24.8		8.2		26.4		86.4		6.2	6.1	1.8	4	2			
IM7	Cloudy	Moderate	11:33	7.4	Middle	3.7	0.3	189	24.5	24.5	8.1	8.1	27.7	27.7	82.4 82.5	82.5	5.9 5.9		2.0	2.1	2	2	821329	806815
	·					3.7	0.3	184	24.5		8.1		27.7						2.1	4	2			
					Bottom	6.4	0.3	202	24.5	24.5	8.1	8.1	27.9	27.9	84.2	84.5	6.0	6.0	2.5	-	<2			
DA: Dooth Aver						6.4	0.3	197	24.5		8.1		27.9		84.7		6.0		2.5		<2			

DA: Depth-Averaged

Water Quality Monitoring Results on 16 May 23 during Mid-Ebb Tide

								7																
Monitoring	Weather	Sea	Sampling	Water	Complies	h ()	Current Speed	Current	Water Te	emperature (°C)	pН		Salinity	y (ppt)		aturation %)	Disso Oxyg		Turbidity	(NTU)	Suspended (mg/l		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	.n (m)	(m/s)	Direction	Value	Average	Value Ave	rage V	Value A	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					0.7	1.0	0.5	97	24.3	212	7.9	. 1	26.1		91.6	24.5	6.6		4.1		2			
					Surface	1.0	0.5	101	24.3	24.3	7.9		26.2	26.2	91.4	91.5	6.6		4.1		3			
						3.9	0.5	110	24.1		7.8		27.2		86.4		6.2	6.4	5.0		2	_		
IM10	Misty	Calm	10:25	7.8	Middle	3.9	0.5	104	24.1	24.1	7.8		27.2	27.2	86.2	86.3	6.2		5.1	5.2	3	3	822221	809840
						6.8	0.5	113	24.1		7.8		27.4		85.4		6.1		6.4		3			
					Bottom	6.8	0.5	115	24.1	24.1	7.8		27.5	27.4	85.3	85.4	6.1	6.1	6.5		3			
					0 (	1.0	0.5	99	24.3	24.0	7.8	. 2	24.7		90.8		6.6		3.8		4			
					Surface	1.0	0.5	102	24.2	24.3	7.8	.8	24.8	24.8	90.2	90.5	6.6	0.0	3.7		4			
13.444	N 42 - 4 - 1	0-1	40.04		B AC - L-III -	3.7	0.6	88	24.0	04.0	7.8	. 2	27.6	07.0	83.7	00.7	6.0	6.3	4.1	1	3		004504	040544
IM11	Misty	Calm	10:21	7.4	Middle	3.7	0.6	90	24.0	24.0	7.8	.8	27.7	27.6	83.6	83.7	6.0		4.2	4.4	3	3	821504	810544
					D-11	6.4	0.6	94	24.1	04.4	7.8	. 2	27.8	07.7	83.8	00.0	6.0	0.0	5.2		3			
					Bottom	6.4	0.6	89	24.1	24.1	7.8		27.7	27.7	83.9	83.9	6.0	6.0	5.3		3			
ĺ					0	1.0	0.6	102	24.7	04.7	7.8	. 2	24.2	04.0	93.6	00.5	6.8		3.5		2			
					Surface	1.0	0.5	107	24.7	24.7	7.8		24.4	24.3	93.4	93.5	6.8	0.0	3.4		3			
18440	N 40 - 10 -	0-1	40.40	0.0	NAC-1-III-	4.4	0.6	91	24.4	04.4	7.8	. 2	25.5	05.5	90.8	00.0	6.6	6.6	4.0	0.0	2		004400	044507
IM12	Misty	Calm	10:16	8.8	Middle	4.4	0.6	86	24.4	24.4	7.8		25.6	25.5	87.8	89.3	6.3		4.0	3.8	2	2	821168	811507
					5	7.8	0.6	103	24.3	212	7.8		25.8		86.5		6.2		4.1		3			
					Bottom	7.8	0.6	110	24.3	24.3	7.7		25.6	25.7	86.5	86.5	6.3	6.3	4.2		2			
					1 .	1.0	0.0	134	24.5		7.7	_ 12	26.3		85.2		6.1		3.5		4			
					Surface	1.0	0.1	140	24.5	24.5	7.7		26.3	26.3	84.9	85.1	6.1		3.5		3			
0044						2.0	0.0	153	-		-		-		-		-	6.1	-	1	-		0.400=0	040050
SR1A	Misty	Calm	09:57	4.0	Middle	2.0	0.0	149	-	-	-		-		-	-	-		-	4.4	-	3	819973	812658
					D-11	3.0	0.0	124	24.4	04.5	7.7	- 2	26.6	00.5	82.5	00.0	5.9	<b>5</b> 0	5.2		3			
					Bottom	3.0	0.0	121	24.5	24.5	7.7		26.4	26.5	82.1	82.3	5.9	5.9	5.3		2			
					Cuntons	1.0	0.3	33	24.0	24.0	7.7	7 2	26.8	20.0	86.6	00.0	6.3		3.4		2			
					Surface	1.0	0.3	27	24.0	24.0	7.7		26.9	26.8	86.6	86.6	6.3	0.0	3.4		2			
000	N 42 - 4 - 1	0-1	00.40	4.0	B AC - L-III -	-	0.4	59	-		-		-		-		-	6.3	-	4.0	-		004.454	04.4470
SR2	Misty	Calm	09:40	4.2	Middle	-	0.4	65	-	-	-	-	-	-	-	-	-		-	4.0	-	2	821451	814179
					D.H.	3.2	0.4	45	24.0	04.0	7.6	. 2	26.7	00.0	86.9	07.0	6.3	0.0	4.5		2			
					Bottom	3.2	0.4	41	24.0	24.0	7.6	.6	26.6	26.6	87.1	87.0	6.3	6.3	4.5		2			
					Currings	1.0	0.6	161	24.9	24.0	8.1	4 2	25.2	25.2	88.4	88.4	6.3		2.0		<2			
					Surface	1.0	0.6	160	24.8	24.9	8.1		25.1	25.2	88.4	88.4	6.4	C 4	2.2		<2			
SR3	01	Marilanata	44.40	0.4	B AC - L-III -	4.2	0.6	161	24.5	04.5	8.1	. 2	27.6	07.7	83.4	00.0	5.9	6.1	4.4	4.0	<2	_	000470	807572
SK3	Cloudy	Moderate	11:40	8.4	Middle	4.2	0.6	164	24.5	24.5	8.1	.1 2	27.7	27.7	83.0	83.2	5.9		4.8	4.2	<2	<u>&lt;2</u>	822170	80/5/2
					Dettern	7.4	0.6	181	24.4	24.4	8.1	. 2	28.1	20.4	81.2	81.3	5.8	5.8	6.0		<2			
					Bottom	7.4	0.6	184	24.4	24.4	8.1	.1	28.1	28.1	81.4	81.3	5.8	5.8	6.2		<2			
					Curtons	1.0	0.0	102	25.1	25.4	8.1	4 2	25.5	25.5	88.5	00.5	6.3		0.9		3			
					Surface	1.0	0.0	106	25.1	25.1	8.1	.1 2	25.5	25.5	88.4	88.5	6.3	6.2	0.9		4			
CD4A	Claudu	Madauata	40.07	0.0	Mistalla	4.4	0.0	111	24.6	24.0	8.0	. 2	27.8	27.0	84.9	04.0	6.0	0.2	2.6	2.5	3	2	817194	007700
SR4A	Cloudy	Moderate	10:07	8.8	Middle	4.4	0.0	106	24.6	24.6	8.0	.0	28.0	27.9	84.8	84.9	6.0		2.7	2.5	2	3	817194	807790
					Bottom	7.8	0.0	107	24.5	24.5	8.0	.0 2	28.7	20.7	85.5	85.6	6.1	6.1	3.9		2			
				<u></u>	DULLUIII	7.8	0.1	105	24.5	24.0	8.0		28.7	28.7	85.6	00.0	6.1	0.1	3.9		2			
İ					Surface	1.0	-	-	24.5	24.5	7.8	.8 2	24.6	24.7	91.1	91.0	6.6		2.1		3			
					Surface	1.0	-	-	24.5	24.5	7.8	.0	24.8	24.1	90.8	91.0	6.6	6.6	2.2		2			
SR8	Michy	Calm	10:13	4.8	Middle	-	-	-	-		-		-		-		-	6.6	-	2.8	-	3	820378	811606
ONO	Misty	Calm	10.13	4.0	ivildule	-	-	-	-	-	-	_	-	- [	-	-	-		-	2.0	-	3	020378	011000
				1	Bottom	3.8	-	-	24.4	24.4	7.7	.7 2	25.1	25.0	86.8	86.6	6.3	6.3	3.4		3			
			<u> </u>	<u> </u>	DULLUITI	3.8	-	-	24.4	24.4	7.7	. 1	25.0	25.0	86.4	00.0	6.3	0.3	3.3		3			

Water Quality Monitoring Results on 16 May 23 during Mid-Flood Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	emperature (°C)	ļ ļ	рΗ	Salin	ity (ppt)	DO S	aturation (%)	Disso Oxy	olved gen	Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	our (III)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.5	21	24.8	24.8	8.0	8.0	25.5	25.5	91.0	90.9	6.5		5.6		3			
					Ourlace	1.0	0.5	17	24.7	24.0	8.0	0.0	25.5	25.5	90.8	30.3	6.5	6.2	5.6		2			
C1	Cloudy	Moderate	16:56	8.8	Middle	4.4	0.5	25	24.4	24.4	8.0	8.0	29.0	29.0	83.2	83.1	5.9	0.2	5.9	6.4	2	2	815623	804243
01	Cloudy	Moderate	10.50	0.0	Middle	4.4	0.5	23	24.4	24.4	8.0	0.0	28.9	25.0	82.9	05.1	5.9		6.0	0.4	2		013023	004243
					Bottom	7.8	0.4	30	24.5	24.5	8.0	8.0	28.9	28.8	88.6	88.9	6.3	6.3	7.7		2			
					Dottom	7.8	0.4	24	24.4	24.5	8.0	0.0	28.8	20.0	89.2	00.3	6.3	0.5	7.8		2			
					Surface	1.0	0.1	234	24.7	24.7	8.2	8.2	23.7	23.7	89.0	88.8	6.5		2.3		3			
					Ourlace	1.0	0.1	238	24.6	24.7	8.2	0.2	23.7	25.7	88.5	00.0	6.4	6.2	2.5		3			
C2	Cloudy	Moderate	15:13	11.9	Middle	6.0	0.0	237	24.7	24.8	8.2	8.2	27.4	27.4	82.9	83.0	5.9	0.2	6.5	5.2	3	3	825695	806927
02	Oloddy	Moderate	10.10	11.5	Wildelie	6.0	0.1	238	24.8	24.0	8.2	0.2	27.4	27	83.0	00.0	5.9		6.8	0.2	2	· ·	020000	000027
					Bottom	10.9	0.1	251	25.0	25.1	8.2	8.2	27.2	27.2	83.6	83.9	5.9	5.9	6.4		2			
					50110111	10.9	0.0	254	25.1	20	8.2	0.2	27.2		84.1	00.0	5.9	0.0	6.7		2			
					Surface	1.0	0.5	250	24.2	24.2	7.9	7.9	26.7	26.8	89.5	89.4	6.5		4.2		2			
						1.0	0.5	248	24.1		7.9		26.9		89.2		6.4	6.2	4.1		3			
C3	Misty	Calm	16:10	8.6	Middle	4.3	0.5	243	23.8	23.8	7.8	7.8	29.4	29.4	82.6	82.6	5.9		5.1	5.1	3	3	822091	817826
						4.3	0.5	242	23.8		7.8		29.5		82.6		5.9		5.2		3	-		
					Bottom	7.6	0.5	270	23.8	23.8	7.8	7.8	29.8 29.8	29.8	82.7	82.7	5.9	5.9	6.1		4			
						7.6	0.5	267	23.8		7.8				82.7		5.9		6.0		3			
					Surface	1.0	0.2	8	24.8	24.8	8.0	8.0	24.8	24.7	91.3	91.3	6.6		2.0		3			
						1.0	0.2	15	24.7		8.0				91.2		6.6	6.4	2.1		3			
IM1	Cloudy	Moderate	16:31	6.4	Middle	3.2	0.2	17 17	24.5 24.5	24.5	8.0	8.0	28.4	28.4	87.4 87.5	87.5	6.2		7.1 7.2	4.9	2	3	818327	806445
						5.4	0.1	31	24.5						87.5		6.2		5.5		3			
					Bottom	5.4	0.2	36	24.4	24.4	8.0	8.0	28.8	28.8	88.2	88.1	6.3	6.3	5.3		2			
						1.0	0.2	328	25.3		8.0		24.3		92.0		6.6		2.2	-	2			
					Surface	1.0	0.2	332	25.2	25.3	8.0	8.0	24.3	24.3	92.1	92.1	6.6		2.2		3			
						3.8	0.1	358	24.6		8.1		26.9		86.9		6.2	6.4	5.9	1	3			
IM2	Cloudy	Moderate	16:27	7.6	Middle	3.8	0.2	3	24.6	24.6	8.1	8.1	26.9	26.9	87.0	87.0	6.2		5.8	5.3	4	4	819169	806219
						6.6	0.2	346	24.6		8.1		27.2		87.6		6.2		7.8	-	4			
					Bottom	6.6	0.1	352	24.7	24.7	8.1	8.1	27.2	27.2	87.7	87.7	6.3	6.3	7.7	1	5			
						1.0	0.2	242	24.6		8.0		26.9		83.1		5.9		1.4		3			
					Surface	1.0	0.2	240	24.6	24.6	8.0	8.0	27.1	27.0	82.9	83.0	5.9		1.5	1	2			
			l			4.0	0.3	270	24.4		8.0		28.2		82.0		5.8	5.9	3.0	1	2			
IM7	Cloudy	Moderate	15:51	8.0	Middle	4.0	0.2	262	24.4	24.4	8.0	8.0	28.2	28.2	82.4	82.2	5.9		3.1	2.6	2	3	821372	806853
					Datter	7.0	0.2	257	24.4	24.4	8.0	0.0	28.2	20.2	84.1	04.0	6.0	6.0	3.4	1	3			
					Bottom	7.0	0.2	250	24.4	24.4	8.0	8.0	28.2	28.2	84.3	84.2	6.0	6.0	3.3	1	3			

DA: Depth-Averaged

Water Quality Monitoring Results on 16 May 23 during Mid-Flood Tide

Water Quar	,	<u> </u>			10 May 23	during wid-		-																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dani	-h (m)	Current Speed	Current	Water Te	emperature (°C)	pН		Salin	ity (ppt)		aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	(111)	(m/s)	Direction	Value	Average	Value Ave	erage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.2	252	24.2	24.2	7.9	'.9	26.4	26.5	89.1	88.9	6.4		4.0		3			
					Surface	1.0	0.1	250	24.2	24.2	7.9	.9	26.6	20.5	88.7	00.9	6.4	6.4	4.1		4			
IM10	Misty	Calm	15:06	9.0	Middle	4.5	0.2	232	24.1	24.1	7.9	'.9	27.3	27.3	87.7	87.7	6.3	0.4	5.1	5.2	4	3	822244	809842
IIVITO	iviloty	Cairii	13.00	3.0	Middle	4.5	0.2	233	24.1	24.1	7.9	.5	27.3	21.5	87.6	01.1	6.3		5.2	5.2	3	3	022244	003042
					Bottom	8.0	0.2	241	24.2	24.2	7.9	'.9	27.4	27.4	87.3	87.4	6.3	6.3	6.4		3			
					Bottom	8.0	0.2	245	24.2		7.9	.0	27.4		87.4	0	6.3	0.0	6.5		3			
					Surface	1.0	0.3	278	24.1	24.1	7.8	'.8	25.6	25.7	88.6	88.2	6.4		3.3		4			
						1.0	0.3	283	24.1		7.8		25.7		87.7		6.4	6.2	3.3		5			
IM11	Misty	Calm	15:21	8.6	Middle	4.3	0.3	277	24.0	24.0	7.8	'.8	27.8	27.8	82.8	82.8	5.9		4.2	4.3	3	4	821518	810522
	·					4.3	0.3	270	24.0		7.8		27.8		82.8		5.9		4.2		4			
					Bottom	7.6 7.6	0.3	273	24.0	24.1	7.7		27.7	27.7	83.1 83.1	83.1	6.0	6.0	5.4		4			
							0.2	272	24.1				27.6						5.5		3			
					Surface	1.0	0.3	275 278	24.1 24.1	24.1	7.8 7	'.8	26.9	27.0	85.0 84.7	84.9	6.1 6.1		3.3		3			
						4.4	0.4	278	24.1		7.8		27.1				6.0	6.1	4.6		3			
IM12	Misty	Calm	15:24	8.8	Middle	4.4	0.3	285	24.1	24.1	7.8	'.8	27.4	27.4	83.8 83.7	83.8	6.0		4.6	4.5	3	3	821182	811510
						7.8	0.3	277	24.1		7.8		27.4		83.4		6.0		5.5		3			
					Bottom	7.8	0.3	279	24.1	24.1	7.7	'.7	27.4	27.4	83.3	83.4	6.0	6.0	5.5		3			
						1.0	0.0	188	24.5		70		25.9		91.3		6.6		3.1		2		1	
					Surface	1.0	0.1	181	24.5	24.5	7.9	'.9	26.0	26.0	91.3	91.3	6.6		3.1		3			
						2.6	0.0	208	-		-		-		-		-	6.6	-		-	_		
SR1A	Misty	Calm	15:34	5.2	Middle	2.6	0.1	209	-	-	_	- F	-	-	-	-	-		-	3.9	-	3	819971	812662
					5	4.2	0.0	206	24.5	0.1.5	7.9		26.2		91.4	0.4.5	6.6		4.8		3			
					Bottom	4.2	0.0	211	24.5	24.5	7.9	'.9	26.2	26.2	91.5	91.5	6.6	6.6	4.7		3			
					Surface	1.0	0.1	267	24.4	24.4	7.8	, ,	25.6	25.7	92.5	92.2	6.7		2.7		3			
					Surface	1.0	0.2	260	24.4	24.4	7.8	'.8	25.7	25.7	91.8	92.2	6.6	6.7	2.7		2			
SR2	Misty	Calm	15:52	5.0	Middle	-	0.1	279	-		-		-		-		-	0.7	-	3.2	-	3	821439	814178
SKZ	iviisty	Callii	13.32	5.0	Middle	-	0.0	285	-	-	-		-	-	-	-	-		-	3.2	-	3	021439	014170
					Bottom	4.0	0.1	292	24.3	24.3	7.8	'.8	26.1	26.1	86.5	86.4	6.2	6.2	3.8		3			
					Bottom	4.0	0.1	294	24.3	24.5	7.8		26.1	20.1	86.2	00.4	6.2	0.2	3.8		3			
					Surface	1.0	0.0	283	25.2	25.2	8.1	1	24.5	24.6	90.1	90.0	6.5		1.3		<2			
					Gundoo	1.0	0.0	285	25.1	20.2	8.1		24.7	20	89.9	00.0	6.4	6.3	1.3		<2			
SR3	Cloudy	Moderate	15:44	8.2	Middle	4.1	0.1	281	24.5	24.5	8.1	3.1	26.1	26.1	86.9	85.1	6.3		3.5	3.2	2	2	822166	807568
	,		-			4.1	0.1	281	24.5		8.1		26.1	_	83.3		6.0		3.7		2			
					Bottom	7.2	0.1	273	24.4	24.5	8.1	3.1	28.1	28.1	82.7	82.8	5.9	5.9	4.5		3			
						7.2	0.1	274	24.5		8.1		28.1		82.8		5.9		4.8		2			
					Surface	1.0	0.0	139	24.9	24.9	8.1 8.1	3.1	25.1 25.2	25.2	90.0	89.9	6.5 6.5		1.9	-	3			
						1.0 4.3	0.1	131	24.8									6.2	2.0		3			
SR4A	Cloudy	Moderate	17:27	8.6	Middle	4.3	0.0	125 126	24.5 24.5	24.5	8.1 8.1	3.1	28.3	28.3	83.6 83.6	83.6	5.9 5.9		3.9 4.0	4.7	3	3	817189	807806
						7.6	0.0	117	24.5		8.1	+	28.4		84.7		6.0		7.8		3			
					Bottom	7.6	0.0	117	24.5	24.5	8.1	3.1	28.4	28.4	84.8	84.8	6.0	6.0	8.3		3			
						1.0	-	-	24.5		7.0	<del>- 1</del>	25.1		91.5		6.6		3.8		4			
					Surface	1.0	-	-	24.5	24.5	7.8	'.8	25.2	25.2	88.0	89.8	6.4		3.8	1	3			
						-			-		-		-		-		-	6.5	-	1	-			
SR8	Misty	Calm	15:26	5.4	Middle	-	-	-	-	-	<u> </u>	-  -		-	-	-				3.9	-	3	820377	811638
					5	4.4	-	_	24.3		77	+	25.9	05.7	86.3		6.2		4.1	1	3			
					Bottom	4.4	-	-	24.4	24.4	7.7	'.7	25.5	25.7	86.2	86.3	6.2	6.2	4.0		3			
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DA: Depth-Averaged

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

water Qua	ity worm	oring Kesu	ito on		18 May 23	auring Mia-	EDD HUG	;															
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)	pН	Sa	alinity (ppt)	DO S	Saturation (%)	Disso Oxy	olved ⁄gen	Turbidity	(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	ii (iii)	(m/s)	Direction	Value	Average	Value Avera	ge Valu	ue Averag	e Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.6	213	25.3	25.3	7.9	24.	.7 24.7	108.2	108.0	7.7		4.0		4			
					Surface	1.0	0.6	206	25.3	25.5	7.9	24.	.7	107.7	106.0	7.7	7.2	4.2		5			
C1	Cloudy	Moderate	12:35	8.6	Middle	4.3	0.6	209	24.4	24.4	7.9	27.	.6 27.7	92.4	92.5	6.6	1.2	7.0	6.0	7	6	815622	804253
C1	Cioday	Woderate	12.33	0.0	Middle	4.3	0.6	214	24.4	24.4	7.9	27.	.7	92.5	92.3	6.6		7.1	0.0	6	U	013022	004233
					Bottom	7.6	0.6	201	24.3	24.3	7.9 7.8	27.	.9 27.9	93.9	94.2	6.7	6.7	6.8		7			
					Bottom	7.6	0.6	195	24.3	24.5	7.8	27.	.9	94.4	34.2	6.7	0.7	7.1		6			
					Surface	1.0	0.4	179	24.9	24.9	7.8	24.	.9 24.9	91.6	91.6	6.6		8.0		5			
					Ourlace	1.0	0.4	175	24.9	24.5	7.8	25.	.0	91.6	31.0	6.6	6.4	8.0		5			
C2	Cloudy	Moderate	10:59	12.6	Middle	6.3	0.5	160	24.5	24.5	7.8	26.	.5 26.4	86.6	86.6	6.2	0.4	11.0	9.8	5	5	825699	806964
02	Cloudy	Woderate	10.55	12.0	ivildale	6.3	0.5	154	24.5	24.5	7.8	26.	.4	86.5	00.0	6.2		11.1	3.0	5	3	023033	000304
					Bottom	11.6	0.5	190	24.7	24.7	7.8	25. 25.	25.7	86.8	86.8	6.2	6.2	10.7		5			
					Bottom	11.6	0.5	190	24.7	2-1.1	7.8			86.8	00.0	6.2	0.2	10.3		6			
					Surface	1.0	0.5	81	25.2	25.2	8.1	26.	.0 26.1	85.4	85.4	6.1		3.5		6			
					Canace	1.0	0.5	77	25.1	20.2	8.1	26.	.1	85.4	00.4	6.1	6.1	3.5		5			
СЗ	Fine	Calm	11:36	9.8	Middle	4.9	0.5	65	25.0	25.0	8.1	26.	.5 26.5	86.0	86.1	6.1	0.1	4.2	4.5	5	5	822124	817787
00	1 1110	Odim	11.00	0.0	Wildele	4.9	0.5	61	25.0	20.0	8.1	26.	.6	86.1	00.1	6.1		4.2	4.0	6	J	OZZ IZ-	017707
					Bottom	8.8	0.5	63	24.9	24.9	8.1	26. 26.	.9 26.9	87.6	87.9	6.2	6.3	5.8		5			
					Bottom	8.8	0.5	62	24.9	24.0	8.1			88.1	01.0	6.3	0.0	5.9		5			
					Surface	1.0	0.3	176	25.1	25.1	7.8	25. 25.	25.7	94.9	94.9	6.8		6.0		4			
					- Curiaco	1.0	0.3	181	25.0	20	7.8			94.9	0 1.0	6.8	6.6	6.6		4			
IM1	Cloudy	Moderate	12:14	6.4	Middle	3.2	0.4	194	24.4	24.4	7.8	27.	.0 27.1	89.9	89.8	6.4		7.7	7.4	5	5	818361	806437
	,			-		3.2	0.4	188	24.4		7.8	27.	.1	89.7		6.4		7.2		5			
					Bottom	5.4	0.3	187	24.2	24.2	7.8 7.8	28.	28.4	88.2	88.3	6.3	6.3	8.7		6			
						5.4	0.3	192	24.2		7.8	28.	.4	88.3		6.3		8.2		5			
					Surface	1.0	0.3	181	25.1	25.1	7.9	25.	25.2	97.2	97.2	7.0		4.9		5			
						1.0	0.3	186	25.1		7.9	25.	.2	97.1		7.0	6.8	5.4		5			
IM2	Cloudy	Moderate	12:06	7.6	Middle	3.8	0.3	196	24.6	24.6	7.9 7.9	26.	26.3	92.0	92.0	6.6		7.3	7.4	5	5	819192	806245
						3.8	0.2	199	24.6		7.9	26.		91.9		6.6		7.9		5			
					Bottom	6.6	0.3	197	24.5	24.5	7.9	26. 26.	26.7	91.7	91.7	6.6	6.6	9.2		4			
						6.6	0.3	196	24.5		7.9			91.7		6.6		9.8		5			
					Surface	1.0	0.3	150	25.1	25.1	7.8 7.8	25. 25.	25.0	94.3	94.2	6.8		3.6		4			
						1.0	0.3	148	25.1		7.8			94.1	<u> </u>	6.7	6.6	3.7		5			
IM7	Cloudy	Moderate	11:34	7.7	Middle	3.9	0.2	168	24.7	24.7	7.8 7.8	25.		88.7	88.6	6.4		4.6	4.8	4	4	821341	806826
						3.9	0.2	166	24.7		7.8	25.		88.4	ļ	6.4	ļ	4.9		4			
					Bottom	6.7	0.2	167	24.6	24.6	7.8 7.8	25. 25.	25.9	87.1	87.1	6.3	6.3	6.0		4			
						6.7	0.2	167	24.6		7.8	25.	.9	87.1		6.3		6.0		4			

DA: Depth-Averaged

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

Water Quar		<u> </u>			10 May 20	during mid		·																
Monitoring	Weather	Sea	Sampling	Water	Compline Dest	h (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
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	(Northing)	(Easting)
					0	1.0	0.5	101	25.8	05.0	8.0	0.0	24.4	04.4	90.1	00.4	6.4		3.0		5			
					Surface	1.0	0.5	104	25.7	25.8	8.0	8.0	24.4	24.4	90.0	90.1	6.4		3.1	Ī	5			
IM10	- Fina	Calm	10:41	0.0	Middle	4.5	0.6	113	25.3	25.4	8.0	0.0	25.2	25.0	88.1	88.2	6.3	6.4	5.0	4.4	5		822229	809835
IIVITO	Fine	Calm	10:41	9.0	ivildale	4.5	0.6	106	25.4	25.4	8.0	8.0	25.2	25.2	88.2	88.2	6.3		5.0	4.4	4	4	822229	809835
					Bottom	8.0	0.5	91	25.6	25.7	8.0	8.0	24.9	24.9	90.1	90.2	6.4	6.4	5.1	1	3			
					DULLUITI	8.0	0.5	93	25.7	25.7	8.0	6.0	24.8	24.9	90.2	90.2	6.4	0.4	5.1		4			
					Surface	1.0	0.6	89	25.2	25.2	8.0	8.0	25.0	25.0	85.6	85.6	6.1		3.3		5			
					Sulface	1.0	0.6	93	25.2	25.2	8.0	0.0	25.0	25.0	85.6	65.0	6.1	6.1	3.4		5			
IM11	Fine	Calm	10:46	7.8	Middle	3.9	0.6	86	25.2	25.2	8.0	8.0	25.1	25.1	85.9	85.9	6.1	0.1	4.8	4.4	6	6	821509	810531
IIVIII	1 1116	Callii	10.40	7.0	Middle	3.9	0.6	84	25.2	25.2	8.0	0.0	25.1	25.1	85.9	55.5	6.1		4.8	4.4	6	O	621309	010331
					Bottom	6.8	0.5	71	25.4	25.5	8.0	8.0	25.0	25.0	87.1	87.2	6.2	6.2	5.0		6			
					Bottom	6.8	0.5	76	25.5	25.5	8.0	0.0	25.0	25.0	87.2	07.2	6.2	0.2	5.0		6			
					Surface	1.0	0.6	106	25.2	25.2	8.0	8.0	25.1	25.1	86.4	86.4	6.2		4.8		5			
					Sulface	1.0	0.6	104	25.2	25.2	8.0	0.0	25.1	25.1	86.4	00.4	6.2	6.2	4.8		5			
IM12	Fine	Calm	10:50	7.6	Middle	3.8	0.6	111	25.1	25.1	8.0	8.0	25.2	25.2	86.6	86.6	6.2	0.2	5.8	5.5	5	5	821155	811536
IIVITZ	1 1116	Callii	10.50	7.0	Middle	3.8	0.6	110	25.1	25.1	8.0	0.0	25.2	25.2	86.6	00.0	6.2		5.8	3.3	6	3	021133	011330
					Bottom	6.6	0.7	91	25.2	25.3	8.0	8.0	25.2	25.1	87.3	87.4	6.2	6.2	6.1		5			
					Bottom	6.6	0.7	90	25.3	25.5	8.0	0.0	25.1	23.1	87.4	07.4	6.2	0.2	6.0		6			
					Surface	1.0	0.1	112	25.6	25.6	8.0	8.0	24.9	24.9	88.3	88.3	6.3		1.5		6			
					Sulface	1.0	0.1	118	25.6	25.0	8.0	0.0	24.9	24.5	88.3	00.5	6.3	6.3	1.5		5			
SR1A	Fine	Calm	11:02	5.6	Middle	2.8	0.0	141	-	_	-	J .	-	_	-	_	-	0.5	-	2.0	-	6	819976	812658
OKIA	1 1116	Callii	11.02	5.0	ivildale	2.8	0.0	137	-		-		-		-		-		-	2.0	-	O	013370	012000
					Bottom	4.6	0.0	102	25.6	25.6	8.0	8.0	24.9	24.8	88.5	88.5	6.3	6.3	2.5		7			
					20110	4.6	0.1	102	25.6	20.0	8.0	0.0	24.8	20	88.5	00.0	6.3	0.0	2.6		6			
					Surface	1.0	0.5	37	25.6	25.6	8.0	8.0	24.9	25.0	89.4	89.4	6.4		4.5		6			
					Cuitado	1.0	0.5	35	25.5	20.0	8.0	0.0	25.0	20.0	89.3	00.1	6.4	6.4	4.5		6			
SR2	Fine	Calm	11:19	5.2	Middle	-	0.5	50	-	_	-		-	_	-	-	-	0.4	_	4.8	-	5	821459	814167
0.1.2	10	- Caiiii		0.2	madio	-	0.5	53	-		-		-		-		-		-		-	ŭ	021.00	011101
					Bottom	4.2	0.5	61	25.3	25.3	8.0	8.0	25.4	25.4	90.0	90.2	6.4	6.4	5.0		5			
					Dottom	4.2	0.5	62	25.3	20.0	8.0	0.0	25.4	20.1	90.4	00.2	6.4	0	5.0		4			
					Surface	1.0	0.5	165	25.2	25.2	7.8	7.8	24.9	24.9	95.4	95.4	6.8		4.0		5			
						1.0	0.5	165	25.2		7.8		24.9		95.4		6.8	6.7	4.2		5			
SR3	Cloudy	Moderate	11:27	8.9	Middle	4.5	0.4	161	24.7	24.7	7.8	7.8	25.7	25.8	91.0	90.9	6.5		6.5	6.7	6	6	822160	807562
	,					4.5	0.5	159	24.7		7.8		25.8		90.8		6.5		6.5		6	-		
					Bottom	7.9	0.5	154	24.7	24.7	7.8	7.8	26.0	26.0	90.7	90.7	6.5	6.5	9.2	1	6			
						7.9	0.5	151	24.7		7.8		26.0		90.7		6.5		9.7		6			
					Surface	1.0	0.0	23	25.3	25.3	8.0	8.0	24.6	24.6	113.2	112.7	8.1		5.9	1	6			
						1.0	0.1	18	25.2		8.0		24.7		112.1		8.0	7.5	6.2	1	7			
SR4A	Cloudy	Moderate	13:02	9.6	Middle	4.8	0.0	42	25.0	25.0	7.9	7.9	24.9	24.9	95.6	95.6	6.9		7.3	8.5	5	6	817201	807789
	,					4.8	0.0	35	25.0		7.9		24.9		95.5		6.9		7.4	1	6			
					Bottom	8.6	0.0	12	25.0	25.0	7.9	7.9	24.9	24.9	95.4	95.5	6.9	6.9	12.1		6			
			<u> </u>			8.6	0.0	18	25.0		7.9	<del>                                     </del>	24.9		95.5		6.9		12.1	<u> </u>	5			
					Surface	1.0	-	-	25.5	25.6	8.0	8.0	24.7	24.7	88.7	88.7	6.3		1.8	4	5			
						1.0	-	-	25.6		8.0	<b>.</b>	24.7		88.7		6.3	6.3	1.8	4	6			
SR8	Fine	Calm	10:54	5.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	2.0	-	6	820403	811609
						-	-	-	-			1							- 0.4	-	-			
					Bottom	4.0	-	-	25.9	26.0	8.0	8.0	24.7	24.6	90.0	90.4	6.4	6.4	2.1	4	5			
						4.0	-	-	26.0		8.0		24.6		90.7		6.4		2.1		6			

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

Trator qua		oring Kesu			10 May 23	during wild-	Current		1		I				DO S	aturation	Disso	olved			Suspende	d Solids		
Monitoring	Weather	Sea	Sampling	Water	Committee Des	th ()	Speed	Current	Water Te	emperature (°C)	pН		Salini	ity (ppt)		(%)		gen	Turbidity	(NTU)	(mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	tn (m)	(m/s)	Direction	Value	Average	Value Av	erage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	32	25.3	25.3	8.1	8.1	23.0	23.1	130.4	130.1	9.4		4.0		6			
					Surface	1.0	0.4	25	25.3	25.5	8.1	0.1	23.0	23.1	129.7	130.1	9.4	8.0	3.9	1	5			
C1	Cloudy	Moderate	05:52	8.2	Middle	4.1	0.5	44	24.5	24.5	7.9	7.9	26.3	26.4	90.5	90.4	6.5	0.0	4.1	4.2	4	5	815625	804270
Ci	Cloudy	Moderate	03.32	0.2	Middle	4.1	0.5	41	24.5	24.5	7.9	7.9	26.5	20.4	90.2	90.4	6.5		4.3	4.2	5	5	013023	004270
					Bottom	7.2	0.5	35	24.4	24.4	7.9	7.9	26.8	26.8	89.3	89.4	6.4	6.4	4.4		4			
					Bottom	7.2	0.5	27	24.4	24.4	7.9	7.5	26.8	20.0	89.5	05.4	6.4	0.4	4.5		5			
					Surface	1.0	0.4	354	24.9	24.9	7.8	7.8	24.8	24.8	92.3	92.4	6.6		8.6		5			
					Gunace	1.0	0.4	356	24.9	24.5	7.8	7.0	24.8	24.0	92.4	32.4	6.6	6.5	8.5		5			
C2	Cloudy	Moderate	07:22	11.4	Middle	5.7	0.4	345	24.5	24.5	7.8	7.8	26.6	26.6	89.7	89.8	6.4	0.0	9.2	9.4	5	5	825673	806932
02	Cioday	moderate	07.22		madio	5.7	0.4	342	24.5	20	7.8		26.7	20.0	89.8	00.0	6.4		9.3	0	6	Ü	0200.0	000002
					Bottom	10.4	0.4	348	24.5	24.5	7.8	7.8	26.4	26.4	91.1	91.3	6.5	6.6	10.8	4	6			
						10.4	0.4	347	24.5		7.8		26.3		91.5	*	6.6		10.2	<u> </u>	5			
					Surface	1.0	0.6	253	24.9	24.9	8.1	8.1	27.4	27.4	82.2	82.1	5.8		1.1	_	5			
						1.0	0.6	254	24.9		8.1		27.5		82.0		5.8	5.8	1.1	1	4			
C3	Fine	Calm	06:06	12.4	Middle	6.2	0.6	262	24.7 24.6	24.7	8.1	8.1	28.4	28.4	81.5 81.5	81.5	5.8 5.8		1.1	1.2	6	6	822102	817808
						6.2 11.4	0.6	268 284			8.1								1.1	-	6			
					Bottom	11.4	0.6	284	24.7 24.7	24.7	8.1	8.1	28.3 28.3	28.3	83.3 83.7	83.5	5.9 5.9	5.9	1.6 1.5	-	6			
	l					1.0	0.0	25	25.2		0.0	1	24.2		116.5		8.4		3.0	1	6			
					Surface	1.0	0.3	32	25.2	25.2	8.0	8.0	24.2	24.2	116.5	116.5	8.4		3.1	1	6			
						3.4	0.3	31	24.7		7.0		25.1		99.6		7.2	7.8	5.0	1	6			
IM1	Cloudy	Moderate	06:14	6.7	Middle	3.4	0.3	30	24.7	24.7	7.9	7.9	25.1	25.1	99.6	99.6	7.2		5.0	5.9	6	6	818337	806481
					5	5.7	0.4	13	24.2	24.0	7.0		28.8		92.9		6.6		9.4	1	6			
					Bottom	5.7	0.4	5	24.3	24.3	7.9	7.9	28.7	28.8	93.3	93.1	6.6	6.6	9.9	Ī	7			
					Curfoss	1.0	0.4	19	24.9	24.9	7.8	7.8	25.2	25.2	92.5	92.5	6.6		4.4		7			
					Surface	1.0	0.4	19	24.9	24.9	7.8	7.8	25.2	25.2	92.5	92.5	6.6	6.6	4.5	1	7			
IM2	Cloudy	Moderate	06:20	7.2	Middle	3.6	0.4	347	24.6	24.6	7.9	7.9	25.7 25.8	25.7	92.3	92.3	6.6	0.6	6.5	6.9	7	7	819169	806232
IIVIZ	Cloudy	Moderate	06.20	1.2	Middle	3.6	0.4	340	24.6	24.0	7.9	7.9		25.7	92.2	92.5	6.6		6.6	6.9	6	,	019109	000232
					Bottom	6.2	0.4	30	24.2	24.2	7.8	7.8	28.6 28.6	28.6	93.0	93.3	6.6	6.7	9.5		7			
					Dottom	6.2	0.4	29	24.2	24.2	7.8	7.0	28.6	20.0	93.5	33.5	6.7	0.7	9.7		8			
					Surface	1.0	0.2	355	25.0	25.0	7.9	7.9	25.1	25.1	95.4	95.3	6.8		4.3		8			
					- Cu.1000	1.0	0.2	351	25.0	25.0	7.9		25.1	20.1	95.2	55.0	6.8	6.8	4.4		7			
IM7	Cloudy	Moderate	06:45	8.2	Middle	4.1	0.2	9	24.9	24.9	7.8	7.8	25.2 25.2	25.2	94.1	94.1	6.8		5.2	5.1	7	7	821342	806811
	,					4.1	0.3	14	24.9		7.8				94.1		6.8		5.2	1	6			
					Bottom	7.2	0.2	18	24.8	24.8	7.8	7.8	25.3	25.3	94.4	94.4	6.8	6.8	5.6	4	7			
						7.2	0.2	13	24.8		7.8		25.3		94.4		6.8		5.7		6			

DA: Depth-Averaged

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

water Quai	ity wonin	orning ivesu	iito oii		18 May 23	auring Mia-	rioou ii	ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy	olved gen	Turbidity	(NTU)	Suspender (mg/		Coordinate HK Grid	Coordinate HK Grid
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	(Northing)	(Easting)
					Ourford	1.0	0.3	307	25.6	05.0	8.0	0.0	24.6	04.0	89.3	89.2	6.3		3.0		6			
					Surface	1.0	0.3	313	25.6	25.6	8.0	8.0	24.6	24.6	89.1	89.2	6.3	0.0	3.0	1	6			
IM10	Fine	Calm	07:20	7.8	Middle	3.9	0.4	313	25.4	25.4	8.0	8.0	25.1	25.1	88.4	88.4	6.3	6.3	3.9	3.8	6	7	822261	809858
IIVITO	rine	Callii	07.20	7.0	ivildule	3.9	0.4	308	25.3	25.4	8.0	0.0	25.2	25.1	88.4	00.4	6.3		3.8	3.0	7	'	022201	009000
					Bottom	6.8	0.4	296	25.4	25.4	8.0	8.0	25.2	25.2	88.4	88.4	6.3	6.3	4.4		8			
					Bottom	6.8	0.4	302	25.4	25.4	8.0	0.0	25.2	23.2	88.4	00.4	6.3	0.3	4.4		7			
					Surface	1.0	0.3	275	25.2	25.2	8.0	8.0	25.1	25.1	86.0	86.1	6.1		2.2		5			
					Gundoo	1.0	0.3	276	25.1	20.2	8.0	0.0	25.1	20.1	86.2	00.1	6.2	6.2	2.2		6			
IM11	Fine	Calm	07:16	9.0	Middle	4.5	0.4	271	25.1	25.2	8.0	8.0	25.2	25.1	86.7	86.8	6.2	0.2	4.1	3.8	5	5	821514	810531
	1 1110	Odim	07.10	0.0	Wildale	4.5	0.4	267	25.3	20.2	8.0	0.0	25.1	20.1	86.8	00.0	6.2		4.1	0.0	5	Ü	021014	010001
					Bottom	8.0	0.3	304	25.7	25.8	8.0	8.0	24.9	24.9	88.2	88.2	6.2	6.2	5.1		4			
					5000011	8.0	0.3	310	25.8	20.0	8.0	0.0	24.8	20	88.1	00.2	6.2	0.2	5.1		3			
					Surface	1.0	0.3	287	25.3	25.3	8.0	8.0	24.9	24.9	87.0	87.0	6.2		3.3		5			
						1.0	0.3	289	25.2		8.0		24.9		86.9		6.2	6.2	3.2		6			
IM12	Fine	Calm	07:10	7.2	Middle	3.6	0.3	277	25.1	25.2	8.0	8.0	25.3	25.3	86.6	86.7	6.2		4.6	4.3	5	5	821139	811534
						3.6	0.3	283	25.2		8.0		25.3		86.7		6.2		4.5		5			
					Bottom	6.2	0.4	278	25.9	26.0	8.0	8.0	24.9	24.9	87.9	88.2	6.2	6.2	5.0	l	5			
						6.2	0.3	271	26.0		8.0		24.9		88.5		6.2		5.1		5			
					Surface	1.0	0.1	180	25.6	25.7	7.9	7.9	25.3	25.3	88.1	88.2	6.2		1.4		5			
						1.0	0.0	186	25.7		7.9		25.4		88.2		6.2	6.2	1.5	ł	6			
SR1A	Fine	Calm	06:49	4.8	Middle	2.4 2.4	0.1	202	-	-	-	-	-	-	-	-	-		-	1.8	-	6	819980	812661
							0.1	204	-				- 05.4		-		-		-	ł	-			
					Bottom	3.8 3.8	0.1 0.1	191 185	25.9 26.0	26.0	7.9	7.9	25.4 25.4	25.4	89.0 89.4	89.2	6.3	6.3	2.1	ł	7 6			
				l I		1.0	0.1	276									6.2		1.1		5			
					Surface	1.0	0.1	271	25.1 25.1	25.1	8.1 8.1	8.1	25.4 25.5	25.4	86.8 86.9	86.9	6.2		1.0	ł	5			
						-	0.1	275	-		-		-		-		-	6.2	-		-			
SR2	Fine	Calm	06:33	4.8	Middle	-	0.1	275	-	-	<del>-</del>	-	H	-	-	-	H			1.4	-	5	821486	814156
						3.8	0.1	262	25.1		8.1		25.6		88.3		6.3		1.8	ł	5			
					Bottom	3.8	0.1	258	25.1	25.1	8.1	8.1	25.6	25.6	88.8	88.6	6.3	6.3	1.7	ł	5			
						1.0	0.3	5	24.9		7.8		24.9		92.9		6.7		3.7		5			
					Surface	1.0	0.3	4	24.9	24.9	7.8	7.8	24.9	24.9	92.9	92.9	6.7		3.7	i	6			
	<b>.</b> .					4.4	0.3	332	24.7		7.9		25.4		91.5		6.6	6.7	6.3	1	5	_		
SR3	Cloudy	Moderate	06:53	8.8	Middle	4.4	0.3	327	24.7	24.7	7.9	7.9	25.4	25.4	91.4	91.5	6.6		6.4	5.7	5	5	822161	807549
					5	7.8	0.4	328	24.6	010	7.8		25.9	05.0	90.6		6.5		6.9	1	5			
					Bottom	7.8	0.4	331	24.6	24.6	7.8	7.8	25.9	25.9	90.8	90.7	6.5	6.5	6.9	1	5			
					Ourton	1.0	0.1	129	25.0	05.0	7.9	7.0	24.0	04.4	107.9	407.0	7.8		4.0		5			
					Surface	1.0	0.1	135	25.0	25.0	7.9	7.9	24.1	24.1	107.7	107.8	7.8	7.3	4.1	1	6			
SR4A	Claudu	Madazata	05.24	0.4	Middle	4.6	0.1	122	24.8	24.0	7.9	7.0	24.6	24.0	94.7	94.8	6.8	7.3	4.5	4.5	5	5	047400	007000
SK4A	Cloudy	Moderate	05:34	9.1	ivildale	4.6	0.1	127	24.8	24.8	7.9	7.9	24.6	24.6	94.8	94.8	6.8		4.7	4.5	6	э	817168	807826
					Bottom	8.1	0.1	163	24.8	24.8	7.9	7.9	24.6	24.6	95.6	95.7	6.9	6.9	4.8		4			
					DOLLOIT	8.1	0.1	164	24.8	24.0	7.9	1.5	24.6	24.0	95.7	33.1	6.9	0.5	4.7		5			
					Surface	1.0	-	-	26.0	26.0	8.0	8.0	24.9	24.9	89.2	89.3	6.3		1.1		5			
					Guilade	1.0	-	-	26.0	20.0	8.0	0.0	24.9	24.0	89.4	03.5	6.3	6.3	1.1		6			
SR8	Fine	Calm	07:05	4.4	Middle	-	-	-	-	_	-		-	_	-	_	-	0.5	-	1.2	-	6	820373	811627
0.10	1 1110	Juin	07.00	7.7	IVIIGGIO	-	-	-	-		-		-		-		-		-	1.2	-	ĭ	320010	011027
					Bottom	3.4	-	-	26.2	26.2	8.0	8.0	24.8	24.8	90.1	90.1	6.3	6.3	1.2		6			
					20110	3.4	-	-	26.2	20.2	8.0	0.0	24.8		90.1		6.3	0.0	1.2		6			

Water Quality Monitoring Results on 20 May 23 during Mid-Ebb Tide

Water Quar	ity wont	oring Resu	its on		20 May 23	auring Mia-		:																
Monitoring	Weather	Sea	Sampling	Water	OP D	d. ()	Current Speed	Current	Water Te	emperature (°C)	Ŀ	рΗ	Salin	ity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg/		Coordinate	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	tn (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
					Ourford	1.0	0.6	224	26.5	00.5	8.3	0.0	25.7	05.0	102.5	400.5	7.1		2.1	Ì	4			
					Surface	1.0	0.5	221	26.4	26.5	8.3	8.3	25.8	25.8	102.4	102.5	7.1		2.2		3			
04	01	Madazi	40.00	0.7	A 41 d d d	4.4	0.6	194	25.5	05.5	8.2	0.0	28.2	00.0	94.1	94.0	6.6	6.9	7.4		4		045040	004044
C1	Cloudy	Moderate	13:22	8.7	Middle	4.4	0.6	192	25.4	25.5	8.2	8.2	28.2	28.2	93.8	94.0	6.6		7.7	6.1	3	4	815613	804241
					Bottom	7.7	0.6	210	25.4	25.4	8.2	8.2	28.4	28.3	94.6 94.2	94.4	6.6	6.6	8.6		5			
					BOILOITI	7.7	0.6	208	25.4	25.4	8.2 8.2	0.2	28.3	20.3	94.2	94.4	6.6	0.0	8.4		4			
					Surface	1.0	0.4	158	26.5	26.5	8.2	8.2	25.7	25.7	98.8	98.8	6.9		2.6		4			
					Surface	1.0	0.5	154	26.4	20.5	8.2	0.2	25.7	25.1	98.8	90.0	6.9	6.8	2.3		4			
C2	Cloudy	Moderate	11:45	11.9	Middle	6.0	0.4	161	26.0	26.0	8.2	8.2	26.4	26.4	95.4 95.4	95.4	6.7	0.0	8.6	6.2	4	5	825680	806952
02	Oloudy	Woderate	11.40	11.0	Wildaic	6.0	0.4	165	26.0	20.0	8.2	0.2	26.3	20.4		50.∓	6.7		8.6	0.2	4	Ŭ	020000	000002
					Bottom	10.9	0.5	154	26.2	26.2	8.2	8.2	26.1	26.0	95.8 96.0	95.9	6.7	6.7	7.3		5			
						10.9	0.4	157	26.2		8.2		26.0				6.7	• • •	7.6		6			
					Surface	1.0	0.5	60	25.2	25.2	8.1	8.1	23.1	23.2	111.7	111.0	8.1		2.1		8			
						1.0	0.5	54	25.2		8.1		23.4		110.2	_	8.0	7.5	2.1		7			
C3	Fine	Calm	13:06	10.8	Middle	5.4	0.5	57	24.9	24.9	8.1	8.1	27.4	27.5	96.7 96.8	96.8	6.9 6.9		3.3	3.2	6	7	822131	817821
						5.4	0.5	58	24.9		8.1		27.6						3.3	4	7			
					Bottom	9.8 9.8	0.5	63	24.9 24.9	24.9	8.1 8.1	8.1	27.8 27.9	27.8	97.5 99.7	98.6	6.9 7.1	7.0	4.1 4.2	-	6			
						1.0	0.5	60 181							•				3.9	<u> </u>	5			
					Surface	1.0	0.3	174	25.7 25.7	25.7	8.2 8.2	8.2	26.2 26.2	26.2	102.9	102.7	7.2 7.2		4.3		5			
						3.5	0.3	186	25.4		8.2		28.3				6.5	6.9	5.7	-	6			
IM1	Cloudy	Moderate	12:58	6.9	Middle	3.5	0.3	181	25.4	25.4	8.2	8.2	28.4	28.3	93.3 93.4	93.4	6.5		5.7	5.1	4	5	818348	806465
						5.9	0.3	206	25.4		8.2		28.4		94.7		6.6		5.5		6			
					Bottom	5.9	0.3	209	25.4	25.4	8.2	8.2	28.4	28.4	98.0	96.4	6.9	6.8	5.5		5			
					0.1	1.0	0.3	202	25.5	05.5	8.3		27.9		97.2		6.8		5.9		5			
					Surface	1.0	0.3	207	25.5	25.5	8.3	8.3	28.1	28.0	96.5	96.9	6.8		6.1		4			
10.40	01	Madazi	40.50	7.0	A 41 d d d	3.8	0.3	195	25.4	05.4	8.3	0.0	28.3	00.0	93.9	94.0	6.6	6.7	7.4		3		040400	000004
IM2	Cloudy	Moderate	12:50	7.6	Middle	3.8	0.4	197	25.4	25.4	8.2	8.2	28.3	28.3	93.9 94.0	94.0	6.6		7.4	6.9	3	4	819188	806234
					Bottom	6.6	0.3	190	25.4	25.4	8.2	8.2	28.3	28.3	94.8	94.9	6.6	6.6	7.4		3			
					DULLUIII	6.6	0.3	190	25.4	20.4	8.2	0.2	28.3	20.3	95.0	94.9	6.6	0.0	7.2		3			
					Surface	1.0	0.2	142	26.2	26.2	8.2	8.2	25.3	25.3	95.6	95.6	6.7		1.9		4		·	
					Juliace	1.0	0.2	147	26.2	20.2	8.2	0.2	25.3	20.0	95.6	33.0	6.7	6.6	1.9	]	3			
IM7	Cloudy	Moderate	12:15	8.4	Middle	4.2	0.2	117	25.8	25.8	8.2	8.2	26.6	26.6	93.3 93.3	93.3	6.5 6.5	0.0	5.1	4.5	4	4	821325	806850
11017	Jioudy	Moderate	12.10	0.7	Middle	4.2	0.3	121	25.8	25.0	8.2	0.2	26.6	20.0		33.3			5.2	7.5	5	7	021020	000000
					Bottom	7.4	0.2	137	25.7	25.7	8.2	8.2	26.8	26.8	94.3	94.4	6.6	6.6	6.5	1	5			
DA: Donth Aven					Dottom	7.4	0.2	136	25.7	20.7	8.2	0.2	26.8	20.0	94.5	04.4	6.6	0.0	6.5		5			

DA: Depth-Averaged

Water Quality Monitoring Results on 20 May 23 during Mid-Ebb Tide

Water Quar	ity illioinit	orning recou			ZU Way ZS	during wid-																		
Monitoring	Weather	Sea	Sampling	Water	Samplis - Des	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg/		Coordinate	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ui (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	(Easting)
		-			Surface	1.0	0.7	113	25.1	25.1	8.0	8.0	21.7	21.7	98.8	98.4	7.2		3.1		5			
					Surface	1.0	0.7	119	25.1	23.1	8.0	0.0	21.7	21.7	98.0	90.4	7.2	6.8	3.2		5			
IM10	Fine	Calm	11:57	8.8	Middle	4.4	0.7	92	25.0	25.1	8.0	8.0	25.3	25.3	89.7	89.9	6.4	0.0	4.2	4.4	7	6	822216	809839
IIVITO	1 1110	Cairi	11.57	0.0	IVIIGGIG	4.4	0.7	98	25.1	20.1	8.0	0.0	25.3	20.0	90.0	00.0	6.4		4.2		7	U	022210	003039
					Bottom	7.8	0.7	87	25.1	25.2	8.0	8.0	25.3	25.2	92.7	93.4	6.6	6.7	5.9		7			
					Bottom	7.8	0.7	80	25.2	20.2	8.1	0.0	25.2	20.2	94.0	00.1	6.7	0	5.9		7			
					Surface	1.0	0.8	105	25.3	25.3	8.0	8.0	20.1	20.2	105.4	103.8	7.7		3.4		5			
						1.0	0.7	104	25.3		8.0		20.3		102.1		7.5	7.1	3.5		5			
IM11	Fine	Calm	12:12	7.2	Middle	3.6	0.8	107	25.3	25.3	8.0	8.0	24.6	24.6	90.4	90.6	6.5		4.4	4.5	5	5	821499	810562
						3.6	0.8	107	25.3		8.0		24.7		90.7		6.5		4.5		6			
					Bottom	6.2	0.7	78	25.3 25.3	25.3	8.0	8.0	25.0 25.0	25.0	93.0 95.0	94.0	6.6	6.7	5.5		5			
							0.7	79									6.8		5.5	1	6			
					Surface	1.0	0.8	112 110	25.7 25.7	25.7	8.1	8.1	19.6 19.4	19.5	108.9	108.8	8.0		2.5	-	7 8			
						3.7	0.8	79	25.7				23.5				6.4	7.2	3.1	-	7			
IM12	Fine	Calm	12:16	7.4	Middle	3.7	0.8	76	25.2	25.2	8.0	8.0	23.7	23.6	89.3 89.1	89.2	6.4		3.1	3.3	7	7	821161	811507
						6.4	0.8	112	25.2		8.0		24.2		88.7		6.4		4.4		6			
					Bottom	6.4	0.8	116	25.1	25.1	8.0	8.0	24.2	24.2	88.8	88.8	6.4	6.4	4.4		6			
						1.0	0.0	120	25.9		8.1		21.3		116.1		8.4		4.3		6			
					Surface	1.0	0.0	112	25.8	25.9	8.1	8.1	21.4	21.3	113.8	115.0	8.2		4.2		5			
		<b>.</b> .				2.7	0.0	91	-		-		-		-		-	8.3	-	1	-	_		
SR1A	Fine	Calm	12:36	5.4	Middle	2.7	0.0	98	-	-	-	-	-	-	-	-	-		-	4.7	-	6	819981	812656
					5	4.4	0.0	92	25.3	05.4	8.0		23.5		109.2	400 5	7.9		5.0		7			
					Bottom	4.4	0.0	96	25.5	25.4	8.0	8.0	22.9	23.2	109.8	109.5	7.9	7.9	5.1		6			
					Surface	1.0	0.7	41	25.5	25.5	8.0	9.0	21.2	21.2	109.0	107.2	7.9		5.4		6			
					Surface	1.0	0.7	42	25.4	25.5	8.0	8.0	21.1	21.2	105.3	107.2	7.7	7.0	5.5		5			
SR2	Fine	Calm	12:49	4.3	Middle	-	0.7	66	-		-		-		-		-	7.8	-	5.7	-	6	821482	814186
SKZ	FILLE	Callii	12.49	4.3	ivildale	-	0.6	62	-	-	-		-		-	-	-		-	3.7	-	б	021402	014100
					Bottom	3.3	0.7	74	25.3	25.3	8.0	8.0	23.7	23.7	95.6	95.7	6.9	6.9	6.0		7			
					Dottom	3.3	0.7	78	25.3	25.5	8.0	0.0	23.7	20.7	95.8	33.7	6.9	0.5	6.1		7			
					Surface	1.0	0.5	157	26.2	26.2	8.2	8.2	25.0	25.0	91.2	91.2	6.4		1.9		5			
						1.0	0.5	160	26.2	20.2	8.2	0.2	25.1	20.0	91.2	01.2	6.4	6.5	2.1		5			
SR3	Cloudy	Moderate	12:09	9.7	Middle	4.9	0.4	149	26.1	26.1	8.2	8.2	25.7	25.7	92.4	92.5	6.5		2.8	2.5	4	4	822134	807571
	,					4.9	0.4	150	26.1		8.2		25.7		92.6		6.5		2.8		5			
					Bottom	8.7	0.5	154	26.1	26.1	8.2	8.1	25.8	25.7	92.9	93.0	6.5	6.5	2.6	4	4			
			1	<u> </u>	1	8.7	0.5	153	26.1		8.1	<u> </u>	25.7		93.0		6.5		2.6	1	3			
					Surface	1.0	0.0	38	25.9	25.9	8.2	8.2	26.5 26.5	26.5	91.9	91.9	6.4		3.1	4	4			
						1.0 4.4	0.0	34	25.9			1					6.4	6.5	3.1	4	5			
SR4A	Cloudy	Moderate	13:53	8.8	Middle	4.4	0.0	18 14	25.8 25.8	25.8	8.2	8.2	26.7 26.7	26.7	92.2 92.3	92.3	6.5 6.5		3.5	3.5	5 5	5	817210	807804
						7.8	0.0	2	25.8		8.2	-	26.7		92.3		6.6		3.9	-	7			
					Bottom	7.8	0.0	3	25.8	25.8	8.2	8.2	26.7	26.7	93.5	93.5	6.6	6.6	3.9	1	6			
			1			1.0	-	-	26.7		8.1		20.6		120.7		8.6		3.5	1	6			<u> </u>
					Surface	1.0	-	-	26.7	26.7	8.1	8.1	20.6	20.6	120.7	120.7	8.6		3.5	1	6			
						-	-		- 20.7		-		-		-		-	8.6	-	1	-			
SR8	Fine	Calm	12:21	5.6	Middle	-	-	-	-	-		1 -		-		-				4.0	-	7	820400	811636
					5	4.6	-	-	26.7		8.1		20.7		121.1	404.6	8.7		4.6	1	8			
					Bottom	4.6	-	-	26.6	26.7	8.1	8.1	20.7	20.7	121.6	121.4	8.7	8.7	4.6	1	7			
M. Donth Avor			1			7.0			20.0		0.1		20.1		121.0		0.7		7.0	1				

Water Quality Monitoring Results on 20 May 23 during Mid-Flood Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	рŀ	1	Salin	ity (ppt)		aturation (%)		olved /gen	Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Запринд Бер	ur (III)	(m/s)	Direction	Value	Average	Value A	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	23	25.8	25.8	8.1	8.1	26.7 26.7	26.7	100.4	100.4	7.0		4.1		6			
					Ounace	1.0	0.3	27	25.8	25.0	8.1	0.1	26.7	20.7	100.3	100.4	7.0	6.7	4.5		5			
C1	Cloudy	Moderate	06:23	8.8	Middle	4.4	0.3	33	25.4	25.4	8.1	8.1	28.0	28.1	91.7	91.6	6.4	0.7	8.2	5.8	6	6	815597	804264
O1	Cloudy	Woderate	00.20	0.0	Wildale	4.4	0.3	30	25.4	25.4	8.1	0.1	28.1	20.1	91.5	51.0	6.4		7.8	5.0	6	O	013331	004204
					Bottom	7.8	0.4	25	25.4	25.4	8.1	8.1	28.3	28.3	90.5	90.6	6.3	6.3	5.2		7			
					Dottom	7.8	0.3	19	25.4	25.4	8.1	0.1	28.3	20.5	90.6	30.0	6.3	0.5	5.2		8			
					Surface	1.0	0.4	355	26.1	26.1	8.2	8.2	26.1	26.2	98.0	97.7	6.8		5.2		7			
					Ounace	1.0	0.4	355	26.1	20.1	8.2	0.2	26.2	20.2	97.4	31.1	6.8	6.7	5.6		7			
C2	Cloudy	Moderate	07:55	11.2	Middle	5.6	0.4	8	25.9	25.9	8.2	8.2	26.4	26.4	94.8	94.8	6.6	0.7	8.8	7.8	7	6	825658	806942
02	Cloudy	Moderate	07.00	11.2	Wildaic	5.6	0.4	11	25.9	20.0	8.2	0.2	26.4	20.4	94.8	54.0	6.6		8.4	7.0	6	O	020000	000042
					Bottom	10.2	0.3	3	25.9	25.9	8.2	8.2	26.4	26.4	96.6	96.7	6.8	6.8	9.6	1	5			
						10.2	0.3	8	25.9		8.2		26.4		96.8		6.8		9.7		6			
					Surface	1.0	0.5	248	25.2	25.2	8.0	8.0	18.4	18.4	103.2	103.0	7.7	1	2.1	4	8			
						1.0	0.4	245	25.2		8.0		18.5	-	102.8		7.6	7.1	2.2		8			
C3	Fine	Calm	06:51	12.0	Middle	6.0	0.5	278	24.9	24.9	7.9	7.9	27.0	27.1	92.4	92.5	6.6	1	2.7	2.6	6	7	822109	817809
						6.0	0.5	276	24.9		7.9		27.1		92.5		6.6		2.7	_	8			
					Bottom	11.0 11.0	0.6	273 266	25.1 25.2	25.2	7.8	7.8	27.1 26.9	27.0	93.9	94.1	6.6	6.7	2.8	4	7			
						1.0	0.6												2.9		6			
					Surface	1.0	0.2	30 35	26.1 26.0	26.1	8.2	8.2	26.1 26.3	26.2	100.5	100.4	7.0	-	2.6	-	4			
						3.6	0.2	20	25.6		8.2		27.4		97.6		6.8	6.9	3.8	1	4			
IM1	Cloudy	Moderate	06:47	7.1	Middle	3.6	0.2	17	25.6	25.6	8.2	8.2	27.5	27.5	96.8	97.2	6.8	1	3.9	3.4	4	4	818332	806448
						6.1	0.2	44	25.5		8.2		27.8		92.2		6.5		4.1	1	4			
					Bottom	6.1	0.2	39	25.6	25.6	8.2	8.2	27.6	27.7	92.4	92.3	6.5	6.5	4.0	1	4			
						1.0	0.2	348	25.6		8.2		25.9		95.5		6.7		3.6		6			
					Surface	1.0	0.2	353	25.6	25.6	8.2	8.2	26.0	25.9	95.5	95.5	6.7		3.8	1	6			
1840	Oleverte	Madanata	00.50	7.4	NAC-1-III-	3.7	0.2	1	25.5	05.0	8.2	0.0	27.7	07.0	95.1	05.4	6.7	6.7	3.9	- 0	6		040474	000050
IM2	Cloudy	Moderate	06:59	7.4	Middle	3.7	0.2	3	25.6	25.6	8.2	8.2	27.6	27.6	95.1	95.1	6.7	1	3.8	5.3	7	6	819171	806256
					D. II	6.4	0.3	9	25.6	25.6	8.2	0.0	27.0	07.0	95.2	05.0	6.7	6.7	8.4	1	6			
					Bottom	6.4	0.3	10	25.6	25.0	8.2	8.2	27.0	27.0	95.2	95.2	6.7	6.7	8.4		7			
		•			Surface	1.0	0.3	7	26.1	26.1	8.2	8.2	25.4	25.5	93.4	93.3	6.6		3.1		5	_	<del>-</del>	
					Sullace	1.0	0.3	1	26.0	20.1	8.2	0.2	25.6	20.0	93.2	93.3	6.6	6.6	3.0		5			
IM7	Cloudy	Moderate	07:27	8.2	Middle	4.1	0.2	20	25.9	25.9	8.2	8.2	26.2 26.3	26.2	92.6	92.6	6.5	0.0	5.5	5.2	4	5	821363	806814
IIVI7	Cioudy	Moderate	01.21	0.2	iviidale	4.1	0.2	13	25.8	23.9	8.2	0.2		20.2	92.6	92.0	6.5		6.2	3.2	5	3	021303	000014
					Bottom	7.2	0.3	6	25.8	25.8	8.2	8.2	26.3	26.3	92.7	92.8	6.5	6.5	6.8	1	4			
					Dottom	7.2	0.3	10	25.8	20.0	8.2	5.2	26.3	20.0	92.8	02.0	6.5	0.0	6.7		4			

DA: Depth-Averaged

Water Quality Monitoring Results on 20 May 23 during Mid-Flood Tide

water Quai	ity wioiiit	orning ivesu	iilo Uii		20 May 23	auring Mia-	rioou ii	ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy	olved ⁄gen	Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ın (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Overforce.	1.0	0.4	290	25.0	05.0	7.9	7.0	20.1	00.0	89.1	89.1	6.6		5.1		6			
					Surface	1.0	0.3	290	25.0	25.0	7.9	7.9	20.5	20.3	89.0	89.1	6.5	0.5	5.1	Ī	5			
IM10	F1	0-1	00.04	7.0	Middle	3.9	0.3	285	24.9	04.0	7.9	7.0	25.7	05.7	89.5	89.7	6.4	6.5	6.2	6.1	6	6	000054	000040
IIVITO	Fine	Calm	08:01	7.8	ivildale	3.9	0.3	280	24.9	24.9	7.9	7.9	25.7	25.7	89.8	89.7	6.4		6.2	0.1	6	ю	822251	809816
					Datter	6.8	0.4	298	24.9	24.9	7.9	7.0	26.0	26.0	93.3	94.0	6.7	0.0	7.0	1	6			
					Bottom	6.8	0.4	290	24.9	24.9	7.9	7.9	26.0	26.0	94.6	94.0	6.8	6.8	7.0	1	6			
					Surface	1.0	0.4	268	25.0	25.0	8.0	8.0	20.3	20.3	88.6	88.4	6.5		5.8		6			
					Surface	1.0	0.4	265	25.0	25.0	8.0	0.0	20.2	20.3	88.2	00.4	6.5	6.3	5.9	1	6			
IM11	Fine	Calm	07:56	9.0	Middle	4.5	0.3	289	24.8	24.8	8.0	8.0	24.8	24.7	83.8	83.7	6.0	0.3	6.1	6.4	6	6	821519	810555
IIVIII	1 1110	Callii	07.50	9.0	Middle	4.5	0.3	295	24.8	24.0	8.0	0.0	24.7	24.7	83.6	65.7	6.0		6.1	0.4	6	O	021319	010000
					Bottom	8.0	0.4	300	24.8	24.8	8.0	8.0	26.8	26.8	83.5	83.7	6.0	6.0	7.1		6			
					Dollom	8.0	0.4	301	24.8	24.0	8.0	0.0	26.8	20.0	83.8	03.7	6.0	0.0	7.2		6			
					Surface	1.0	0.4	271	25.2	25.2	8.0	8.0	18.6	18.6	96.3	94.5	7.1		2.1		6			
					Ounace	1.0	0.4	264	25.2	25.2	8.0	0.0	18.7	10.0	92.6	34.5	6.9	6.9	2.1		7			
IM12	Fine	Calm	07:49	8.0	Middle	4.0	0.4	290	25.0	25.0	8.0	8.0	23.5	23.6	92.8	92.9	6.7	0.0	3.1	3.2	6	6	821176	811542
114112	1 1110	Gaini	01.40	0.0	Wildaio	4.0	0.4	288	24.9	20.0	8.0	0.0	23.6	20.0	93.0	02.0	6.7		3.2	0.2	6	·	021170	0110-12
					Bottom	7.0	0.4	260	24.8	24.9	7.9	7.9	27.2	27.1	94.7	95.2	6.7	6.8	4.4		6			
					Bottom	7.0	0.4	254	24.9	24.0	7.9	7.0	27.1	27.1	95.6	50.E	6.8	0.0	4.5		6			
					Surface	1.0	0.0	193	25.5	25.5	7.9	7.9	17.3	17.3	97.7	97.0	7.3		4.1		6			
					Curiaco	1.0	0.0	199	25.5	20.0	7.9	7.0	17.4	17.0	96.2	07.0	7.1	7.2	4.2		7			
SR1A	Fine	Calm	07:25	5.4	Middle	2.7	-	186	-	-	-	_	-	_	-	_	-		-	4.8	-	7	819980	812663
• • • • • • • • • • • • • • • • • • • •						2.7	0.0	187	-		-		-		-		-		-		-	•		
					Bottom	4.4	0.0	191	25.5	25.5	7.9	7.9	21.3	21.4	91.2	91.1	6.6	6.6	5.5		8			
						4.4	0.0	190	25.4		7.9		21.4		91.0		6.6		5.6		7			
					Surface	1.0	0.1	233	25.3	25.3	8.0	8.0	23.0	22.9	93.9	93.9	6.8		3.2		6			
						1.0	0.1	227	25.3		8.0		22.9		93.9		6.8	6.8	3.2	1	5			
SR2	Fine	Calm	07:11	5.2	Middle	-	0.1	244	-	-	-	-	-	-	-	-	-		-	4.0	-	7	821479	814142
						-	0.1	248	-		-		-		-		-		-		-			
					Bottom	4.2	0.1	241	25.2	25.2	8.0	8.0	23.4	23.4	94.1	94.2	6.8	6.8	4.9		8			
						4.2	0.1	248	25.2		8.0		23.4		94.3		6.8		4.9		7			
					Surface	1.0	0.3	337 340	26.3 26.2	26.3	8.2 8.2	8.2	24.6	24.7	90.9	90.9	6.4		1.7	4	4			
						4.5	0.3	6	26.2		8.2		25.5		90.8		6.4	6.4	1.9 3.5	-	3			
SR3	Cloudy	Moderate	07:34	9.0	Middle	4.5	0.3	9	26.0	26.0	8.2	8.2	25.5	25.5	90.2	90.3	6.3		3.5	2.9	3	3	822169	807560
						8.0	0.3	325	26.0								6.3		3.4	4	2			
					Bottom	8.0	0.3	318	26.0	26.0	8.2 8.2	8.2	25.5 25.5	25.5	90.2	90.2	6.3	6.3	3.5	1	3			
						1.0	0.0	148	26.0		_		26.3				6.7		5.2		9			
					Surface	1.0	0.0	142	26.0	26.0	8.1 8.1	8.1	26.3	26.3	95.9 95.8	95.9	6.7		5.3	1	9			
						4.5	0.0	172	25.9		8.1		26.6		94.5		6.6	6.7	6.8	1	10			
SR4A	Cloudy	Moderate	05:55	8.9	Middle	4.5	0.0	166	25.9	25.9	8.1	8.1	26.6	26.6	94.5	94.5	6.6		6.8	6.8	9	10	817170	807832
						7.9	0.0	164	25.9		8.0		26.7		93.3		6.5		8.3		10			
					Bottom	7.9	0.0	159	25.9	25.9	8.0	8.0	26.7	26.7	93.3	93.3	6.5	6.5	8.6	1	10			
			1	İ		1.0	-	-	25.2		8.0		23.2		86.1		6.2		4.1	1	7			
					Surface	1.0	-		25.1	25.2	8.0	8.0	23.4	23.3	86.0	86.1	6.2		4.1	1	6			
						-	_	_	-		-	1	-		-		-	6.2		1	-			
SR8	Fine	Calm	07:45	4.4	Middle	-	_	-	-	-	_	-		-	_	-	-		_	4.6	-	6	820388	811604
						3.4	-	_	25.1		8.0		23.6		86.0		6.2		5.0	1	6			
					Bottom	3.4	-	-	25.1	25.1	8.0	8.0	23.6	23.6	86.0	86.0	6.2	6.2	5.0	1	5			
					1	Ü.,	1				0.0	1	20.0		00.0		Ŭ.Z		0.0	1	ŭ			

DA: Depth-Average

Water Quality Monitoring Results on 23 May 23 during Mid-Ebb Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water T	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Dissol Oxyg		Turbidity	(NTU)	Suspend (mg	ed Solids g/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Запріінд Бер	ur (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	
					Surface	1.0	0.7	216	27.1	27.1	7.8 7.8	7.8	23.2	23.2	115.9	115.9	8.1		1.3		3			
					Cunace	1.0	0.7	215	27.1	27.11		7.0	23.2	20.2	115.9	110.0	8.1	8.1	1.3		3			
C1	Cloudy	Rough	15:11	8.2	Middle	4.1	0.7	215	27.1	27.1	7.8	7.8	23.2	23.2	115.2	115.2	8.1	0.1	3.6	3.2	3	3	815608	804253
0.	Cioudy	. toug.	10	0.2	madio	4.1	0.7	208	27.1	2			23.2	20.2	115.1		8.0		3.6	0.2	3	ŭ	0.0000	00.200
					Bottom	7.2	0.6	235	27.1	27.1	7.8	7.8	23.5	23.5	110.3	110.2	7.7	7.7	4.7		2			
						7.2	0.7	232	27.1		7.8		23.5		110.1		7.7		4.7		3			
					Surface	1.0	0.6	175	27.4	27.4	7.8	7.8	22.8	22.8	116.6		8.1		2.4		3			
						1.0	0.5	179	27.4		7.8		22.8		116.5		8.1	7.8	2.5		3			
C2	Cloudy	Rough	13:43	9.4	Middle	4.7	0.6	181	27.0	27.0	7.8	7.8	23.7	23.7	106.5 106.4	106.5	7.4		1.7	1.8	3	3	825669	806942
						8.4	0.6 0.6	184 185	27.0 26.7		7.8		24.5		96.4		6.7		1.8		3			
					Bottom	8.4	0.6	191	26.7	26.7	7.7	7.7	24.5	24.5	96.4	96.4	6.7	6.7	1.2		2			
						1.0	0.5	53	26.9				24.1		113.9		8.0		1.7		2			
					Surface	1.0	0.5	50	26.9	26.9	7.8	7.8	24.1	24.1	113.9		8.0		1.8		3			
_						5.4	0.5	64	26.2				26.3		100.6		7.0	7.5	2.3		4			
C3	Cloudy	Rough	15:47	10.8	Middle	5.4	0.4	59	26.2	26.2	7.7	7.7	26.3	26.3	100.5	100.6	7.0		2.2	2.6	4	4	822129	817804
					5	9.8	0.5	53	25.9	0.50	7.7		27.1		94.6		6.6		3.8		4			
					Bottom	9.8	0.5	51	25.9	25.9	7.7	7.7	27.1	27.1	94.5	94.6	6.6	6.6	3.8		4			
					Surface	1.0	0.4	181	27.1	27.1	7.8	7.8	23.1	23.1	113.1	113.1	7.9		1.8		4			
					Sulface	1.0	0.4	186	27.1	27.1	7.8	7.0	23.1	25.1	113.0	113.1	7.9	7.7	1.8		4			
IM1	Cloudy	Rough	14:46	7.8	Middle	3.9	0.3	181	27.0	27.0	7.7	7.7	23.4	23.4	107.5	107.6	7.5 7.5	1.1	2.4	2.3	4	4	818367	806436
11011	Cioday	rtougii	14.40	7.0	Middle	3.9	0.3	186	27.0	21.0	7.7	7.7	23.4	25.4	107.6	107.0	7.5		2.5	2.5	3	7	010307	000430
					Bottom	6.8	0.3	169	25.8	25.8	7.7	7.7	27.5	27.5	85.5	85.4	6.0	6.0	2.7		3			
					Dotto	6.8	0.4	172	25.8	20.0	7.7		27.6	27.0	85.3	00.1	6.0	0.0	2.7		3			
					Surface	1.0	0.4	201	27.2	27.2	7.8	7.8	22.9	22.9	119.7	119.6	8.4		1.8		3			
						1.0	0.4	206	27.2		7.8		22.9		119.5		8.4	8.1	1.8		3			
IM2	Cloudy	Rough	14:39	7.9	Middle	4.0	0.4	191	26.8	26.8	7.8	7.8	23.6	23.7	110.2	110.1	7.7		1.1	1.6	3	3	819160	806219
		-				4.0	0.4	186	26.8		7.8		23.7		110.0		7.7		1.1		2			
					Bottom	6.9	0.4	208 208	26.7 26.7	26.7	7.7	7.7	24.6	24.6	100.6	100.7	7.0	7.0	1.8		2			
						1.0	0.4												2.7		2			
					Surface	1.0	0.3	169 176	27.1 27.1	27.1	7.8	7.8	23.1	23.1	115.4 115.4		8.1 8.1		2.6		2			
						4.1	0.2	176	26.6		7.8		24.7		103.8		7.3	7.7	2.3		2			
IM7	Cloudy	Rough	14:17	8.1	Middle	4.1	0.2	177	26.6	26.6	7.7	7.7	24.7	24.8	103.8	103.8	7.3		2.3	3.0	3	3	821344	806845
					-	7.1	0.2	169	26.3				25.7		98.4		6.9		3.9		3			
					Bottom	7.1	0.2	173	26.3	26.3	7.7	7.7	25.7	25.7	98.4	98.4	6.9	6.9	3.9		3			

DA: Depth-Averaged

Water Quality Monitoring Results on 23 May 23 during Mid-Ebb Tide

water Quai	ity worth	orning inesu	ILS UII		23 May 23	auring Mia-	EDD HUE	:																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)	DO S	aturation (%)	Disso Oxyg		Turbidity	(NTU)		led Solids g/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Depi	()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.6	104	27.5	27.5	7.8	7.8	22.8	22.8	115.6	115.5	8.0		1.4		2			
					Cundoc	1.0	0.6	104	27.4	27.0	7.8	7.0	22.8	22.0	115.4	110.0	8.0	7.7	1.4		3			
IM10	Cloudy	Rough	13:40	8.6	Middle	4.3	0.6	101	26.9	26.9	7.8	7.8	24.0	24.0	106.1	106.0	7.4		1.4	1.5	2	3	822249	809846
	,	3				4.3	0.6	96	26.9		7.8		24.1		105.9		7.4		1.4		3			
					Bottom	7.6	0.6	89	26.7	26.7	7.7	7.7	24.7	24.7	98.3	98.3	6.9	6.9	1.8		3			
						7.6 1.0	0.6	93	26.7		7.7		24.7		98.3		6.9		1.8		3			
					Surface	1.0	0.8	109 108	26.7 26.6	26.7	7.7	7.7	24.5	24.6	99.8 99.5	99.7	7.0		1.9 1.9		2			
						4.1	0.7	114	26.4		7.7		25.3		98.4		6.9	7.0	3.1		3	-		
IM11	Cloudy	Rough	13:54	8.1	Middle	4.1	0.8	111	26.4	26.4	7.7	7.7	25.4	25.4	98.4	98.4	6.9		3.1	3.0	3	3	821504	810525
						7.1	0.8	99	26.3		7.7		25.4		96.4		6.7		3.9		3			
					Bottom	7.1	0.8	106	26.3	26.3	7.7	7.7	25.8	25.8	96.5	96.5	6.7	6.7	3.9		3			
						1.0	0.8	104	27.1		7.8		23.1		114.1		8.0		1.9		3			
					Surface	1.0	0.8	109	27.1	27.1	7.8	7.8	23.2	23.2	113.7	113.9	7.9		1.9		3			
						3.8	0.7	106	26.7		7.7		24.4		99.7		7.0	7.5	2.8		3			
IM12	Cloudy	Rough	14:01	7.5	Middle	3.8	0.7	103	26.7	26.7	7.7	7.7	24.6	24.5	99.7	99.7	7.0		2.8	3.2	2	3	821145	811532
						6.5	0.8	110	26.6		7.8		25.5		99.4		6.9		4.8		4			
					Bottom	6.5	0.8	105	26.7	26.7	7.8	7.8	25.5	25.5	99.4	99.4	6.9	6.9	4.8		5			
					0	1.0	0.0	95	27.1	07.4	7.8	7.0	23.1	00.4	114.2	444.0	8.0		3.7		3			
					Surface	1.0	0.0	99	27.1	27.1	7.8	7.8	23.1	23.1	114.2	114.2	8.0	8.0	3.7		4			
SR1A	Cloudy	Moderate	15:12	5.2	Middle	2.6	0.1	82	-	_	-		-		-		-	8.0	-	2.8	-	3	819971	812663
SKIA	Cloudy	Moderate	13.12	5.2	Middle	2.6	0.1	85	-	-	-	-	-		-	1 -	-		-	2.0	-	3	019971	012003
					Bottom	4.2	0.1	75	27.0	27.0	7.7	7.7	23.6	23.7	112.4	112.4	7.9	7.9	1.9		2			
					Dottom	4.2	0.1	78	26.9	27.0	7.7	7.7	23.7	25.7	112.4	112.4	7.9	1.5	1.9		3			
					Surface	1.0	0.7	43	27.1	27.1	7.8	7.8	23.1	23.1	117.9	117.9	8.2		1.8		3			
					- Cundoo	1.0	0.7	43	27.1		7.8		23.1	20	117.9		8.2	8.2	1.8		2			
SR2	Cloudy	Rough	15:24	5.3	Middle	-	0.7	30	-	-	-	-	-	_	-	_	-	0.2	-	1.7	-	2	821441	814185
	,					-	0.7	33	-		-		-		-		-		-		-	_		
					Bottom	4.3	0.6	32	27.1	27.1	7.8	7.8	23.1	23.1	117.5	117.5	8.2	8.2	1.6		2			
						4.3	0.6	34	27.1		7.8		23.1		117.5		8.2		1.6		2			
					Surface	1.0	0.5	152	27.1	27.1	7.8	7.8	23.4	23.4	113.5	113.2	7.9		1.7		3			
						1.0	0.5	148	27.0		7.8		23.5		112.8		7.9	7.5	1.7		2			
SR3	Cloudy	Rough	14:04	8.5	Middle	4.3	0.5	140	26.7	26.7	7.7	7.7	24.6	24.7	100.6	100.5	7.0		2.0	2.4	2	3	822133	807561
						4.3 7.5	0.6 0.6	142 144	26.6 26.3					-	100.4 95.3				3.6		3			
					Bottom	7.5	0.6	144	26.4	26.4	7.7	7.7	25.7 25.6	25.7	95.4	95.4	6.7	6.7	3.6		4			
						1.0	0.0	26	27.1		7.8		23.1		116.5		8.1		2.6		3			
					Surface	1.0	0.0	30	27.1	27.1	7.8	7.8	23.1	23.1	116.3	116.4	8.1		2.6		2	1		
						4.8	0.0	52	27.0		7.7		23.4		114.1		8.0	8.1	3.8		3	1		
SR4A	Cloudy	Moderate	15:39	9.6	Middle	4.8	0.1	53	27.0	27.0	7.7	7.7	23.5	23.5	114.1	114.1	8.0		3.9	4.2	3	3	817186	807812
					_	8.6	0.0	34	26.9		7.7		24.2		105.3		7.3		6.0		3			
					Bottom	8.6	0.0	32	26.9	26.9	7.7	7.7	24.2	24.2	105.5	105.4	7.4	7.4	6.0		3			
İ					Curt	1.0	-	-	27.1	07.4	7.8	7.0	23.1	20.4	116.8	440.0	8.2		2.7		2			
					Surface	1.0	-	-	27.1	27.1	7.8	7.8	23.2	23.1	116.7	116.8	8.2	0.0	2.7	1	3	1		
CDO	Claudi	Madazat-	44.07	5.4	Middle	-	-	-	-		-		-		-		-	8.2	-	1	-	1	000400	044000
SR8	Cloudy	Moderate	14:07	5.1	Middle	-	-	-	-	-	-	-	-	1 -	-	1 -	-		-	3.2	-	3	820409	811606
					Bottom	4.1	-	-	26.9	26.9	7.8	7.8	23.8	23.8	108.1	108.2	7.6	7.6	3.7	1	3	1		
					DULLOITI	4.1	-	-	26.9	20.9	7.8	7.8	23.8	23.8	108.2	108.2	7.6	0.1	3.7	1	3	<u> </u>		<u> </u>
· Denth-Aver:					l	4.1	-	-	20.9		7.8		23.8		108.2	I	٥.١		3.1		J	I	l	

Water Quality Monitoring Results on 23 May 23 during Mid-Flood Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxyg		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	0.2	357	25.6	25.6	7.8	7.8	28.4	28.4	99.5	99.5	6.9		1.2		3			
					Gunace	1.0	0.1	3	25.6	23.0	7.8	7.0	28.4	20.4	99.4	33.5	6.9	6.9	1.2		2			
C1	Rainy	Rough	07:05	7.9	Middle	4.0	0.1	3	25.5	25.5	7.8 7.8	7.8	28.4	28.4	98.8	98.8	6.9	0.5	3.7	3.1	3	3	815625	804233
01	reality	rtougii	07.00	7.5	Middle	4.0	0.1	359	25.5	25.5	7.8	7.0	28.4	20.4	98.8	30.0	6.9		3.7	5.1	3	3	013023	004233
					Bottom	6.9	0.1	19	25.2	25.2	7.8 7.8	7.8	29.4	29.4	94.5	94.6	6.6	6.6	4.2		4			
					Dottom	6.9	0.1	17	25.2	25.2	7.8	7.0	29.4	23.4	94.6	34.0	6.6	0.0	4.3		4			
					Surface	1.0	0.4	344	27.0	27.0	7.7	7.7	23.4	23.4	104.7	104.7	7.3		1.8		3			
					Gundoo	1.0	0.3	341	27.0	27.0	7.7	···	23.4	20.4	104.7	104.7	7.3	7.1	1.9		2			
C2	Rainy	Rough	08:25	8.9	Middle	4.5	0.3	345	26.8	26.8	7.7	7.7	24.1	24.1	98.0	98.1	6.9		1.1	1.5	3	3	825696	806935
02	r.cay	rtoug	00.20	0.0	madio	4.5	0.3	342	26.8	20.0	7.7		24.1		98.1	00.1	6.9		1.1		3	Ü	020000	000000
					Bottom	7.9	0.3	6	26.7	26.7	7.7	7.7	24.6	24.6	99.8	99.8	7.0	7.0	1.6		3			
						7.9	0.3	3	26.7				24.6		99.8		7.0		1.6		3			
					Surface	1.0	0.1	286	25.5	25.5	7.8	7.8	27.3	27.3	97.4	97.4	6.8		1.8		3			
						1.0	0.1	279	25.5		7.8		27.3		97.3		6.8	6.8	1.8		2			
C3	Rainy	Rough	06:37	11.5	Middle	5.8 5.8	0.1	293 297	25.2	25.2	7.7	7.7	27.6 27.6	27.6	95.8 95.7	95.8	6.8		1.5	1.8	3	4	822122	817792
						10.5	0.1	297	25.2 25.0												4			
					Bottom	10.5	0.2	291	25.0	25.0	7.8 7.8	7.8	27.3	27.2	91.7 91.7	91.7	6.5 6.5	6.5	1.9		<u>6</u> 5			
						1.0	0.2	40	26.9		7.7		23.7		108.1		7.6		2.6		2			
					Surface	1.0	0.0	46	26.9	26.9	7.7	7.7	23.7	23.7	108.0	108.1	7.6		2.6		3			
						3.6	0.1	27	25.9		7.7		27.1		94.4		6.6	7.1	2.6		3			
IM1	Rainy	Rough	07:27	7.1	Middle	3.6	0.1	20	25.9	25.9	7.7	7.7	27.3	27.2	94.4	94.4	6.6		2.6	3.0	4	3	818351	806435
						6.1	0.0	38	25.8		7.7		27.7		94.9		6.6		3.8		4			
					Bottom	6.1	0.1	36	25.8	25.8	7.7	7.7	27.7	27.7	95.0	95.0	6.6	6.6	3.7		3			
					0	1.0	0.0	250	26.8	26.8	7.7	7.7	24.4	24.5	110.3	440.0	7.7		1.7		4			
					Surface	1.0	0.0	253	26.8	26.8	7.7	7.7	24.6	24.5	110.3		7.7	7.5	1.7		4			
IM2	Boiny	Rough	07:33	7.4	Middle	3.7	0.1	244	26.5	26.5	7.7	7.7	25.5	25.6	102.5	102.5	7.2	7.5	1.4	1.7	2	3	819173	806252
IIVIZ	Rainy	Rough	07.33	7.4	Middle	3.7	0.1	248	26.4	20.5	7.7	7.7	25.7	25.6	102.5	102.5	7.2		1.4	1.7	3	3	019173	000232
					Bottom	6.4	0.1	251	26.1	26.1	7.7	7.7	26.7 26.6	26.6	96.6	96.7	6.7	6.7	2.1		2			
					Bottom	6.4	0.1	247	26.1	20.1		7.7		20.0	96.7		6.7	0.7	2.0		2			
					Surface	1.0	0.0	331	26.9	26.9	7.8	7.8	23.7	23.7	112.8		7.9		1.3		2			
					24/1400	1.0	0.0	332	26.9	25.0	7.8	0	23.7	20.7	112.8		7.9	7.4	1.4		2			
IM7	Rainy	Rough	07:53	7.8	Middle	3.9	0.0	344	26.4	26.4	7.7	7.7	25.8	25.8	97.9	97.9	6.8		2.8	2.5	2	3	821365	806844
I		· ··oug··	000			3.9	0.1	350	26.4	20	7.7		25.8		97.9	00	6.8		2.8		3	·	02.000	0000.4
					Bottom	6.8	0.1	307	26.4	26.4	7.7	7.7	25.8	25.8	99.1	99.1	6.9	6.9	3.4		4		1	
						6.8	0.1	301	26.4	-	7.7		25.8		99.1		6.9		3.5		3			

DA: Depth-Averaged

Water Quality Monitoring Results on 23 May 23 during Mid-Flood Tide

water Qual	ity wonit	orning inesu	IIIS UII		23 Way 23	auring Mia-		ue																
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)		ed Solids g/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ın (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	282	27.0	27.0	7.7	7.7	23.3	23.2	106.7	106.7	7.5		2.9		4			
					Sulface	1.0	0.4	288	27.0	27.0	7.7	7.7	23.2	23.2	106.6	100.7	7.5	7.2	3.0		2			
IM10	Rainy	Rough	08:21	8.2	Middle	4.1	0.4	292	26.8	26.8	7.7	7.7	24.2	24.2	98.4	98.4	6.9	1.2	1.3	2.5	3	3	822228	809830
111110	ramy	rtougii	00.21	0.2	Wildaio	4.1	0.4	293	26.8	20.0	7.7	,,,	24.2	27.2	98.4	30.4	6.9		1.4	2.0	2	U	OZZZZO	000000
					Bottom	7.2	0.4	306	26.5	26.5	7.7	7.7	25.1	25.1	100.9	101.0	7.1	7.1	3.1		2			
						7.2	0.4	310	26.5		7.7		25.1		101.0		7.1		3.0		2			
					Surface	1.0	0.4	286	26.9	26.9	7.8	7.8	23.4	23.5	114.1	114.1	8.0		2.3	4	2			
						1.0	0.3	286	26.9		7.8		23.6		114.1		8.0	7.6	2.3	-	2			
IM11	Rainy	Rough	08:05	7.9	Middle	4.0	0.3	294	26.6	26.6	7.7	7.7	24.7	24.7	102.8	102.8	7.2		1.2	1.7	2	2	821506	810533
		•				4.0	0.4	293	26.6				24.7		102.7		7.2		1.3	4	2			
					Bottom	6.9	0.4	277	26.3	26.3	7.7	7.7	25.9 25.9	25.9	93.2	93.3	6.5	6.5	1.7	4	2			
			-			6.9	0.4	279	26.3						93.3		6.5		1.7		4			
					Surface	1.0	0.4	297 290	26.8 26.8	26.8	7.8	7.8	24.3	24.2	110.6	110.7	7.7		2.5 2.5	-	3			
						3.7	0.4	284	26.5						102.8		7.7	7.5	3.8	-	3			
IM12	Rainy	Rough	07:56	7.3	Middle	3.7	0.4	280	26.4	26.5	7.7	7.7	25.4 25.5	25.5	102.6	102.7	7.2		3.8	4.4	2	3	821178	811512
						6.3	0.3	283	26.4		7.7		26.5		97.3		6.8		6.8	-	2			
					Bottom	6.3	0.4	285	26.2	26.2	7.7	7.7	26.4	26.4	97.4	97.4	6.8	6.8	6.8	1	2			
				1		1.0	0.1	172	25.6		7.8		28.2		100.7		7.0		2.3		2			
					Surface	1.0	0.1	177	25.6	25.6	7.8	7.8	28.2	28.2	100.6	100.7	7.0		2.3	1	3			
						2.4	0.0	174	-		-		-		-		-	7.0	-	1	-			
SR1A	Rainy	Moderate	07:14	4.7	Middle	2.4	0.1	169	-	-	-	-		-	_	-	-		-	1.9	-	3	819980	812659
						3.7	-	204	25.6		7.8		28.3		100.2		7.0		1.5	1	2			
					Bottom	3.7	0.1	199	25.6	25.6	7.8	7.8	28.3	28.3	100.3	100.3	7.0	7.0	1.5	1	3			
					0	1.0	0.0	333	25.6	05.0	7.8	7.0	28.2	00.0	100.1	400.4	7.0		3.0		3			
					Surface	1.0	0.1	333	25.6	25.6	7.8	7.8	28.2	28.2	100.0	100.1	7.0	7.0	3.0	1	4			
SR2	Doiny	Bough	06:52	4.2	Middle	-	0.1	353	-	_	-		-		-		-	7.0	-	2.1	-	4	821471	814181
SKZ	Rainy	Rough	00.32	4.2	ivildule	-	0.0	346	-	-	-	-	-	1 -	-	-	-		-	2.1	-	4	021471	014101
					Bottom	3.2	0.1	325	25.5	25.5	7.8	7.8	28.4	28.4	99.2	99.2	6.9	6.9	1.2		4			
					Dollom	3.2	0.1	320	25.5	25.5	7.8	7.0	28.4	20.4	99.2	99.2	6.9	0.9	1.3		4			
					Surface	1.0	0.1	327	26.9	26.9	7.8	7.8	23.4	23.5	116.3	116.3	8.1		3.4		2			
					Ounace	1.0	0.1	330	26.9	20.9	7.8	7.0	23.6	20.0	116.3	110.5	8.1	7.8	3.4		2			
SR3	Rainy	Rough	08:01	8.2	Middle	4.1	0.1	334	26.6	26.6	7.7	7.7	24.6	24.6	106.9	106.9	7.5		5.7	5.3	2	3	822157	807562
						4.1	0.1	340	26.6		7.7		24.6		106.9		7.5		5.7	1	2	-		
					Bottom	7.2	0.1	316	26.5	26.5	7.7	7.7	25.0	25.0	102.4	102.5	7.2	7.2	6.9	_	3			
						7.2	0.1	318	26.5		7.7		25.0		102.5		7.2		6.9		4			
					Surface	1.0	0.0	200	25.6	25.6	7.7	7.7	27.8	27.8	99.1	99.1	6.9		3.4	4	5			
						1.0	0.0	194	25.6		7.7		27.8		99.1		6.9	6.9	3.5	4	4			
SR4A	Rainy	Moderate	06:39	9.2	Middle	4.6	0.0	215	25.5	25.5	7.7	7.7	27.8	27.8	98.3	98.3	6.9		5.6	5.1	3	3	817184	807829
						4.6	0.1	220	25.5				27.8		98.2				5.6	-	2			
					Bottom	8.2	0.1	222	25.5	25.5	7.7	7.7	27.8	27.8	97.4	97.4	6.8	6.8	6.2	4	2			
			1	<u> </u> 	<u> </u>	8.2 1.0	0.1	219	25.5					1					6.2	1	2		1	
					Surface	1.0	-	-	27.0 26.9	27.0	7.8	7.8	23.7	23.8	115.6 115.3	115.5	8.1		3.4	4	3			
						1.0	-	-	26.9		7.8		23.8	1	115.3		8.1	8.1	3.4	1				
SR8	Rainy	Rough	07:48	4.9	Middle	-	-	-	-	-	-	-	<u> </u>	-	-	-	-		-	3.5	-	2	820368	811626
						3.9	-	-	26.7		7.7		24.9		107.1		7.5		3.7	1	2			
					Bottom	3.9	-	-	26.7	26.7	7.7	7.7	24.9	24.9	107.1	107.2	7.5	7.5	3.7	1	2			
			1		1	ა.ყ		_	20.7		1.1		24.9		101.2		1.5		3.1	<u> </u>			l .	

Water Quality Monitoring Results on 25 May 23 during Mid-Ebb Tide

Sampling Depth (m)   Sampling Depth (m)   Sampling Depth (m)   (m/s)   Direction (	Water Quar	ity Moint	oring Kesu	ito on		25 May 23	auring Mia-	EDD TIGE	·																
Condition   Condition   Condition   Time   Cepth (m)   Condition		Weather	Sea	Sampling	Water	Complies Dest	.h (m)		Current	Water Te	emperature (°C)		рН	Salini	ty (ppt)	DO S				Turbidity	(NTU)				Coordinate
C1 Cloudy Moderate 16:44 8.7 Middle 4.4 0.6 216 283 4.8 8.2 8.2 285 25 8.5 97.8 97.9 6.8 6.7 4 5.7 5.1 3 3 815636 804252	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		(Easting)
C1 Cloudy Moderate 16:44 8.7 Middle 4.4 0.6 216 283 4.8 8.2 8.2 285 25 8.5 97.8 97.9 6.8 6.7 4 5.7 5.1 3 3 815636 804252						0	1.0	0.6	219	26.4	00.4	8.2	0.0	27.0	07.4	114.9	4440	7.9		1.3		3			
C1 Cloudy Moderate 16:44 8.7 Middle 4.4 0.6 215 25.9 25.9 82 82 28.5 87.8 97.8 6.8 5.7 5.7 5.1 3 3 815638 804252    Bottom						Surface	1.0	0.6	215	26.3	20.4		8.2	27.1	27.1	114.3	114.0		7.4	1.3	1	2			
Part	C1	Cloudy	Madarata	16:44	0.7	Middle	4.4	0.6	215	25.9	25.0	8.2	0.2	28.5	20 E	97.9	07.0	6.8	7.4	5.7		3	,	015636	904252
South   Fine   Calm   16:12   11.9   Surface   10.0   0.3   179   26.5   0.6   2.6   0.6   0.5   0.7   0.6   0.7   0.6   0.7   0.6   0.7   0.6   0.7   0.6   0.7   0.6   0.7   0.6   0.7	Ci	Cloudy	Moderate	10.44	0.7	Middle	4.4	0.6	220	25.9	25.9	8.2	0.2	28.5	20.5	97.8	97.9	6.8		5.2	5.1	2	٥	013030	004232
Surface   1.0   0.3   179   26.5   26.5   8.2   26.5   26.7   27.5   27.7   10.6   10.16   7.0   7.0   6.9   6.1   6.0						Rottom		0.6	222	26.2	26.3	8.1	0.1	28.3	20.2	98.6	08.0	6.8	6.9			2			
C2						Bottom		0.6		26.3	20.3	8.1	0.1	28.3	20.5	99.1	30.3	6.8	0.0	8.5		3			
C2 Cloudy Moderate						Surface					26.5	8.2	8.2		25.7										
C2   Cloudy   Moderate   15:02   11:9   Middle   5:0   0.4   17:2   25:0   26:0   8:2   28:2   28:4   26:3   36:2   8:2   8:2   8:2   8:3   8:4   8:5   6:8   5:6   6:8   5:6   6:8   5:6   6:8   5:6   6:8   6:8   5:6   6:8   6:						Gundee					20.0		0.2		20.7		101.0	7.0	69			3			
Bottom 10.9 0.4 187 26.2 26.2 8.2 8.2 26.1 26.0 98.6 98.7 6.8 6.9 6.9 8.3 2 2 2 2 8 8 2 8 2 8 2 8 2 8 2 8 2 8 2	C2	Cloudy	Moderate	15:02	11.9	Middle					26.0	8.2	8.2		26.4		98.2	6.8	0.0		6.8		2	825689	806967
Sourhand   Sourhand	02	o.ouu,	moderate	10.02		madio					20.0		0.2		20		00.2				1 0.0		_	020000	000001
Calm   16:12   10.8   Surface   1.0   0.5   85   26.2   8.2   26.0   88.8   6.9   88.8   6.9   86.6   2						Bottom					26.2	8.2	8.2		26.0	98.6	98.7		6.9		_				
Calm											-														
C3						Surface					27.0	8.0	8.0		28.5		99.3				4				
Bottom   B																			6.8		4				
Bottom   B	C3	Fine	Calm	16:12	10.8	Middle					27.2	8.0	8.0		28.0	103.1	101.4	7.0			1.1		3	822121	817791
Middle																					4				
Middle						Bottom					27.5	8.0	8.0		28.1	99.4	99.4	6.7	6.7		-				
Moderate   16:21   7.1   Middle   3.6   0.4   191   26.0   26.0   8.2   8.2   27.9   27.9   112.0   112.5   7.7   7.3   1.8   2.1																				•	<u> </u>			1	l
Middle   3.6   0.4   191   26.0   26.0   8.2   28.4   28						Surface					26.1	8.2	8.2		27.9	112.9	112.5	7.0			1				
Bottom   B																_			7.3		1				
Bottom 6.1 0.4 172 26.2 26.3 26.3 8.2 8.2 8.2 8.2 8.2 99.1 99.4 6.8 6.8 6.8 8.9 2 2 3 4 4 4 1 0.3 178 26.1 26.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8	IM1	Cloudy	Moderate	16:21	7.1	Middle					26.0	8.2	8.2		28.4		98.6	6.8			4.2		2	818335	806458
Moderate   16:17   Record   Moderate   16:17   Record																					1				
Moderate   16:17   Record   Moderate   16:17   Record   Moderate   16:17   Record						Bottom					26.3	8.2	8.2		28.3	99.6	99.4	6.8	6.8		1				
IM2 Cloudy Moderate 16:17 6.6 Middle 3.3 0.4 205 25.9 25.9 8.2 8.2 28.2 105.4 105.0 105.2 7.3 7.6 1.9 2.5 2 819164 806235    Bottom 5.6 0.4 208 26.0 5.6 0.4 201 26.0 5.6 0.4 201 26.0 5.6 0.4 201 26.0 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2						0	1.0	0.4	180	26.2	00.0		0.0	27.5	07.0	113.4	440.0	7.8		1.6		2			
M2   Cloudy   Moderate   16:17   6.6   Middle   3.3   0.4   205   25.9   25.9   8.2   8.2   28.2   28.2   105.4   105.0   7.3   1.9   2.5   2   2   819164   806235						Suпасе	1.0	0.5	179		26.2	8.2	8.2		27.6		113.2	7.8	7.0		1	2			
Bottom	IMO	Claudu	Madazata	40.47	0.0	Mistalla	3.3	0.4	205	25.9	25.0	8.2	0.0	28.2	20.2	105.4	405.0	7.3	7.6	1.9	1 , ,	2	1	040404	000005
Surface 1.0 0.3 183 26.5 26.0 26.5 8.1 8.1 24.3 24.3 105.2 105.4 7.4 7.4 7.4 7.1 2.5 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6	IIVI∠	Cloudy	Moderate	10:17	0.0	Middle	3.3	0.4	212	25.9	25.9		8.2		28.2	105.0	105.2	7.3		2.0	2.5	2		819164	806235
Surface 1.0 0.3 183 26.5 26.5 8.1 8.1 24.3 24.3 105.2 105.4 7.4 7.4 7.4 7.1 2.5 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6						Dottom	5.6	0.4	208	26.0	26.0	8.2	0.2	28.4	20.4	96.0	06.0	6.6	6.6	4.1	1	<2	1		
Moderate   15:43   8.2   Surface   1.0   0.3   187   26.4   26.5   8.1   8.1   24.4   24.3   105.2   105.4   7.4   7.1   2.6   4.1   0.3   185   26.0   26.1   8.1   8.1   27.5   27.4   27.5   96.4   96.4   6.7   7.1   2.6   4.7   2.6   2.7   2.6   2.7   2.6   2.7   2.6   2.7   2.7   2.6   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.						DULLUITI	5.6	0.4	201	26.0	20.0	8.2	0.2	28.4	20.4	96.0	96.0	6.6	0.0	4.0		<2			
IM7 Cloudy Moderate 15:43 8.2 Middle 1.0 0.3 187 26.4 20.3 8.1 0.1 24.4 24.5 105.2 10.4 7.4 7.1 2.6 5.0 4.7 7.1 2.0 4.7 7.1 2.6 5.0 4.7 7.1 2.0 4.7 7.1 2.0 4.7 7.1 2.0 4.7 7.1 2.0 4.7 7.1 2.6 5.0 4.7 7.1 2.						Surface		0.3			26.5	8.1	8.1		24.3		105.4	7.4							
IM7         Cloudy         Moderate         15:43         8.2         Middle         4.1         0.3         185         26.0         26.1         8.1         8.1         27.5         96.4         96.4         6.7         5.0         3.4         2         2         821354         806853						Guilace					20.0		0.1		24.5		100.4	7.4	7 1		]	<2			
	IM7	Cloudy	Moderate	15:43	8.2	Middle					26.1	8.1	8.1		27.5		96.4	6.7	, · · ·		34		2	821354	806853
	11417	Jioudy	Moderate	10.70	0.2	Middle					20.1		0.1		21.0		30.4				] 5.4			021004	000000
						Bottom	7.2	0.3	184	26.4	26.5	8.1	8.1	27.7	27.7	96.6	96.8	6.6	6.7	3.1	1	2			
		nand				Sotioni	7.2	0.3	180	26.5	23.0	8.1	J.1	27.6		97.0	50.0	6.7	5.7	2.8		2			

DA: Depth-Averaged

Water Quality Monitoring Results on 25 May 23 during Mid-Ebb Tide

Water Qual	ity Monite	oring Resu	its on		25 May 23	during Mid-	EDD HAE	,																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)	1	рН	Salini	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspend (mo		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	0.4	103	27.0	27.0	8.0	8.0	27.7	27.8	98.3	96.3	6.7		1.0		3			
						1.0 4.4	0.4 0.5	109 110	27.0 27.0		8.0		27.8		94.3		6.4	6.5	1.0	-	4			
IM10	Fine	Calm	15:01	8.8	Middle	4.4	0.5	110	27.0	27.0	8.0	8.0	28.0 28.0	28.0	93.6	93.7	6.4		1.1	1.2	3	3	822235	809857
					D-11	7.8	0.5	89	27.2	07.0	8.0	0.0	28.0	00.0	95.0	00.4	6.4	0.5	1.6		2			
					Bottom	7.8	0.5	83	27.3	27.3	8.0	8.0	27.9	28.0	97.1	96.1	6.6	6.5	1.6		2			
					Surface	1.0	0.6	79	27.0	27.0	8.0	8.0	28.0	28.0	98.7	96.7	7.0		1.0		2			
						1.0	0.6	73	27.0		8.0		28.0		94.7		6.7	6.8	1.0	_	3			
IM11	Fine	Calm	15:09	7.2	Middle	3.6 3.6	0.5 0.5	110 112	27.0 27.0	27.0	8.0	8.0	28.3	28.3	94.0	94.1	6.7		1.1	1.2	2	3	821508	810555
						6.2	0.6	89	27.0		8.0		28.2		95.4		6.7		1.1	-	4			
					Bottom	6.2	0.6	91	27.0	27.0	8.0	8.0	28.2	28.2	97.5	96.5	6.9	6.8	1.6	_	3			
					Curtons	1.0	0.7	104	27.3	07.0	8.1	0.4	26.6	20.0	115.8	445.0	7.9		1.3		2			
					Surface	1.0	0.7	104	27.3	27.3	8.1	8.1	26.6	26.6	114.6	115.2	7.8	7.7	1.2		2			
IM12	Fine	Calm	15:25	7.2	Middle	3.6	0.6	92	27.3	27.3	8.1	8.1	26.8	26.8	109.4	109.2	7.5	,.,	1.3	1.4	2	3	821171	811531
						3.6	0.6	94	27.3		8.1	• • • • • • • • • • • • • • • • • • • •	26.8		109.0		7.4		1.4	_	3	_		
					Bottom	6.2 6.2	0.7	112 106	27.3 27.4	27.4	8.1 8.1	8.1	26.7 26.5	26.6	109.1	109.2	7.4	7.5	1.5	_	3			
						1.0	0.0	105	27.4		8.0		25.5		107.3		7.4		2.0		2			
					Surface	1.0	0.0	98	27.4	27.4	8.0	8.0	25.5	25.5	106.9	107.1	7.3		2.1	1	2			
SR1A	Fine	Calm	15:47	5.4	Middle	2.7	-	93	-		-		-		-		-	7.4	-	2.6	-	2	819983	812658
SKIA	1 1116	Callii	13.47	5.4	ivildule	2.7	0.1	92	-		-	_	-		-		-		-	2.0	-		019903	012030
					Bottom	4.4	0.0	113	27.3	27.3	8.0	8.0	25.7	25.7	106.0	106.0	7.3	7.3	3.2		2			
						4.4	0.1	108	27.2		8.0		25.6		106.0		7.3		3.2	1	2			
					Surface	1.0	0.5 0.6	60 63	26.8 26.8	26.8	8.0	8.0	28.0	28.4	99.3	99.3	6.8		1.0	-	3			
						-	0.5	35	-		-		-		-		-	6.8	- 1.1	-	-			
SR2	Fine	Calm	16:01	4.2	Middle	-	0.5	37	-	-	-	-	-	-	-	-	-	•	-	1.3	-	2	821447	814167
					Bottom	3.2	0.6	57	26.9	26.9	8.0	8.0	28.5	28.7	98.9	98.8	6.7	6.7	1.5		2			
					Dottom	3.2	0.6	54	26.8	20.9	8.0	0.0	28.9	20.7	98.7	30.0	6.7	0.7	1.4		2			
					Surface	1.0	0.5	151	26.8	26.8	8.1	8.1	24.2	24.2	106.8	106.7	7.4		1.1	_	2			
						1.0 4.7	0.5 0.5	155 161	26.7 26.3		8.1 8.1		24.2 26.4		106.6 100.6		7.4 7.0	7.2	1.1 2.8	_	2			
SR3	Cloudy	Moderate	15:32	9.4	Middle	4.7	0.5	166	26.2	26.3	8.1	8.1	26.8	26.6	99.1	99.9	6.9		2.8	3.4	2	2	822158	807551
					5	8.4	0.5	141	25.9	25.2	8.1		28.0		98.0		6.8		6.3	-	2			
					Bottom	8.4	0.5	145	25.9	25.9	8.1	8.1	28.0	28.0	98.5	98.3	6.8	6.8	6.5		2			
					Surface	1.0	0.0	346	26.2	26.2	8.2	8.2	28.0	28.0	102.9	102.9	7.1		2.7		3			
					Cunacc	1.0	0.0	348	26.2	20.2	8.2	0.2	28.0	20.0	102.9	102.0	7.1	6.9	2.8	_	4			
SR4A	Cloudy	Moderate	17:13	8.4	Middle	4.2 4.2	0.0	344 337	25.9 25.9	25.9	8.2 8.2	8.2	28.3	28.3	97.4 97.4	97.4	6.8	}	4.0	3.7	3	3	817207	807789
						7.4	0.1	8	25.9		8.2		28.3		97.4		6.8		4.1	-	2	ł		
					Bottom	7.4	0.0	9	26.1	26.1	8.2	8.2	28.2	28.2	98.1	98.0	6.8	6.8	4.3	1	3	1		
	İ				Curtooo	1.0	-	-	27.0	36.0	8.1	8.1	26.3	26.4	109.2	108.7	7.5		1.0	i –	2			
					Surface	1.0	-	-	26.8	26.9	8.1	ö. I	26.5	26.4	108.1	108.7	7.5	7.5	0.9	]	3	]		
SR8	Fine	Calm	15:30	4.2	Middle	-	-	-	-		-	_	-	-	-		-	7.3	-	1.5	-	3	820373	811610
						-	-	-	-		-		-		-		-		-	4	-	_		
					Bottom	3.2	-	<u> </u>	26.7 26.6	26.7	8.1 8.1	8.1	27.5 27.1	27.3	105.4	104.6	7.2	7.2	2.0 1.9	-	3 2	l		
DA: Donth Aver					1	3.2	-	-	∠0.0		ö. I		21.1		103.8		1.2		1.9		2			

Water Quality Monitoring Results on 25 May 23 during Mid-Flood Tide

water Quai	ity wonit	oring Resu	แร บท		25 May 23	auring Mia-		ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)	DO S	Saturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	(111)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Ourford	1.0	0.1	95	25.7	05.7	8.1	0.4	27.9	07.0	95.2	05.0	6.6		9.0		2			
					Surface	1.0	0.1	88	25.7	25.7	8.1	8.1	27.9	27.9	95.1	95.2	6.6		9.4		3			
04	01		04:04	0.4	A 42 of other	4.2	0.0	76	25.3	25.3	8.1	0.4	29.2	00.0	86.5	86.4	6.0	6.3	9.1	8.1	2		045004	804257
C1	Cloudy	Moderate	04:01	8.4	Middle	4.2	0.0	74	25.3	25.3	8.1	8.1	29.3	29.3	86.3	86.4	6.0		8.7	8.1	2	2	815624	804257
					Bottom	7.4	0.1	71	25.3	25.3	8.1	8.1	29.5	29.5	85.3	85.4	5.9	5.9	6.1		2			
					Bollom	7.4	0.1	75	25.3	25.3	8.1	8.1	29.5	29.5	85.4	85.4	5.9	5.9	6.1		2			
					Surface	1.0	0.3	182	26.0	26.0	8.2	8.2	27.3	27.4	92.8	92.5	6.4		6.1		3			
					Surface	1.0	0.2	184	26.0	20.0	8.2	0.2	27.4	27.4	92.2	92.5	6.4	6.3	6.5		2			
C2	Cloudy	Moderate	05:48	11.1	Middle	5.6	0.2	165	25.8	25.8	8.2	8.2	27.6	27.6	89.6	89.6	6.2	0.0	9.7	8.7	2	2	825687	806951
02	Oloudy	Woderate	00.40		Middle	5.6	0.2	168	25.8	25.0	8.2	0.2	27.6	27.0	89.6	03.0	6.2		9.3	0.7	2	2	023007	000331
					Bottom	10.1	0.3	191	25.8	25.8	8.2	8.2	27.6	27.6	91.4	91.5	6.4	6.4	10.5		3			
					Bottom	10.1	0.3	188	25.8	20.0	8.2	0.2	27.6	27.10	91.6		6.4	0	10.6		2			
					Surface	1.0	0.1	65	26.7	26.7	8.1	8.1	28.6	28.6	110.0	109.8	7.5		0.9		2			
						1.0	0.1	69	26.7		8.1		28.6		109.6		7.5	7.1	1.0		2			
C3	Fine	Calm	04:43	12.2	Middle	6.1	0.1	91	26.1	26.1	8.0	8.0	30.2	30.2	101.1 97.4		6.9 6.6		1.1	1.3	2	3	822126	817792
						6.1 11.2	0.1 0.1	84 90	26.1										1.1		3			
					Bottom	11.2	0.1	86	26.1 26.1	26.1	8.0	8.0	30.3	30.3	97.0 97.4	97.2	6.6 6.6	6.6	1.8		4			
						1.0	0.1	117	26.0		8.2		27.3		95.3	1	6.6		7.2		2			l I
					Surface	1.0	0.1	124	25.9	26.0	8.2	8.2	27.5	27.4	95.1	95.2	6.6		7.5		2			
						3.3	0.1	123	25.5		8.2		28.6		92.4		6.4	6.5	8.7		2			
IM1	Cloudy	Moderate	04:25	6.5	Middle	3.3	0.0	123	25.5	25.5	8.2	8.2	28.7	28.7	91.6	92.0	6.3		8.8	8.3	3	2	818345	806452
					5	5.5	0.1	104	25.4	05.5	8.2		29.0				6.0		9.0		2			
					Bottom	5.5	0.1	107	25.5	25.5	8.2	8.2	28.8	28.9	87.0 87.2	87.1	6.0	6.0	8.9		3			
					Surface	1.0	0.1	207	25.5	25.5	8.2	8.2	27.1	27.1	90.3	00.2	6.3		8.5		4			
					Surface	1.0	0.0	210	25.5	25.5	8.2	8.2	27.2	27.1	90.3	90.3	6.3	6.3	8.7		3			
IM2	Cloudy	Moderate	04:37	6.8	Middle	3.4	0.1	212	25.4	25.5	8.2	8.2	28.9	28.8	89.9	89.9	6.2	0.3	8.8	8.9	3	3	819200	806256
IIVIZ	Cloudy	Wioderate	04.37	0.0	Middle	3.4	0.1	204	25.5	25.5	8.2	0.2	28.8	20.0	89.9	09.9	6.2	•	8.7	0.9	2	3	819200	800230
					Bottom	5.8	0.0	215	25.5	25.5	8.2	8.2	28.2	28.2	90.0	90.0	6.3	6.3	9.3		2			
					Dottom	5.8	0.1	219	25.5	25.5	8.2	0.2	28.2	20.2			6.3	0.5	9.3		2			
					Surface	1.0	0.1	156	26.0	26.0	8.3	8.3	26.6	26.7	88.2 88.0	88.1	6.1	i	8.0		3			
					22.11400	1.0	0.0	154	25.9	_3.0	8.3	5.0	26.8			20.1	6.1	6.1	8.4		2			
IM7	Cloudy	Moderate	05:05	7.6	Middle	3.8	0.1	169	25.8	25.8	8.3	8.3	27.4	27.4	87.4	87.4	6.1		10.4	10.2	2	2	821326	806845
	,					3.8	0.1	162	25.7		8.3		27.5		87.4		6.1		11.1		3			
					Bottom	6.6	0.1	137	25.7	25.7	8.2 8.2	8.2	27.5	27.5	87.5	87.6	6.1	6.1	11.7	-	2			
DA: Dopth Avor						6.6	0.1	143	25.7		8.2		27.5		87.6	<u> </u>	6.1		11.6		2			

DA: Depth-Averaged

Water Quality Monitoring Results on 25 May 23 during Mid-Flood Tide

Trator quar	ty Monte	oring Resu	113 011		25 Way 23	auring Mia-		ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspend (mo	ed Solids g/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	ii (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	144	26.9	26.9	8.0	8.0	25.7	25.7	99.8	99.4	6.9		1.7		4			
					Ourrace	1.0	0.2	149	26.8	20.5	8.0	0.0	25.6	25.7	98.9	33.4	6.8	6.7	1.6		4			
IM10	Fine	Calm	06:00	7.8	Middle	3.9	0.2	114	26.7	26.7	8.0	8.0	28.0	28.0	95.9	96.1	6.5	0.7	2.4	2.4	3	3	822253	809859
114110	1 1110	Odim	00.00	7.0	Wildale	3.9	0.2	114	26.7	20.7	8.0	0.0	28.1	20.0	96.3	00.1	6.6		2.3		2	Ĭ	022200	000000
					Bottom	6.8	0.2	154	26.7	26.7	8.0	8.0	28.1	28.1	97.3	97.5	6.6	6.7	3.2		2			
					Bottom	6.8	0.2	159	26.7	20.7	8.0	0.0	28.1	20.1	97.6	01.0	6.7	0.7	3.2		3			
					Surface	1.0	0.2	106	27.0	27.0	8.1	8.1	26.7	26.8	108.0	107.5	7.4	l	1.4		<2			
						1.0	0.2	113	27.0		8.1		26.9		107.0		7.3	7.2	1.3		<2			
IM11	Fine	Calm	05:52	9.2	Middle	4.6	0.2	94	27.0	27.0	8.0	8.0	27.2	27.3	104.8	102.1	7.1		1.9	1.9	2	2	821519	810560
			*****			4.6	0.2	90	27.0		8.0		27.3		99.4		6.8		1.9		2	_		
					Bottom	8.2	0.2	121	27.1	27.1	8.0	8.0	27.8	27.7	99.0	99.0	6.7	6.7	2.4		2			
						8.2	0.3	120	27.1		8.0		27.7		98.9		6.7		2.4		3			
					Surface	1.0	0.2	84	26.7	26.7	8.1	8.1	26.4	26.4	105.6	104.6	7.3		1.3		<2			
						1.0	0.3	82	26.7		8.1	•	26.4		103.6		7.1	7.0	1.2		<2			
IM12	Fine	Calm	05:48	8.0	Middle	4.0	0.2	99	26.8	26.9	8.0	8.0	28.5	28.5	98.3	98.5	6.7		1.4	1.4	2	3	821162	811539
2		ou	00.10	0.0	.v.idaio	4.0	0.3	100	26.9	20.0	8.0	0.0	28.5	20.0	98.6	00.0	6.7		1.4	1	2		021102	011000
					Bottom	7.0	0.2	112	27.0	27.1	8.0	8.0	28.6	28.5	99.0	99.1	6.7	6.7	1.7		3			
					Bottom	7.0	0.1	116	27.1	27.1	8.0	0.0	28.5	20.0	99.1	55.1	6.7	0.7	1.7		4			
					Surface	1.0	0.0	162	27.0	27.0	8.0	8.0	25.4	25.4	103.4	103.3	7.1		1.0		2			
					Ounace	1.0	0.0	156	27.0	27.0	8.0	0.0	25.4	25.4	103.2	100.0	7.1	7.1	1.0		3			
SR1A	Fine	Calm	05:27	4.8	Middle	2.4	0.0	174	-	_	-	_	-	_	-	_	-	/	-	1.0	-	2	819980	812664
OI(I)(	1 1110	Odim	00.21	4.0	Wildale	2.4	0.0	180	-		-		-		-		-		-	1.0	-		010000	012004
					Bottom	3.8	0.0	148	27.0	27.0	8.0	8.0	25.5	25.4	102.8	102.7	7.1	7.1	1.0		<2			
					Bottom	3.8	0.0	146	27.0	27.0	8.0	0.0	25.4	20.4	102.6	102.7	7.1	7	1.1		<2			
					Surface	1.0	0.2	44	26.8	26.9	8.0	8.0	27.4	27.4	103.9	103.6	7.1		1.2		2			
					Curiaco	1.0	0.3	44	26.9	20.0	8.0	0.0	27.5	27.7	103.3	100.0	7.0	7.1	1.2		3			
SR2	Fine	Calm	05:11	4.6	Middle	-	0.2	49	-	_	-	_	-	_	-	_	-	/	-	1.3	-	3	821484	814148
ONE	1 1110	Odiiii	00.11	4.0	Middle	-	0.2	52	-		-		-		-		-		-	1.0	-	_ ~	021404	014140
					Bottom	3.6	0.2	33	27.3	27.4	8.0	8.0	27.6	27.5	99.2	99.1	6.7	6.7	1.3		2			
					Bottom	3.6	0.2	33	27.4	27.4	8.0	0.0	27.5	27.0	99.0	00.1	6.7	0.7	1.3		4			
					Surface	1.0	0.2	161	26.2	26.2	8.2	8.2	25.8	25.9	85.7	85.7	6.0	l	6.6		<2			
					Carrace	1.0	0.2	163	26.1	20.2	8.2	0.2	25.9	20.0	85.6	00.7	6.0	6.0	6.8		<2			
SR3	Cloudy	Moderate	05:12	8.8	Middle	4.4	0.2	143	25.9	25.9	8.2	8.2	26.7	26.7	85.0	85.1	5.9	0.0	8.4	7.8	2	2	822164	807572
Onto	Cioudy	Moderate	00.12	0.0	Middle	4.4	0.2	147	25.9	20.0	8.2	0.2	26.7	20.7	85.1	00.1	5.9		8.3	7.0	2		022104	00/0/2
					Bottom	7.8	0.3	157	25.9	25.9	8.2	8.2	26.7	26.7	85.0	85.0	5.9	5.9	8.5		3			
					Bottom	7.8	0.2	155	25.9	20.0	8.2	0.2	26.7	20.1	85.0	00.0	5.9	0.0	8.4		3			
					Surface	1.0	0.0	107	25.9	25.9	8.1	8.1	27.5	27.5	90.7	90.7	6.3		6.1		3			
					Guildoo	1.0	0.0	111	25.9	20.0	8.1	0.1	27.5	27.0	90.6	55.7	6.3	6.3	6.2	1	3	]		
SR4A	Cloudy	Moderate	03:33	8.8	Middle	4.4	0.0	104	25.8	25.8	8.1	8.1	27.8	27.8	89.3	89.3	6.2	0.0	7.7	7.7	3	3	817202	807810
011471	Jioudy	.nodorate	00.00	0.0	Middle	4.4	0.1	110	25.8	20.0	8.1	0.1	27.8	27.0	89.3	00.0	6.2		7.7	] '''	3	Ĭ	017202	007010
					Bottom	7.8	0.0	98	25.8	25.8	8.1	8.1	27.9	27.9	88.1	88.1	6.1	6.1	9.2	1	3	]		
					Dottom	7.8	0.0	100	25.8	20.0	8.1	0.1	27.9	27.0	88.1	00.1	6.1	0.1	9.5		2	<u> </u>		
					Surface	1.0	-	-	27.2	27.2	8.0	8.0	26.8	26.9	97.6	97.6	6.6		1.2		2			
					Oundoo	1.0	-	-	27.2	21.2	8.0	0.0	27.0	20.0	97.6	07.0	6.6	6.6	1.2	]	3	]		
SR8	Fine	Calm	05:42	4.2	Middle	-	-	-	-	_	-	] _ [	-		-	] _ [	-	0.0	-	2.0	-	3	820389	811629
0.10	1 1110	Juin	00.4Z	7.2	Middle	-	-	-	-		-		-		-		-		-		-	Ĭ	020000	011020
					Bottom	3.2	-	-	27.3	27.4	8.0	8.0	27.8	27.8	98.2	98.4	6.6	6.7	2.9	]	4	]		
					Dottom	3.2	-	-	27.4	21.7	8.0	0.0	27.8	27.0	98.5	55.7	6.7	0.7	2.9		4			

Water Quality Monitoring Results on 27 May 23 during Mid-Ebb Tide

water Quar				144.4	ZI Way 23	during wild-	Current		144 · -	(0-)		-11	0-11-	21 - ( 1)	DO S	aturation	Disso	olved	To add Called	/AITLI\	Suspende	ed Solids	0	0
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Speed	Current	Water 16	emperature (°C)	F	рН	Saiin	ity (ppt)		(%)	Оху	gen	Turbidity	(NTU)	· (mg	/L)	Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Gampling Dept	()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.4	212	28.6	28.6	8.2	8.2	24.5	24.5	152.0	151.2	10.3		3.3		2			
					Surface	1.0	0.5	207	28.6	20.0	8.3	0.2	24.5	24.5	150.3	131.2	10.2	8.9	3.3		2			
C1	Sunny	Moderate	18:10	8.2	Middle	4.1	0.4	224	26.1	26.1	8.1	8.1	29.0	29.1	111.3	109.3	7.7	0.3	3.0	5.1	3	3	815643	804240
O1	Outliny	Woderate	10.10	0.2	Middle	4.1	0.4	221	26.0	20.1	8.1	0.1	29.1	20.1	107.2	100.0	7.4		3.0	0.1	2		010040	004240
					Bottom	7.2	0.4	203	26.0	26.0	8.1	8.1	29.2	29.2	100.4	101.2	6.9	7.0	9.0	1	3			
						7.2	0.4	204	26.0		8.1		29.1		102.0		7.0		8.9		3			
					Surface	1.0	0.4	170	28.3	28.3	8.1	8.1	21.6	21.6	141.1	137.9	9.8		3.4	_	4			
						1.0	0.4	162	28.2		8.1		21.6		134.7		9.3	8.6	3.4	1	4			
C2	Sunny	Moderate	16:42	11.7	Middle	5.9	0.3	178	27.0	27.0	7.9 7.9	7.9	25.2	25.2	109.7	109.8	7.6		3.2	3.3	4	4	825660	806943
						5.9	0.3	176	27.0				25.2		109.9		7.6		3.2	4	4			
					Bottom	10.7 10.7	0.4 0.4	195 198	26.9 26.9	26.9	7.9	7.9	25.9 25.9	25.9	120.5 123.6	122.1	8.3 8.5	8.4	3.2	4	5			
-						1.0	0.4	81	26.9		8.1		27.5		135.9		9.4		1.1		2			
					Surface	1.0	0.3	82	26.0	26.0	8.1	8.1	27.6	27.5	131.9	133.9	9.2		1.1	1	3			
						5.4	0.3	63	25.9		7.9		27.6		126.4		8.8	9.1	1.3	1	3			
C3	Fine	Calm	17:53	10.8	Middle	5.4	0.4	67	25.9	25.9	7.9	7.9	27.6	27.6	126.3	126.4	8.8		1.2	1.3	2	3	822086	817817
					_	9.8	0.3	90	25.9		7.9		27.7		125.6		8.7		1.5	1	3			
					Bottom	9.8	0.3	90	25.9	25.9	7.9	7.9	27.7	27.7	125.3	125.5	8.7	8.7	1.5	1	3			
					2 (	1.0	0.2	176	27.1		8.2		26.1	00.4	145.4	4.45.0	10.0		4.1		2			
					Surface	1.0	0.2	176	27.1	27.1	8.2	8.2	26.2	26.1	144.9	145.2	10.0	9.8	4.2	1	3			
IM1	Sunny	Moderate	17:49	6.9	Middle	3.5	0.3	190	26.7	26.7	8.2	8.2	26.7	26.7	138.3	138.1	9.5	9.8	4.7	5.3	3	3	818343	806451
IIVII	Suriny	Moderate	17.49	6.9	Middle	3.5	0.3	197	26.7	20.7	8.2	0.2	26.7	20.7	137.8	130.1	9.5		5.2	5.5	2	3	010343	606451
					Bottom	5.9	0.3	198	26.1	26.1	8.1	8.1	28.8	28.8	101.6	101.8	7.0	7.0	6.6		3			
					Bottom	5.9	0.3	196	26.1	20.1	8.1	0.1	28.8	20.0	102.0	101.0	7.0	7.0	6.7		2			
					Surface	1.0	0.4	198	28.2	28.2	8.3	8.3	24.8	24.9	153.4	153.3	10.4		3.2		2			
					Canado	1.0	0.4	196	28.1	20.2	8.3	0.0	24.9	20	153.2	100.0	10.4	9.3	3.3	_	2			
IM2	Sunny	Moderate	17:45	7.5	Middle	3.8	0.4	192	26.3	26.3	8.3	8.3	28.2	28.3	118.7	118.1	8.2	0.0	4.1	3.7	3	3	819177	806217
						3.8	0.4	189	26.2		8.3		28.4		117.4		8.1		4.0	1	2	_		
					Bottom	6.5	0.3	181	26.1	26.1	8.1	8.1	28.9	28.9	99.1	100.2	6.8	6.9	3.9	_	4			
						6.5	0.2	187	26.1		8.1		28.9		101.2		7.0		3.8	ļ	3			
					Surface	1.0	0.3	174	28.1	28.1	8.0	8.0	22.4	22.4	129.5	129.2	8.9		3.7	4	3			
						1.0	0.3	169	28.1		8.0		22.4		128.8		8.9	8.0	3.8	-	3			
IM7	Sunny	Moderate	17:11	8.4	Middle	4.2 4.2	0.2	172 172	26.5 26.5	26.5	8.0	8.0	27.5	27.5	103.0	103.1	7.1		5.9	5.5	3	3	821339	806814
					<u> </u>	7.4	0.2	172 164	26.5		8.0		27.6		103.1		7.1 7.2		6.0	1	3			
					Bottom	7.4	0.2	164	26.5	26.5	8.0	8.0	27.6	27.6	104.6	104.8	7.2	7.2	6.9	1	4			
			l	l .	1	1.4	0.3	104	∠0.5		ö.U		21.0		104.9		1.2		ზ.9	1	4			

DA: Depth-Averaged

Water Quality Monitoring Results on 27 May 23 during Mid-Ebb Tide

	,	orning ixesu			Zr May 20	auring ima		•	,															_
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ın (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
	Ì				0 /	1.0	0.3	96	26.8		8.0		24.7		123.0	400.0	8.6		1.1		2			
					Surface	1.0	0.4	92	26.8	26.8	8.0	8.0	24.7	24.7	122.5	122.8	8.5		1.1	1	4			
						4.5	0.3	96	26.8		8.0		24.7		122.1		8.5	8.5	1.2	1	2	_		
IM10	Fine	Calm	16:42	9.0	Middle	4.5	0.3	100	26.8	26.8	8.0	8.0	24.7	24.7	122.0	122.1	8.5		1.2	1.4	2	2	822251	809842
						8.0	0.4	116	27.0		8.0		24.4		123.5		8.6		1.9	1	2			
					Bottom	8.0	0.4	116	27.0	27.0	8.0	8.0	24.4	24.4	123.5	123.5	8.6	8.6	1.9	1	2			
						1.0	0.4	97	26.9		8.1		24.3		129.2		9.0		1.2		3			
					Surface	1.0	0.5	96	26.9	26.9	8.1	8.1	24.3	24.3	129.2	129.2	9.0		1.2	1	2			
		0.1	40.50			3.7	0.4	78	26.8	22.2	8.1		24.4	04.5	127.1	400 =	8.9	8.8	1.4	1	3			040505
IM11	Fine	Calm	16:58	7.4	Middle	3.7	0.4	77	26.7	26.8	8.1	8.1	24.6	24.5	120.2	123.7	8.4		1.5	1.5	2	3	821494	810525
						6.4	0.5	101	26.7		7.9		24.6		116.3		8.1		1.9	1	3			
					Bottom	6.4	0.4	106	26.6	26.7	7.9	7.9	24.6	24.6	111.1	113.7	7.8	8.0	2.0	1	2			
						1.0	0.5	114	27.1		8.0		24.3		118.9		8.3		1.3		3			
					Surface	1.0	0.5	119	27.1	27.1	8.0	8.0	24.4	24.3	117.5	118.2	8.2		1.3	1	3			
						3.5	0.5	119	27.3		8.0		24.5		109.2		7.5	7.9	1.7	1	3			
IM12	Fine	Calm	17:03	7.0	Middle	3.5	0.5	121	27.4	27.4	8.0	8.0	24.6	24.6	108.7	109.0	7.5		1.7	1.7	2	3	821139	811502
						6.0	0.5	108	27.6		8.0		24.6		108.3		7.4		2.1	1	2			
					Bottom	6.0	0.5	114	27.7	27.7	8.0	8.0	24.5	24.5	108.3	108.3	7.4	7.4	2.0	1	2			
						1.0	0.0	112	27.2		8.0		24.0		129.9		9.0		2.1		4			
					Surface	1.0	0.1	116	27.2	27.2	8.0	8.0	24.0	24.0	129.7	129.8	9.0		2.1	1	5			
						2.6	0.0	101	-		-		-		-		-	9.0	-	1	-			
SR1A	Fine	Calm	17:16	5.2	Middle	2.6	0.1	105	-	-	_	-	_	-	_	-	-		-	2.5	-	4	819980	812657
					_	4.2	0.0	95	27.2		8.0		24.0		130.0		9.0		2.9	1	3			
					Bottom	4.2	0.0	95	27.2	27.2	8.0	8.0	24.0	24.0	130.4	130.2	9.1	9.1	2.9	1	4			
						1.0	0.4	44	27.8		8.2	i -	23.4		154.1		10.6		1.2		2			
					Surface	1.0	0.5	50	27.7	27.8	8.2	8.2	23.6	23.5	153.2	153.7	10.6		1.2	1	3			
						-	0.4	35	-		-		-		-		-	10.6	-	1	-	_		
SR2	Fine	Calm	17:33	4.4	Middle	-	0.5	34	-	-	_	-	_	-	_	-	-		-	1.3	-	3	821462	814163
					_	3.4	0.4	22	27.4		8.2		24.2		141.1		9.8		1.3	1	3			
					Bottom	3.4	0.5	19	27.4	27.4	8.2	8.2	24.2	24.2	137.6	139.4	9.5	9.7	1.3	1	4			
						1.0	0.4	168	27.4		8.0		24.0		121.1		8.4		3.4		3			
					Surface	1.0	0.5	173	27.4	27.4	8.0	8.0	24.0	24.0	121.1	121.1	8.4		3.4	1	4			
	_					4.6	0.5	183	26.8		8.0		26.5		108.1		7.5	7.9	6.2	1	4			
SR3	Sunny	Moderate	17:05	9.1	Middle	4.6	0.5	185	26.8	26.8	8.0	8.0	26.6	26.5	104.2	106.2	7.2		6.4	5.5	4	4	822140	807552
					_	8.1	0.4	141	26.7		8.0		26.7		104.7		7.2		6.9	1	4			
					Bottom	8.1	0.5	140	26.7	26.7	8.0	8.0	26.7	26.7	105.0	104.9	7.2	7.2	6.8	1	4			
						1.0	0.1	335	27.8		8.2		26.1		132.4		9.0		4.0		4			
					Surface	1.0	0.1	334	27.8	27.8	8.2	8.2	26.2	26.2	131.1	131.8	8.9		4.2	1	3			
	_					4.7	0.0	332	26.3		8.1		28.1		103.7		7.1	8.0	5.2	1	3			
SR4A	Sunny	Moderate	18:39	9.3	Middle	4.7	0.0	330	26.3	26.3	8.1	8.1	28.1	28.1	103.7	103.7	7.1		5.2	4.8	3	3	817169	807830
					_	8.3	0.0	0	26.3		8.1		28.1		106.5		7.3		5.2	1	2			
					Bottom	8.3	0.0	2	26.3	26.3	8.1	8.1	28.1	28.1	107.2	106.9	7.4	7.4	5.1	1	2			
					2.1	1.0	-		26.9		8.0		24.0		110.6	440 :	7.7		1.1		2			
					Surface	1.0	-	_	26.9	26.9	8.0	8.0	24.1	24.1	110.2	110.4	7.7		1.2	1	3			
000			47.05			-	-	_	-		-		-		-		-	7.7	-	1	-			
SR8	Fine	Calm	17:07	4.0	Middle	-	-	-	-	-	-	1 -	-	· -	-	† -	-		-	1.9	-	3	820410	811620
					5	3.0	-	_	26.9		8.0		24.2	24.5	109.4	400.5	7.6		2.7	1	2			
					Bottom	3.0	-	_	26.8	26.9	8.0	8.0	24.2	24.2	107.8	108.6	7.5	7.6	2.6	1	4			
				I.	l .							_												I.

Water Quality Monitoring Results on 27 May 23 during Mid-Flood Tide

Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	uth (m)	Current Speed	Current	Water T	emperature (°C)		рН	Salir	nity (ppt)	DO S	Saturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Camping Dep	, (iii)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.0	93	27.2	27.3	8.1	8.1	25.9	25.9	132.3	132.1	9.1		5.0		2			
					Odriace	1.0	0.0	92	27.3	27.5	8.1	0.1	25.9	20.0	131.8	3	9.0	7.9	5.1		3			
C1	Fine	Moderate	05:46	8.4	Middle	4.2	0.0	93	26.0	26.0	8.0	8.0	28.8	28.8	97.8	97.9	6.8	7.5	7.8	7.1	2	3	815635	804248
01	1 1110	Woderate	05.40	0.4	Wildale	4.2	0.0	87	26.0	20.0	8.0	0.0	28.8	20.0	98.0		6.8		7.8	J '.'	2	3	013033	004240
					Bottom	7.4	0.0	62	25.8	25.8	8.0	8.0	29.4	29.4	94.9 95.1	95.0	6.5	6.6	8.5		3			
					Bottom	7.4	0.1	67	25.8	20.0	8.0	0.0	29.4	20.4			6.6	0.0	8.1		3			
					Surface	1.0	0.2	156	28.5	28.5	8.1	8.1	21.4	21.4	143.5 143.1	143.3	9.9		3.3		4			
					Curiaco	1.0	0.2	150	28.5	20.0	8.1	0.1	21.4	21.7			9.9	8.7	3.3		5			
C2	Fine	Moderate	07:10	11.4	Middle	5.7	0.2	160	27.0	27.0	8.0	8.0	25.7	25.7	107.8		7.4	0.7	3.2	3.3	4	4	825680	806929
02	1 1110	Woderate	07.10	11	Iviidale	5.7	0.2	161	27.0	27.0	8.0	0.0	25.7	20.7	107.9	9	7.4		3.3	0.0	3	-	020000	000020
					Bottom	10.4	0.2	155	27.0	27.0	8.0	8.0	25.8	25.8	109.8	110.3	7.6	7.6	3.3		4			
					20110111	10.4	0.2	154	27.0	27.0	8.0	0.0	25.8	20.0			7.6		3.5		3			
					Surface	1.0	0.1	19	27.0	27.0	8.1	8.1	28.6	28.6	110.0	109.8	7.5		1.0	_	3			
						1.0	0.1	25	27.0		8.1		28.6		_		7.5	7.1	0.9	_	3			
C3	Fine	Calm	06:23	12.2	Middle	6.1	0.0	5	26.4	26.4	8.0	8.0	28.2	28.2	101.1	99.3	6.9		1.1	1.3	3	4	822097	817813
						6.1	0.0	6	26.4		8.0		28.2		97.4		6.6		1.1	_	4			
					Bottom	11.2	0.0	17	26.4	26.4	8.0	8.0	28.3	28.3	97.0 97.4	97.2	6.6	6.6	1.9	_	4			
						11.2	0.1	20	26.4		8.0		28.3				6.6		1.8	1	4			
					Surface	1.0	0.1	150	27.4	27.4	8.1	8.1	25.4 25.3	25.4	135.7 136.0	135.9	9.3		4.3	_	3			
						1.0 3.2	0.1	146 146	27.4		8.1						9.3	8.1	4.8	4	4			
IM1	Fine	Moderate	06:08	6.4	Middle	3.2	0.1	146	26.0 26.0	26.0	8.0	8.0	28.9	28.9	99.2 98.5	98.9	6.8		6.1 6.3	6.1	<u>3</u>	3	818328	806443
						5.4	0.1	131	26.0		8.0		28.9				7.1		7.8	-	2			
					Bottom	5.4	0.1	137	26.0	26.0	8.0	8.0	28.9	28.9	103.2	103.6	7.1	7.2	7.1	-	2			
						1.0	0.0	186	27.4		8.1		25.4		133.5	:	9.2		4.6		2			
					Surface	1.0	0.0	179	27.3	27.4	8.0	8.0	25.4	25.4	131.1	132.3	9.0		4.7	-	2			
						3.7	0.1	191	26.0		8.0		28.8		100.8	,	7.0	8.1	7.9	-	2			
IM2	Fine	Moderate	06:12	7.4	Middle	3.7	0.1	185	26.0	26.0	8.0	8.0	28.9	28.9	101.2		7.0		7.8	6.9	2	2	819165	806243
					_	6.4	0.1	168	26.0		8.0		28.9				7.2		8.0	1	2			
					Bottom	6.4	0.1	171	26.0	26.0	8.0	8.0	28.9	28.9	104.0	104.5	7.2	7.2	8.1		3			
					0.7	1.0	0.0	116	27.9		8.1		22.5				8.6		5.6	i i	4			
					Surface	1.0	0.1	110	28.0	28.0	8.1	8.1	22.3	22.4	123.6	123.4	8.5		5.9	1	3			
18.47	- Fina	Madausto	00.40	0.5	Middle	4.3	0.0	132	26.6	20.0	8.1	0.4	27.0	07.4	106.7	100.1	7.4	8.0	8.7	0.4	2	2	004000	000044
IM7	Fine	Moderate	06:43	8.5	Middle	4.3	0.1	137	26.6	26.6	8.1	8.1	27.1	27.1	105.5	106.1	7.3		8.9	8.1	3	3	821360	806844
					Rottom	7.5	0.1	116	26.6	26.6	8.1	8.1	27.3	27.3	103.8	104.0	7.2	7.2	9.7	1	2			
					Bottom	7.5	0.1	112	26.6	20.0	8.1	0.1	27.3	21.3	103.8	2 104.0	7.2	1.2	9.9	1	3			

DA: Depth-Averaged

Water Quality Monitoring Results on 27 May 23 during Mid-Flood Tide

Water Quui		g			Zi May 20	during ima													,					
Monitoring	Weather	Sea	Sampling	Water	Compline Deat	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salini	ty (ppt)	DO S	aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	11 (111)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	HK Grid (Easting)
					Confess	1.0	0.1	127	27.2	27.2	8.0	0.0	24.3	24.2	123.7	400.0	8.6		1.0		3			
					Surface	1.0	0.1	123	27.3	27.3	8.0	8.0	24.3	24.3	122.0	122.9	8.4	0.0	1.0		2			
13.440	<b>-</b> 1	0-1	07.40	7.0	B AC J JII -	3.9	0.2	147	27.4	07.4	8.0	0.0	24.3	04.0	117.2	447.4	8.1	8.3	1.6	4.5	3		000045	000045
IM10	Fine	Calm	07:40	7.8	Middle	3.9	0.2	149	27.4	27.4	8.0	8.0	24.3	24.3	116.9	117.1	8.1		1.7	1.5	4	3	822245	809815
						6.8	0.1	133	27.6		8.0		24.2		115.9		8.0		1.8		3			
					Bottom	6.8	0.1	134	27.6	27.6	8.0	8.0	24.1	24.2	115.2	115.6	7.9	8.0	2.0		4			
						1.0	0.2	108	27.3		7.9		23.3		117.8		8.2		1.3		2			
					Surface	1.0	0.2	107	27.2	27.3	7.9	7.9	23.3	23.3	116.7	117.3	8.1		1.3		3			
						4.5	0.2	84	27.1		7.9		23.5		114.9		8.0	8.1	1.7	1	2	_		
IM11	Fine	Calm	07:32	9.0	Middle	4.5	0.2	87	27.0	27.1	7.9	7.9	23.7	23.6	112.3	113.6	7.9		1.8	1.6	3	3	821505	810565
						8.0	0.2	97	26.8		7.9		24.4		106.7		7.4		1.8		4			
					Bottom	8.0	0.2	102	26.8	26.8	7.9	7.9	24.3	24.4	106.2	106.5	7.4	7.4	1.9		3			
						1.0	0.2	91	27.0		8.0	<u> </u>	23.6		119.4		8.3		1.1		3			
					Surface	1.0	0.2	85	27.0	27.0	7.9	7.9	23.7	23.7	117.6	118.5	8.2		1.1		2			
						4.1	0.2	67	26.9		7.9		24.0		112.6		7.8	8.0	1.3		3			
IM12	Fine	Calm	07:28	8.2	Middle	4.1	0.1	63	26.9	26.9	7.9	7.9	24.2	24.1	109.7	111.2	7.6		1.3	1.8	2	3	821142	811518
						7.2	0.1	60	27.0		7.9		24.2		108.6		7.6		3.0		3			
					Bottom	7.2	0.2	65	27.0	27.0	7.9	7.9	24.3	24.3	108.3	108.5	7.5	7.6	3.0		4			
					1	1.0	0.2	172	27.3		8.0	1	24.2		115.0		9.1		1.0		2			
					Surface	1.0	0.0	167	27.3	27.3	8.0	8.0	25.3	24.8	115.0	115.1	8.7		1.1		2			
											- 0.0		23.3				-	8.9	- 1.1		-			
SR1A	Fine	Calm	07:07	4.8	Middle	2.4	0.1 0.1	139 136	-	-	-	-	-	-	-	-	-			1.3	-	2	819978	812665
												-							-					
					Bottom	3.8	0.0	155	27.2	27.2	8.0	8.0	23.5	22.7	111.0	109.0	7.7	7.8	1.4		2			
						3.8	0.1	160	27.2		8.0	1	21.9		106.9		7.8		1.5		3			
					Surface	1.0	0.1	53	27.1	27.2	8.0	8.0	27.4	27.4	103.9	103.6	7.1		1.2		2			
						1.0	0.1	56	27.2		8.0		27.5		103.3		7.0	7.1	1.1		3			
SR2	Fine	Calm	06:52	5.0	Middle	-	0.2	44	-	-	_	-	-	-	-	-	-		-	1.2	-	3	821460	814142
						-	0.3	51	-		-		-		-		-		-		-			
					Bottom	4.0	0.1	59	27.6	27.7	8.0	8.0	27.6	27.5	99.2	99.1	6.7	6.7	1.2		2			
						4.0	0.2	51	27.7		8.0		27.5		99.0		6.7		1.2		3			
					Surface	1.0	0.2	151	27.1	27.1	8.0	8.0	24.0	24.0	117.4	117.3	8.2		3.8		3			
						1.0	0.2	156	27.1		8.0		24.0		117.2		8.2	7.8	4.0		2			
SR3	Fine	Moderate	06:50	9.2	Middle	4.6	0.2	129	26.8	26.8	8.0	8.0	26.5	26.5	107.7	107.7	7.4		5.9	5.4	4	3	822144	807555
						4.6	0.1	129	26.8		8.0		26.6		107.6		7.4		6.1		3			
					Bottom	8.2	0.2	157	26.8	26.8	8.0	8.0	26.5	26.5	109.5	109.7	7.6	7.6	6.3		3			
						8.2	0.2	154	26.8		8.0		26.5		109.9		7.6		6.4		4			
					Surface	1.0	0.0	126	27.3	27.3	8.0	8.0	25.2	25.2	125.8	125.4	8.7		3.7	1	4			
						1.0	0.0	125	27.2		8.0		25.2		125.0		8.6	7.7	3.7	1	3			
SR4A	Fine	Moderate	05:17	8.6	Middle	4.3	0.0	138	26.6	26.6	8.1	8.1	27.3	27.3	98.6	98.5	6.8		4.1	4.2	4	3	817193	807790
011-71	1 1110	Moderate	00.17	0.0	Middle	4.3	0.0	133	26.6	20.0	8.1	0.1	27.3	27.0	98.4	55.5	6.8		4.1	7.2	3	J	017100	001100
					Bottom	7.6	0.0	119	26.5	26.5	8.0	8.0	27.4	27.4	97.8	97.8	6.7	6.7	4.7		2			
					Dottom	7.6	0.0	118	26.5	20.0	8.0	0.0	27.4	£1.¬	97.8	07.0	6.7	0.7	4.6		3			
					Surface	1.0	-	-	27.8	27.8	7.9	7.9	23.0	23.0	116.0	115.6	8.0		1.3		3			
					Guilade	1.0	-	-	27.8	27.0	8.0	1.0	23.0	20.0	115.1	110.0	8.0	8.0	1.2		3			
SR8	Fine	Calm	07:23	4.0	Middle	-	-	-	-	_	-		-		-		-	0.0	-	1.3	-	3	820405	811631
SINO	1 1116	Callii	07.23	4.0	Milatie	-	-	-	-		-		-		-	<u> </u>	-		-	1.5	-	J	020403	011031
					Bottom	3.0	-	-	27.9	28.0	8.0	7.9	23.1	22.8	111.0	109.7	7.7	7.6	1.4		3			
			<u> </u>		DULLUITI	3.0	-	-	28.0	20.0	7.9	1.9	22.5	22.0	108.4	109.7	7.5	7.0	1.5	<u> </u>	3			
					_				_		_			_	_			_		_				

DA: Depth-Averaged

Water Quality Monitoring Results on 30 May 23 during Mid-Ebb Tide

Water Quar	ity wont	oring Resu	iits oii		30 May 23	auring Mia-		;																
Monitoring	Weather	Sea	Sampling	Water	Sampling Depti	h (m)	Current Speed	Current	Water Te	emperature (°C)	рН	1	Salin	ity (ppt)	DO S	aturation (%)	Disso Oxy		Turbidity	/(NTU)	Suspende (mg		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Depti	n (m)	(m/s)	Direction	Value	Average	Value A	verage	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Cuntana	1.0	0.3	222	27.5	27.5	8.4	0.4	25.3	25.3	101.5	101.4	7.0		3.4		<2			
					Surface	1.0	0.3	218	27.5	27.5	8.4	8.4	25.2	25.3	101.2	101.4	6.9		3.4		<2			
C1	Cuppy	Moderate	10:00	8.0	Middle	4.0	0.3	189	26.3	26.3	8.4	8.4	29.3	29.3	81.2	81.2	5.6	6.3	4.2	5.4	<2	<2	815631	804260
CI	Sunny	Moderate	10:00	8.0	ivildale	4.0	0.2	188	26.3	20.3	8.4	8.4	29.3	29.3	81.2	81.2	5.6		4.1	5.4	<2	<2	815631	804260
					Bottom	7.0	0.3	219	26.4	26.4	8.4	8.4	29.3	29.3	81.5	81.6	5.6	5.6	8.8		<2			
					DOLLOITI	7.0	0.3	225	26.4	20.4	8.4	0.4	29.3	29.3	81.7	01.0	5.6	5.6	8.8		<2			
					Surface	1.0	0.5	179	28.7	28.7	8.5	8.5	15.8	15.8	129.8	129.3	9.2		3.6		2			
					Sulface	1.0	0.5	177	28.7	20.7	8.5	0.5	15.8	13.0	128.8	129.3	9.1	7.5	3.5		2			
C2	Sunny	Moderate	11:32	12.3	Middle	6.2	0.5	182	26.8	26.8	8.2	8.2	26.5	26.5	84.2	84.2	5.8	7.5	4.3	4.0	3	3	825692	806938
02	Suring	Moderate	11.32	12.3	Middle	6.2	0.4	179	26.8	20.0	8.2	0.2	26.6	20.5	84.1	04.2	5.8		4.2	4.0	3	3	023092	000930
					Bottom	11.3	0.5	154	26.7	26.7	8.2	8.2	27.0	27.0	78.2	78.4	5.4	5.4	4.1		3			
					Bottom	11.3	0.5	156	26.7	20.7	8.2	0.2	27.0	27.0	78.6	70.4	5.4	5.4	4.2		3			
					Surface	1.0	0.3	80	26.8	26.8	8.1	8.1	25.9	25.9	96.1	94.6	6.5		1.3		4			
					Carrace	1.0	0.3	72	26.8	20.0	8.1	0.1	25.9	20.0	93.0	04.0	6.3	6.3	1.2		4			
СЗ	Misty	Calm	09:55	12.0	Middle	6.0	0.3	62	26.8	26.8	8.1	8.1	26.0	26.0	92.4 92.4	92.4	6.2	0.0	1.3	1.3	4	4	822115	817779
00	wildty	Odim	00.00	12.0	Iviidale	6.0	0.3	69	26.8	20.0	8.1	0.1	26.0	20.0		0 <b>∠</b> .⊣	6.2		1.3	1.0	4	-	022110	011110
					Bottom	11.0	0.3	83	26.8	26.8	8.1	8.1	26.0	26.0	92.7	92.9	6.2	6.3	1.4		4			
					Bottom	11.0	0.4	84	26.8	20.0	8.0	0.1	25.9	20.0	93.1	02.0	6.3	0.0	1.3		4			
					Surface	1.0	0.2	180	28.2	28.2	8.4	8.4	23.4	23.2	109.4 108.2	108.8	7.5		4.9		<2			
						1.0	0.2	181	28.2	20.2	8.4	0	23.0			100.0	7.4	6.5	5.2		<2			
IM1	Sunny	Moderate	10:21	6.2	Middle	3.1	0.3	199	26.4	26.4	8.3	8.3	28.8	28.8	80.6 80.7	80.7	5.5		6.8	6.1	<2	<2	818369	806473
						3.1	0.3	204	26.3	-	8.3		28.9				5.5		6.7	_	<2			
					Bottom	5.2	0.2	196	26.3	26.3	8.3	8.3	29.2	29.2	80.2	80.3	5.5	5.5	6.4		<2			
						5.2	0.3	191	26.3		8.3		29.2		80.3		5.5		6.5		<2			
					Surface	1.0	0.3	189	29.4	29.4	8.6	8.6	16.4	16.3	134.7	134.4	9.4		2.8		3			
						1.0	0.4	184	29.4		8.6		16.2		134.1	-	9.4	7.3	2.8		3			
IM2	Sunny	Moderate	10:27	6.8	Middle	3.4	0.2	189	26.3	26.3	8.4	8.4	29.1	29.1	74.6 74.6	74.6	5.1		7.2	5.1	3	3	819171	806242
	Í					3.4	0.2	191	26.3		8.4		29.1				5.1		7.0		2			
					Bottom	5.8	0.3	215	26.2	26.2	8.3	8.3	29.5	29.5	75.9	76.0	5.2	5.2	5.4		2			
						5.8	0.3	211	26.2		8.3		29.5		76.1		5.2		5.6	ļ	3			
					Surface	1.0	0.2	206	29.5	29.5	9.0	9.0	14.5	14.5	132.5	132.0	9.3		3.3	4	2			
						1.0	0.3	213	29.5		9.0		14.5		131.4		9.3	8.3	3.4	4	3			
IM7	Sunny	Moderate	11:03	7.7	Middle	3.9	0.2	197	27.5	27.5	8.8	8.8	21.0	20.9	107.0	103.7	7.5 7.1		4.1	5.3	2	2	821367	806829
						3.9	0.2	192	27.5		8.8		20.9		100.4				4.3	4	3			
					Bottom	6.7	0.2	210	26.9	26.9	8.8	8.8	26.5	26.5	78.5	78.5	5.4	5.4	8.2	4	2			
DA: Donth Aver					1	6.7	0.3	202	26.8		8.8		26.6		78.5		5.4		8.3		2			

DA: Depth-Averaged

Water Quality Monitoring Results on 30 May 23 during Mid-Ebb Tide

Water Quar	ity morni	orning recou	1110 011		30 Way 23	during wid-																		
Monitoring	Weather	Sea	Sampling	Water	0 " -		Current Speed	Current	Water Te	emperature (°C)		рН	Salin	ity (ppt)		aturation %)	Disso Oxy		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		Average	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)
			1			1.0	0.3	124	27.3		8.1		24.1		101.0		6.8		2.6		3			
					Surface	1.0	0.4	117	27.3	27.3	8.1	8.1	24.1	24.1	99.6	100.3	6.7		2.6	1	2			
						4.1	0.3	113	27.3		8.1		24.2		94.8		6.4	6.6	4.5	1	3			
IM10	Misty	Calm	11:10	8.2	Middle	4.1	0.3	117	27.3	27.3	8.1	8.1	24.3	24.2	94.7	94.8	6.4		4.5	4.4	2	2	822231	809821
						7.2	0.3	133	27.3		8.1		24.2		95.7		6.5		6.2	1	2			
					Bottom	7.2	0.3	137	27.3	27.3	8.1	8.1	24.2	24.2	96.2	96.0	6.5	6.5	6.2	1	2			
						1.0	0.4	112	27.3		8.1		24.1		100.3		6.8		1.4		3			
					Surface	1.0	0.3	110	27.3	27.3	8.1	8.1	24.2	24.1	100.3	100.3	6.8		1.4	1	2			
						4.0	0.4	88	27.2		8.1		24.2		100.3		6.8	6.8	5.4	1	3	_		
IM11	Misty	Calm	11:01	8.0	Middle	4.0	0.5	94	27.2	27.2	8.0	8.0	24.2	24.2	100.4	100.4	6.8		5.3	4.4	4	3	821508	810542
					_	7.0	0.4	110	26.9		7.9		24.4		101.2		6.9		6.3	1	3			
					Bottom	7.0	0.4	104	26.8	26.9	8.1	8.0	24.4	24.4	101.5	101.4	6.9	6.9	6.3	1	4			
						1.0	0.4	89	27.3		8.1		23.8		110.5		7.5		1.2		3			
					Surface	1.0	0.4	93	27.2	27.3	8.1	8.1	23.8	23.8	110.3	110.4	7.5		1.2	1	2			
						3.8	0.4	96	27.2		8.1		23.9		99.7		6.7	7.1	5.7	1	2			
IM12	Misty	Calm	10:54	7.6	Middle	3.8	0.4	97	27.2	27.2	8.1	8.1	24.0	24.0	99.4	99.6	6.7		5.6	4.5	3	3	821159	811513
						6.6	0.4	122	27.2		8.1		24.0		100.4		6.8		6.6	1	4			
					Bottom	6.6	0.4	120	27.2	27.2	8.1	8.1	23.9	24.0	101.7	101.1	6.9	6.9	6.7	1	3			
			1	1		1.0	0.0	125	27.2		8.1		23.7		105.9		7.2		1.3	l	4			
					Surface	1.0	0.0	119	27.2	27.2	8.1	8.1	23.7	23.7	105.7	105.8	7.2		1.2	1	3			
						2.3	0.0	153	-		-		-		-		-	7.2	-	1	-			
SR1A	Misty	Calm	10:36	4.6	Middle	2.3	0.0	153	_	-	_	-	_	-	_	-	-		-	1.3	_	4	819972	812664
						3.6	0.0	128	27.2		8.1		23.8		105.6		7.1		1.3	1	3			
					Bottom	3.6	0.0	126	27.2	27.2	8.1	8.1	23.8	23.8	105.5	105.6	7.1	7.1	1.3	1	4			
						1.0	0.4	53	27.2		8.1		23.8		110.1		7.5		1.4		3			
					Surface	1.0	0.4	54	27.2	27.2	8.1	8.1	23.8	23.8	109.9	110.0	7.4		1.4		4			
						-	0.4	60	-		-		-		-		-	7.5	-	1				
SR2	Misty	Calm	10:15	5.2	Middle	-	0.4	64	-	-	_	-	_	-	_	-	_		-	1.5	-	4	821447	814162
						4.2	0.4	27	27.2		8.1		23.9		110.2		7.5		1.6	1	3			
					Bottom	4.2	0.4	31	27.2	27.2	8.1	8.1	23.8	23.9	110.4	110.3	7.5	7.5	1.5	1	4			
			1			1.0	0.4	166	29.1		8.6		14.9		151.8		10.7		3.1		2			
					Surface	1.0	0.4	166	29.1	29.1	8.6	8.6	14.9	14.9	151.5	151.7	10.7		3.2	1	3			
						4.3	0.4	176	27.4		8.4		20.7		107.1		7.6	9.1	4.1	1	2			
SR3	Sunny	Moderate	11:11	8.5	Middle	4.3	0.4	173	27.3	27.4	8.4	8.4	20.8	20.8	104.1	105.6	7.4		4.3	4.1	3	3	822145	807593
						7.5	0.4	173	26.8		8.2		26.9		71.2		4.9		4.9	1	3			
					Bottom	7.5	0.4	165	26.8	26.8	8.2	8.2	26.9	26.9	71.4	71.3	4.9	4.9	5.0	1	4			
						1.0	0.4	94	27.9		8.2		23.2		120.5		8.3		4.0		3			
					Surface	1.0	0.0	95	28.4	28.2	8.2	8.2	22.4	22.8	124.6	122.6	8.6		4.0		3			
						4.2	0.0	98	26.4		8.2		29.0		78.4		5.4	6.9	4.9	1	3			
SR4A	Sunny	Moderate	09:35	8.3	Middle	4.2	0.0	104	26.4	26.4	8.2	8.2	29.0	29.0	78.4	78.4	5.4		4.9	4.4	3	3	817172	807815
						7.3	0.0	77	26.4		8.2		29.0				5.4		4.3	-	3			
					Bottom	7.3	0.0	83	26.4	26.4	8.2	8.2	29.1	29.1	79.0 79.1	79.1	5.4	5.4	4.3	1	4			
			1	I I	<u> </u>	1.0	-	-	27.2					l					2.0	1	3			1
					Surface	1.0	-	-	27.2	27.2	8.1 8.1	8.1	23.3	23.3	109.8	109.2	7.5 7.4		1.9	1	3			
						1.0	-	-	- 21.2		8.1		23.3		108.6		-	7.5	1.9	-	-			
SR8	Misty	Calm	10:48	5.0	Middle	-	1		-	-	-	-	-	-	-	-	-		-	2.5	-	4	820375	811628
						4.0	-	-						<b> </b>						1	4			
					Bottom	4.0	-	-	27.0 27.0	27.0	8.1 8.1	8.1	23.5	23.5	105.4	107.5	7.2 7.5	7.4	3.2	-	5			
DA: Donth Aver					1	4.0	_	-	21.0		Ö. I		23.3	l	109.6		7.5		J. I		Э			

Water Quality Monitoring Results on 30 May 23 during Mid-Flood Tide

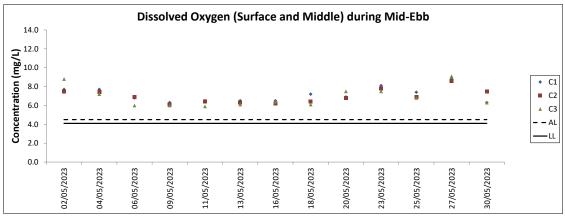
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)	ı	рН	Salir	ity (ppt)		aturation (%)	Disso Oxyg		Turbidity	(NTU)	Suspende (mg.		Coordinate HK Grid	Coordinate HK Grid
Station	Condition	Condition	Time	Depth (m)	Gampling Bop	(III)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.3	45	28.9	28.9	8.5	8.5	16.1	15.8	144.4	144.1	10.2		2.9		2			
					Ourlace	1.0	0.2	38	28.9	20.9	8.6	0.0	15.5	13.0	143.8	144.1	10.2	7.9	2.9		3			
C1	Sunny	Moderate	15:23	8.4	Middle	4.2	0.3	33	26.5	26.5	8.2	8.2	29.1	29.1	81.4	81.4	5.6	1.5	2.1	2.3	3	3	815596	804257
01	Curiny	Woderate	10.20	0.4	Wilddie	4.2	0.3	39	26.5	20.0	8.2	0.2		20.1	81.4	01.4	5.6		2.1	2.0	3	O	010000	00-1207
					Bottom	7.4	0.3	63	26.4	26.5	8.2	8.2	29.1	29.0	81.8	81.9	5.6	5.6	2.0		3			
					Bottom	7.4	0.3	57	26.5	20.0	8.2	0.2	29.0	20.0	81.9	01.0	5.6	0.0	1.9		2			
					Surface	1.0	0.1	234	28.7	28.7	8.5	8.5	16.2	16.2	137.3	135.5	9.7		3.8		3			
					Gundee	1.0	0.1	234	28.7	20.7	8.5	0.0	16.1	10.2	133.7	100.0	9.5	8.0	3.7	1	2			
C2	Sunny	Moderate	14:00	12.2	Middle	6.1	0.1	248	27.0	27.0	8.2	8.2	25.0	25.0	90.5	90.5	6.3	0.0	3.3	3.4	3	3	825691	806935
						6.1	0.1	243	27.0		8.2		25.0		90.5		6.3		3.3		3	-		
					Bottom	11.2	0.1	209	26.7	26.7	8.2	8.2	27.0 27.0	27.0	79.2	79.4	5.5	5.5	3.1		2			
						11.2	0.1	213	26.7		8.2				79.5		5.5		3.0		3			
					Surface	1.0	0.3	267	26.8	26.8	8.3	8.3	24.2	24.3	139.1	138.2	9.6		1.2	l	4			
						1.0	0.3	266	26.8		8.3		24.3		137.3		9.5	9.1	1.3	l	4			
C3	Misty	Calm	15:06	10.8	Middle	5.4	0.3	274 267	26.7	26.7	8.3	8.3	24.4	24.4	124.8 121.8	123.3	8.7 8.5		1.8	1.6	4	4	822107	817815
						5.4 9.8	0.4	283	26.6												5			
					Bottom	9.8	0.4	283	26.6 26.6	26.6	8.3	8.3	24.7	24.6	113.4 113.6	113.5	7.9 7.9	7.9	1.9 1.9		5			
-						1.0	0.3	350	28.3		8.3		22.7		107.2		7.4		10.5		3			
					Surface	1.0	0.2	344	28.3	28.3	8.3	8.3	22.6	22.7	107.4	107.3	7.4		10.8	l	3			
						3.2	0.1	351	26.6		8.2		28.2		83.3		5.7	6.6	6.8	ł	4			
IM1	Sunny	Moderate	15:03	6.3	Middle	3.2	0.1	356	26.6	26.6	8.2	8.2	28.2	28.2	83.4	83.4	5.7		7.0	8.9	4	3	818369	806440
						5.3	0.1	341	26.3		8.2				79.3		5.4		9.1	i	3			
					Bottom	5.3	0.1	334	26.3	26.3	8.2	8.2	29.3	29.3	79.4	79.4	5.4	5.4	9.3	i	3			
					0.1	1.0	0.1	299	28.8		8.5		20.4	00.4	127.3	407.0	8.8		3.0		4			
					Surface	1.0	0.1	299	28.8	28.8	8.5	8.5	20.4	20.4	127.0	127.2	8.8	7.0	3.0		3			
IM2	Cummu	Madazata	44.50	7.0	Middle	3.6	0.1	325	26.3	26.3	8.4	8.4	28.9	28.9	80.4	80.4	5.5	7.2	12.1	8.9	3	2	819164	000040
IIVIZ	Sunny	Moderate	14:59	7.2	Middle	3.6	0.2	319	26.3	20.3	8.4	8.4	28.9	28.9	80.4	80.4	5.5		11.5	8.9	3	3	819164	806213
					Bottom	6.2	0.1	308	26.3	26.3	8.4	8.4	29.3 29.4	29.3	76.4	76.6	5.2	5.3	12.0	1	3			
					DOLLOITI	6.2	0.1	303	26.3	20.3	8.4	0.4	29.4	29.3	76.7	70.0	5.3	5.5	11.8		2			
					Surface	1.0	0.1	254	30.0	30.0	8.6	8.6	13.9	13.9	144.5	144.1	10.1		2.3		2			
					Gullace	1.0	0.1	257	30.0	30.0	8.6	0.0	13.9	13.9	143.7	177.1	10.1	8.2	2.3		3			
IM7	Sunny	Moderate	14:26	7.7	Middle	3.9	0.1	275	27.2	27.2	8.2	8.2	24.0	24.0	91.9	91.2	6.4	0.2	6.3	6.8	2	2	821340	806815
11017	Guiniy	Moderate	17.20	,.,	IVIIGUIG	3.9	0.1	280	27.1	21.2	8.2	0.2		24.0	90.5	91.2	6.3		6.6	0.0	2	_	021040	000013
					Bottom	6.7	0.1	275	26.7	26.7	8.2	8.2	27.5 27.5	27.5	72.3	72.3	5.0	5.0	11.9		2			
						6.7	0.1	282	26.7	==::	8.2		27.5		72.2		5.0		11.5		2			

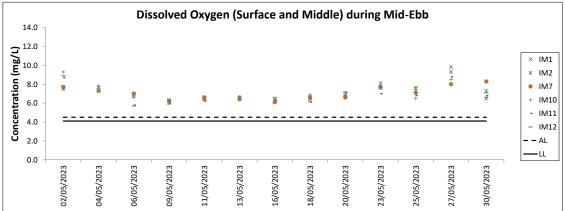
DA: Depth-Averaged

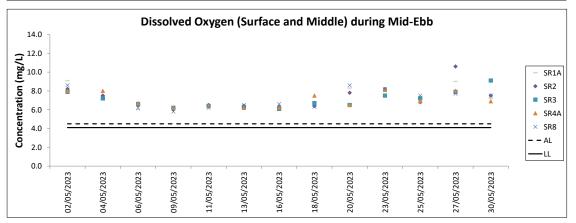
Water Quality Monitoring Results on 30 May 23 during Mid-Flood Tide

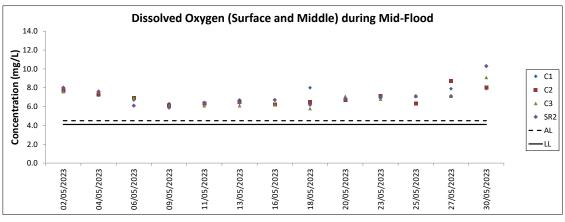
Water Qual	ity worth	oring Kesu	iito oii		30 May 23	during Mid-	riooa ii	ue																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity	(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinat HK Grid
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ur (III)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)
					Surface	1.0	0.1	257	27.3	27.3	8.0	8.0	22.7	22.7	109.7	107.2	7.6		1.2		3			
ļ						1.0	0.1	253	27.3		8.0		22.7		104.7		7.3	7.0	1.3		3			
IM10	Misty	Calm	14:02	9.4	Middle	4.7	0.2	232	27.3	27.3	8.1	8.1	24.4	24.4	95.6	95.7	6.5		1.3	1.4	3	3	822236	809831
						4.7 8.4	0.1	225 227	27.3		8.1		24.5		95.7		6.5		1.4	1	2			
ļ					Bottom	8.4	0.2	233	27.3 27.4	27.4	8.1 8.1	8.1	24.5	24.4	97.5 98.3	97.9	6.6	6.7	1.7		3			
						1.0	0.2	270	27.1		8.5		22.0		144.9		10.1		2.2		3			
ļ					Surface	1.0	0.2	265	27.1	27.1	8.5	8.5	22.0	22.0	139.6	142.3	9.7		2.3	1	2			
IM11	Misty	Calm	14:13	7.0	Middle	3.5	0.2	261	27.0	27.0	8.2	8.2	23.7	23.7	113.3	113.3	7.9	8.9	3.3	3.4	2	3	821521	810559
IIVI I	iviisty	Califi	14.13	7.0	Middle	3.5	0.2	254	27.0	27.0	8.2	0.2	23.7	23.7	113.2	113.3	7.8		3.4	3.4	3	3	021321	610339
ļ					Bottom	6.0	0.2	278	27.0	27.0	8.2	8.2	23.7	23.6	116.4	123.0	8.1	8.6	4.6		3			
					500000	6.0	0.2	280	27.0	27.0	8.2	0.2	23.6	20.0	129.6	.20.0	9.0	0.0	4.6		3			
					Surface	1.0	0.2	281	27.1	27.1	8.5	8.4	23.2	23.2	146.6	142.9	10.2		1.3	4	3			
ļ						1.0 3.4	0.2	285 309	27.0 27.0		8.4		23.3		139.1		9.7	9.5	1.2	-	3			
IM12	Misty	Calm	14:17	6.8	Middle	3.4	0.2	310	27.0	27.0	8.4	8.4	23.4	23.4	133.0 129.2	131.1	9.0		1.3	1.6	3	3	821152	811535
						5.8	0.3	294	27.0		8.3		23.4		121.1		8.4		2.4		3			
					Bottom	5.8	0.3	298	27.0	27.0	8.3	8.3	23.3	23.3	121.5	121.3	8.4	8.4	2.4		2			
					Curfoss	1.0	0.0	180	27.1	27.4	8.3	0.2	23.7	22.7	127.7	407.5	8.8		1.8		2			
					Surface	1.0	0.0	184	27.1	27.1	8.3	8.3	23.7	23.7	127.2	127.5	8.8	8.8	1.7		3			
SR1A	Misty	Calm	14:42	5.0	Middle	2.5	0.0	195	-	_	-	-	-	-	-	_	-	0.0	-	1.8	-	3	819977	812660
0	····ioty	ou		0.0	madio	2.5	0.0	196	-		-		-		-		-		-		-	Ü	0.00	0.2000
					Bottom	4.0	-	173	27.1	27.1	8.3	8.3	23.7	23.7	131.3	131.6	9.1	9.1	1.9	_	4			
						4.0	0.0	177	27.1		8.3		23.7		131.9		9.1		1.9		4			
					Surface	1.0	0.1	300 300	27.3 27.3	27.3	8.5 8.5	8.5	22.9	22.9	150.7 147.9	149.3	10.4		1.3	_	3 4			
ļ						-	0.0	292	-		-		-		-		-	10.3	-		-			
SR2	Misty	Calm	14:48	4.2	Middle	-	0.1	294	-	-	-	-	-	-	-	-	-		-	1.3	-	4	821485	814170
					Dettern	3.2	0.1	284	27.2	27.3	8.5	8.5	23.0	22.9	130.5	129.4	9.0	9.0	1.4	1	4			
					Bottom	3.2	0.1	283	27.3	27.3	8.5	8.5	22.9	22.9	128.3	129.4	8.9	9.0	1.4		3			
					Surface	1.0	0.1	200	28.7	28.7	8.6	8.6	17.2	17.2	156.7	156.6	11.0		4.1	_	3			
					Cundo	1.0	0.1	201	28.7	20.7	8.6	0.0	17.2		156.4		11.0	8.4	4.1		3			
SR3	Sunny	Moderate	14:19	8.8	Middle	4.4	0.1	191	27.1 27.1	27.1	8.2 8.2	8.2	25.5	25.5	84.2 83.8	84.0	5.8		4.0	4.2	3	3	822152	807562
ļ						7.8	0.1 0.1	185 162	26.8		8.2		25.5 27.0		67.6		5.8 4.7		4.0	-	2			
					Bottom	7.8	0.1	167	26.8	26.8	8.2	8.2	27.0	27.1	67.6	67.6	4.7	4.7	4.6	-	2			
						1.0	0.1	114	29.7		8.6		17.9		150.7		10.4		4.5		<2			
					Surface	1.0	0.0	114	29.7	29.7	8.6	8.6	18.0	17.9	153.7	152.2	10.6	7.0	4.6	1	<2			
SR4A	Cuppy	Moderate	15:49	0.2	Middle	4.6	0.0	100	28.7	27.6	8.5	8.4	21.0	19.9	101.9	99.6	5.0	7.8	4.6	4.7	<2	2	817212	807816
SR4A	Sunny	Moderate	15.49	9.2	Middle	4.6	0.1	106	26.4	27.0	8.3	0.4	18.8	19.9	97.2	99.0	5.3		4.4	4.7	2	2	017212	007010
ļ					Bottom	8.2	0.0	115	26.4	26.4	8.3	8.3	28.9	28.9	78.1	78.2	5.4	5.4	5.2		2			
			<u> </u>			8.2	0.0	111	26.4		8.3		28.9		78.3		5.4		5.1	<u> </u>	<2			
ļ					Surface	1.0	-	-	27.1	27.1	8.4	8.4	23.4	23.5	124.1	121.2	8.6		2.0	1	3			
ļ					-	1.0	-	-	27.0		8.4		23.5		118.3		8.2	8.4	2.0	1	2			
SR8	Misty	Calm	14:24	4.4	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	2.5	-	3	820388	811639
ļ					_	3.4	-	-	26.9		8.2		23.7		109.8		7.6		3.0	1	3			
					Bottom	3.4	-		26.9	26.9	8.2	8.2	23.7	23.7	110.4	110.1	7.7	7.7	3.1	1	3		l	1

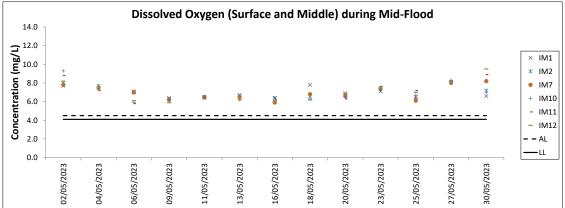
DA: Depth-Averaged

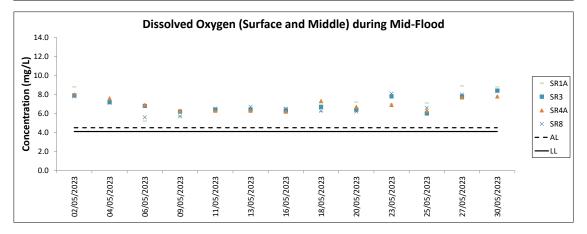


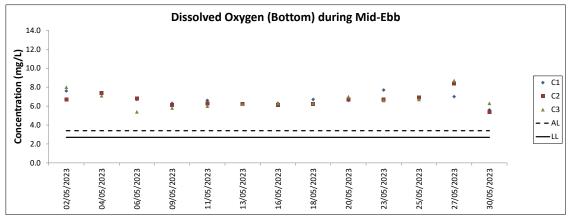


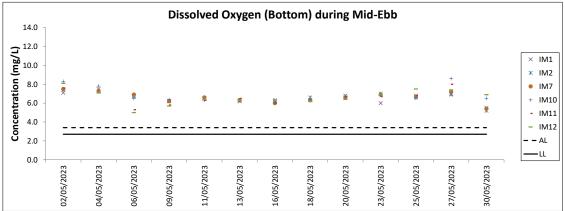


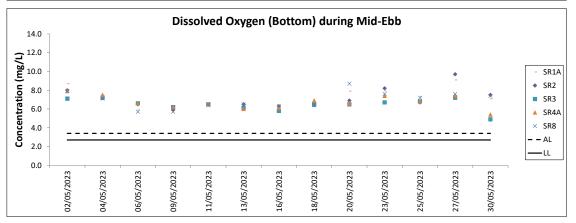


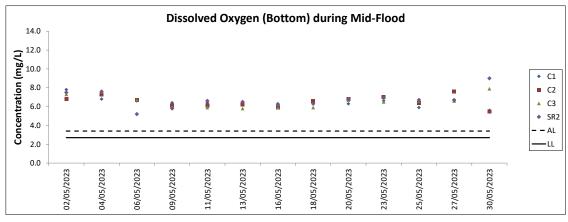


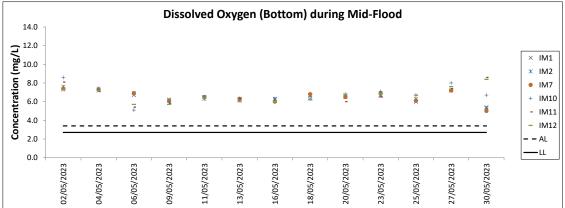


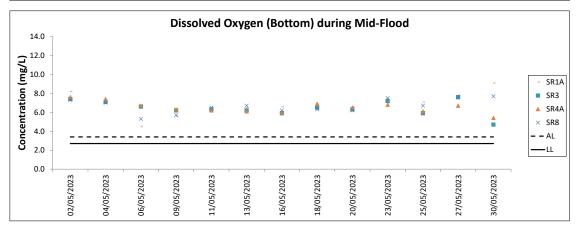


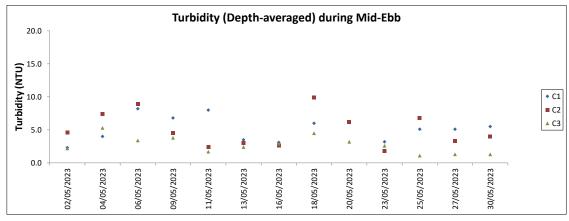


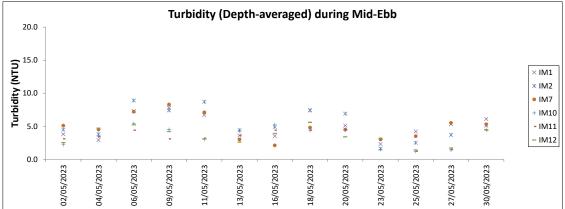


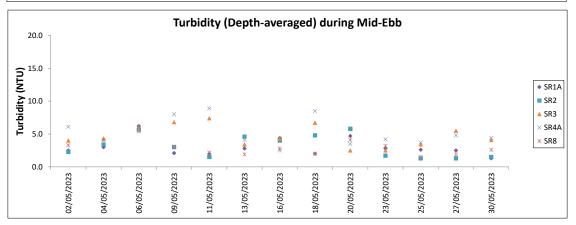


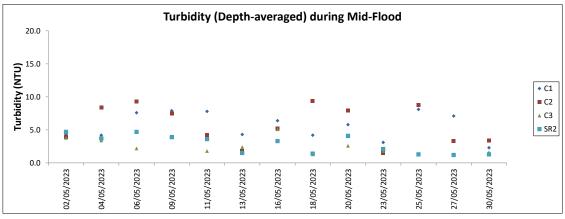


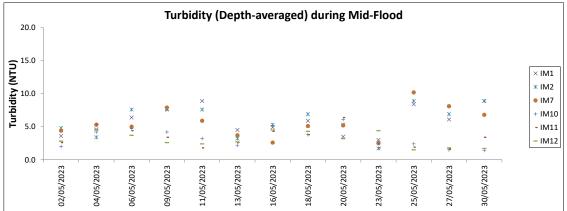


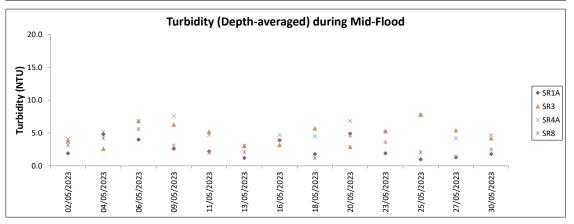


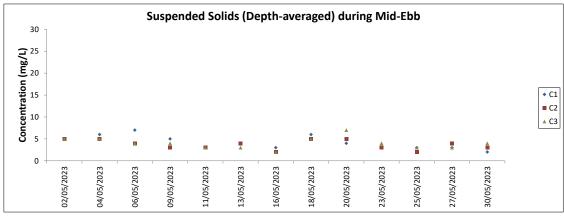


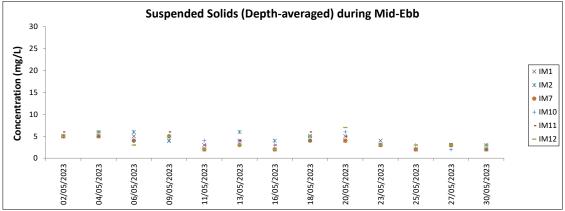


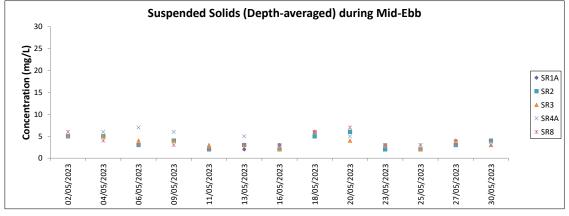


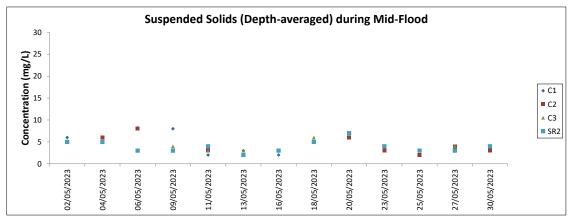


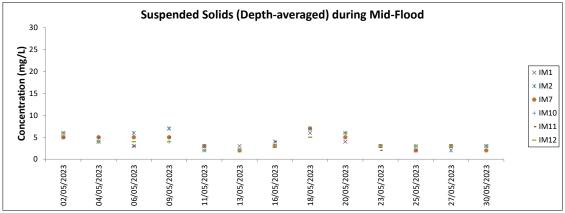


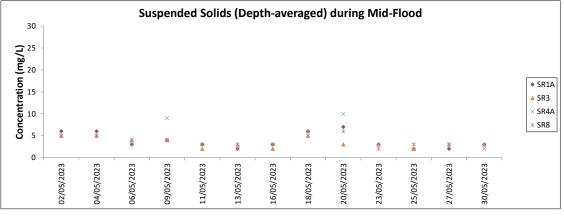












The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report. Weather conditions during monitoring are presented in the data tables above.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

Mott MacDonald   Expansion of Hong Kong International Airport into a Three-Runway System Construction Phase Monthly EM&A Report No. 89 (For May 2023)
<b>Chinese White Dolphin Monitoring Results</b>
Chinese White Dolphin Monitoring Results

#### **CWD Small Vessel Line-transect Survey**

#### **Survey Effort Data**

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
01-Mar-23	AW	2	4.970	SPRING	32166	3RS ET	Р
01-Mar-23	AW	2	4.970	SPRING	32166	3RS ET	Р
01-Mar-23	WL	2	11.695	SPRING	32166	3RS ET	Р
01-Mar-23	WL	2	6.491	SPRING	32166	3RS ET	S
02-Mar-23	AW	2	1.190	SPRING	32166	3RS ET	Р
02-Mar-23	AW	3	3.880	SPRING	32166	3RS ET	Р
02-Mar-23	WL	2	3.848	SPRING	32166	3RS ET	Р
02-Mar-23	WL	3	15.030	SPRING	32166	3RS ET	Р
02-Mar-23	WL	4	1.200	SPRING	32166	3RS ET	Р
02-Mar-23	WL	2	2.520	SPRING	32166	3RS ET	S
02-Mar-23	WL	3	6.430	SPRING	32166	3RS ET	S
02-Mar-23	WL	4	1.030	SPRING	32166	3RS ET	S
03-Mar-23	NWL	2	41.440	SPRING	32166	3RS ET	Р
03-Mar-23	NWL	3	21.770	SPRING	32166	3RS ET	Р
03-Mar-23	NWL	2	11.390	SPRING	32166	3RS ET	S
06-Mar-23	NEL	2	5.820	SPRING	32166	3RS ET	Р
06-Mar-23	NEL	3	31.280	SPRING	32166	3RS ET	Р
06-Mar-23	NEL	2	3.950	SPRING	32166	3RS ET	S
06-Mar-23	NEL	3	5.650	SPRING	32166	3RS ET	S
07-Mar-23	NWL	2	38.700	SPRING	32166	3RS ET	Р
07-Mar-23	NWL	3	23.095	SPRING	32166	3RS ET	Р
07-Mar-23	NWL	2	5.645	SPRING	32166	3RS ET	S
07-Mar-23	NWL	3	4.860	SPRING	32166	3RS ET	S
09-Mar-23	SWL	2	53.106	SPRING	32166	3RS ET	Р
09-Mar-23	SWL	2	15.716	SPRING	32166	3RS ET	S
10-Mar-23	SWL	2	6.340	SPRING	32166	3RS ET	P
10-Mar-23	SWL	3	36.560	SPRING	32166	3RS ET	P
10-Mar-23	SWL	4	10.900	SPRING	32166	3RS ET	Р
10-Mar-23	SWL	2	0.800	SPRING	32166	3RS ET	S
10-Mar-23	SWL	3	11.640	SPRING	32166	3RS ET	S
10-Mar-23	SWL	4	4.000	SPRING	32166	3RS ET	S
13-Mar-23	NEL	2	36.470	SPRING	32166	3RS ET	Р
13-Mar-23	NEL	2	10.830	SPRING	32166	3RS ET	S
11-Apr-23	NEL	2	26.630	SPRING	32167	3RS ET	Р
11-Apr-23	NEL	3	10.200	SPRING	32166	3RS ET	Р
11-Apr-23	NEL	2	7.570	SPRING	32166	3RS ET	S
11-Apr-23	NEL	3	2.300	SPRING	32166	3RS ET	S
12-Apr-23	SWL	1	22.368	SPRING	32166	3RS ET	Р
12-Apr-23	SWL	2	30.970	SPRING	32166	3RS ET	Р
12-Apr-23	SWL	1	10.270	SPRING	32166	3RS ET	S
12-Apr-23	SWL	2	5.460	SPRING	32166	3RS ET	S
13-Apr-23	WL	2	10.107	SPRING	32166	3RS ET	Р
13-Apr-23	WL	3	8.141	SPRING	32166	3RS ET	Р
13-Apr-23	WL	2	4.103	SPRING	32166	3RS ET	S
13-Apr-23	WL	3	6.578	SPRING	32166	3RS ET	S
13-Apr-23	AW	3	4.900	SPRING	32166	3RS ET	Р
14-Apr-23	SWL	2	44.965	SPRING	32166	3RS ET	Р
14-Apr-23	SWL	3	9.510	SPRING	32166	3RS ET	Р
14-Apr-23	SWL	2	13.425	SPRING	32166	3RS ET	S
14-Apr-23	SWL	3	2.000	SPRING	32166	3RS ET	S
18-Apr-23	AW	3	4.720	SPRING	32166	3RS ET	Р
18-Apr-23	WL	3	19.170	SPRING	32166	3RS ET	Р
18-Apr-23	WL	3	10.170	SPRING	32166	3RS ET	S
19-Apr-23	NEL	3	25.790	SPRING	32166	3RS ET	Р
19-Apr-23	NEL	4	10.700	SPRING	32166	3RS ET	P
19-Apr-23	NEL	3	8.980	SPRING	32166	3RS ET	S
19-Apr-23	NEL	4	0.900	SPRING	32166	3RS ET	S
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DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
20-Apr-23	NWL	2	61.800	SPRING	32166	3RS ET	Р
20-Apr-23	NWL	2	13.600	SPRING	32166	3RS ET	S
21-Apr-23	NWL	3	41.400	SPRING	32166	3RS ET	Р
21-Apr-23	NWL	4	22.400	SPRING	32166	3RS ET	Р
21-Apr-23	NWL	3	9.300	SPRING	32166	3RS ET	S
21-Apr-23	NWL	4	1.900	SPRING	32166	3RS ET	S
04-May-23	WL	2	9.370	SPRING	32166	3RS ET	Р
04-May-23	WL	3	5.924	SPRING	32166	3RS ET	Р
04-May-23	WL	2	4.130	SPRING	32166	3RS ET	S
04-May-23	WL	3	4.963	SPRING	32166	3RS ET	S
04-May-23	AW	2	4.790	SPRING	32166	3RS ET	Р
09-May-23	NEL	2	20.000	SPRING	32166	3RS ET	Р
09-May-23	NEL	3	17.600	SPRING	32166	3RS ET	Р
09-May-23	NEL	2	6.500	SPRING	32166	3RS ET	S
09-May-23	NEL	3	3.100	SPRING	32166	3RS ET	S
10-May-23	NEL	2	2.640	SPRING	32166	3RS ET	Р
10-May-23	NEL	3	32.710	SPRING	32166	3RS ET	Р
10-May-23	NEL	4	1.700	SPRING	32166	3RS ET	Р
10-May-23	NEL	2	1.980	SPRING	32166	3RS ET	S
10-May-23	NEL	3	8.370	SPRING	32166	3RS ET	S
11-May-23	NWL	2	14.500	SPRING	32166	3RS ET	Р
11-May-23	NWL	3	48.500	SPRING	32166	3RS ET	Р
11-May-23	NWL	2	2.100	SPRING	32166	3RS ET	S
11-May-23	NWL	3	9.800	SPRING	32166	3RS ET	S
15-May-23	SWL	2	53.890	SPRING	32166	3RS ET	Р
15-May-23	SWL	2	16.110	SPRING	32166	3RS ET	S
16-May-23	NWL	2	29.700	SPRING	32166	3RS ET	Р
16-May-23	NWL	3	34.100	SPRING	32166	3RS ET	Р
16-May-23	NWL	2	6.400	SPRING	32166	3RS ET	S
16-May-23	NWL	3	5.000	SPRING	32166	3RS ET	S
18-May-23	SWL	2	48.250	SPRING	32166	3RS ET	Р
18-May-23	SWL	3	4.660	SPRING	32166	3RS ET	Р
18-May-23	SWL	2	15.050	SPRING	32166	3RS ET	S
18-May-23	SWL	3	1.060	SPRING	32166	3RS ET	S
23-May-23	AW	3	4.630	SPRING	32166	3RS ET	Р
23-May-23	WL	2	9.160	SPRING	32166	3RS ET	Р
23-May-23	WL	3	10.106	SPRING	32166	3RS ET	Р
23-May-23	WL	2	2.470	SPRING	32166	3RS ET	S
23-May-23	WL	3	7.890	SPRING	32166	3RS ET	S

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

#### **CWD Small Vessel Line-transect Survey**

#### **Sighting Data**

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
01-Mar-23	1	1116	CWD	1	AW	2	384	ON	3RS ET	22.3020	113.8820	SPRING	NONE	Р
01-Mar-23	2	1202	CWD	7	WL	2	79	ON	3RS ET	22.2721	113.8461	SPRING	NONE	Р
01-Mar-23	3	1258	CWD	2	WL	2	852	ON	3RS ET	22.2537	113.8347	SPRING	NONE	S
01-Mar-23	4	1315	CWD	6	WL	2	569	ON	3RS ET	22.2422	113.8338	SPRING	NONE	Р
01-Mar-23	5	1343	CWD	7	WL	2	84	ON	3RS ET	22.2280	113.8379	SPRING	NONE	S
01-Mar-23	6	1420	CWD	7	WL	2	249	ON	3RS ET	22.2056	113.8281	SPRING	NONE	Р
01-Mar-23	7	1447	CWD	3	WL	2	345	ON	3RS ET	22.1962	113.8339	SPRING	NONE	Р
02-Mar-23	1	1039	CWD	6	WL	2	116	ON	3RS ET	22.2294	113.8379	SPRING	NONE	S
02-Mar-23	2	1051	CWD	14	WL	2	296	ON	3RS ET	22.2234	113.8338	SPRING	NONE	Р
02-Mar-23	3	1153	CWD	7	WL	3	156	ON	3RS ET	22.1960	113.8395	SPRING	NONE	Р
03-Mar-23	1	1050	CWD	5	NWL	3	167	ON	3RS ET	22.2804	113.8782	SPRING	NONE	Р
07-Mar-23	1	1034	CWD	1	NWL	3	597	ON	3RS ET	22.2792	113.8700	SPRING	NONE	Р
07-Mar-23	2	1140	CWD	1	NWL	2	122	ON	3RS ET	22.4001	113.8778	SPRING	NONE	Р
09-Mar-23	1	1036	CWD	1	SWL	2	701	ON	3RS ET	22.2231	113.9365	SPRING	NONE	Р
09-Mar-23	2	1112	FP	1	SWL	2	138	ON	3RS ET	22.1655	113.9358	SPRING	NONE	Р
09-Mar-23	3	1116	FP	1	SWL	2	21	ON	3RS ET	22.1619	113.9356	SPRING	NONE	Р
09-Mar-23	4	1121	FP	1	SWL	2	8	ON	3RS ET	22.1544	113.9359	SPRING	NONE	Р
09-Mar-23	5	1124	FP	1	SWL	2	6	ON	3RS ET	22.1526	113.9363	SPRING	NONE	Р
09-Mar-23	6	1232	FP	2	SWL	2	252	ON	3RS ET	22.1416	113.9120	SPRING	NONE	S
09-Mar-23	7	1259	FP	1	SWL	2	122	ON	3RS ET	22.1798	113.9040	SPRING	NONE	S
09-Mar-23	8	1345	FP	1	SWL	2	74	ON	3RS ET	22.1521	113.8976	SPRING	NONE	Р
09-Mar-23	9	1513	CWD	5	SWL	2	389	ON	3RS ET	22.1930	113.8593	SPRING	NONE	Р
10-Mar-23	1	1416	FP	2	SWL	2	29	ON	3RS ET	22.1643	113.8681	SPRING	NONE	Р
10-Mar-23	2	1438	CWD	2	SWL	3	211	ON	3RS ET	22.1951	113.8583	SPRING	NONE	Р
12-Apr-23	1	1042	FP	5	SWL	2	366	ON	3RS ET	22.1836	113.9358	SPRING	NONE	Р
12-Apr-23	2	1047	FP	1	SWL	2	20	ON	3RS ET	22.1789	113.9355	SPRING	NONE	Р
12-Apr-23	3	1050	FP	2	SWL	1	205	ON	3RS ET	22.1732	113.9358	SPRING	NONE	Р
12-Apr-23	4	1055	FP	4	SWL	1	95	ON	3RS ET	22.1660	113.9362	SPRING	NONE	Р
12-Apr-23	5	1100	FP	4	SWL	1	47	ON	3RS ET	22.1591	113.9364	SPRING	NONE	Р
12-Apr-23	6	1103	FP	1	SWL	1	78	ON	3RS ET	22.1554	113.9362	SPRING	NONE	Р
12-Apr-23	7	1109	FP	2	SWL	1	149	ON	3RS ET	22.1469	113.9315	SPRING	NONE	S
12-Apr-23	8	1119	FP	1	SWL	1	22	ON	3RS ET	22.1586	113.9276	SPRING	NONE	Р

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
12-Apr-23	9	1124	FP	4	SWL	1	54	ON	3RS ET	22.1661	113.9276	SPRING	NONE	Р
12-Apr-23	10	1218	FP	1	SWL	1	157	ON	3RS ET	22.1444	113.9080	SPRING	NONE	Р
12-Apr-23	11	1226	FP	4	SWL	1	205	ON	3RS ET	22.1563	113.9008	SPRING	NONE	S
12-Apr-23	12	1311	FP	3	SWL	1	53	ON	3RS ET	22.1824	113.8971	SPRING	NONE	Р
13-Apr-23	1	1057	CWD	10	WL	3	623	ON	3RS ET	22.2416	113.8409	SPRING	PURSE SEINER	Р
13-Apr-23	2	1127	CWD	9	WL	2	11	ON	3RS ET	22.2324	113.8294	SPRING	PURSE SEINER	Р
13-Apr-23	3	1146	CWD	2	WL	2	268	ON	3RS ET	22.2237	113.8286	SPRING	NONE	Р
13-Apr-23	4	1156	CWD	3	WL	3	11	ON	3RS ET	22.2188	113.8195	SPRING	NONE	S
13-Apr-23	5	1213	CWD	8	WL	3	355	ON	3RS ET	22.2148	113.8322	SPRING	NONE	Р
14-Apr-23	1	1400	FP	1	SWL	2	9	ON	3RS ET	22.1593	113.8730	SPRING	NONE	S
18-Apr-23	1	1049	CWD	7	WL	3	26	ON	3RS ET	22.2459	113.8496	SPRING	NONE	S
18-Apr-23	2	1148	CWD	3	WL	3	296	ON	3RS ET	22.2141	113.8340	SPRING	NONE	Р
18-Apr-23	3	1226	CWD	4	WL	3	282	ON	3RS ET	22.1962	113.8412	SPRING	NONE	Р
04-May-23	1	1054	CWD	1	WL	2	409	ON	3RS ET	22.2451	113.8491	SPRING	NONE	S
04-May-23	2	1117	CWD	7	WL	3	130	ON	3RS ET	22.2324	113.8242	SPRING	NONE	S
04-May-23	3	1138	CWD	2	WL	3	179	ON	3RS ET	22.2321	113.8278	SPRING	NONE	Р
04-May-23	4	1158	CWD	3	WL	3	335	ON	3RS ET	22.2241	113.8307	SPRING	NONE	Р
04-May-23	5	1219	CWD	3	WL	3	163	ON	3RS ET	22.2143	113.8218	SPRING	NONE	Р
04-May-23	6	1251	CWD	4	WL	3	212	ON	3RS ET	22.1968	113.8287	SPRING	NONE	S
04-May-23	7	1302	CWD	5	WL	3	379	ON	3RS ET	22.1962	113.8402	SPRING	NONE	Р
15-May-23	1	1115	FP	2	SWL	2	44	ON	3RS ET	22.1744	113.9284	SPRING	NONE	Р
18-May-23	1	1402	CWD	2	SWL	2	299	ON	3RS ET	22.1987	113.8785	SPRING	PURSE SEINER	Р
18-May-23	2	1512	CWD	1	SWL	2	366	ON	3RS ET	22.1993	113.8596	SPRING	NONE	S
23-May-23	1	1116	CWD	4	WL	3	162	ON	3RS ET	22.2227	113.8306	SPRING	NONE	Р
23-May-23	2	1145	CWD	1	WL	3	59	ON	3RS ET	22.2144	113.8338	SPRING	NONE	Р
23-May-23	3	1216	CWD	3	WL	3	31	ON	3RS ET	22.1960	113.8410	SPRING	NONE	Р
23-May-23	4	1231	CWD	5	WL	3	200	ON	3RS ET	22.1935	113.8425	SPRING	NONE	S

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

#### Notes:

CWD monitoring survey data of the two preceding survey months 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 445.453 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 13 on-effort sightings and total number of 41 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in May 2023 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in May 2023

$$STG = \frac{13}{445.453} \times 100 = 2.92$$

Encounter Rate by Number of Dolphins (ANI) in May 2023

$$ANI = \frac{41}{445.453} \times 100 = 9.20$$

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

A total of 1280.996 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 37 on-effort sightings and total number of 162 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)

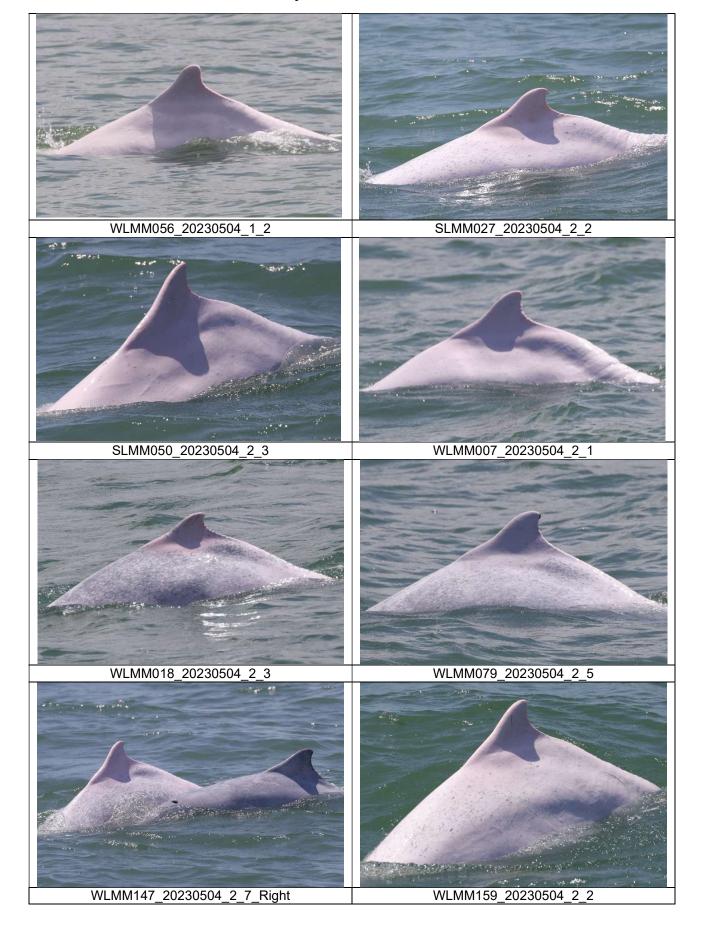
$$STG = \frac{37}{1280.996} \times 100 = 2.89$$

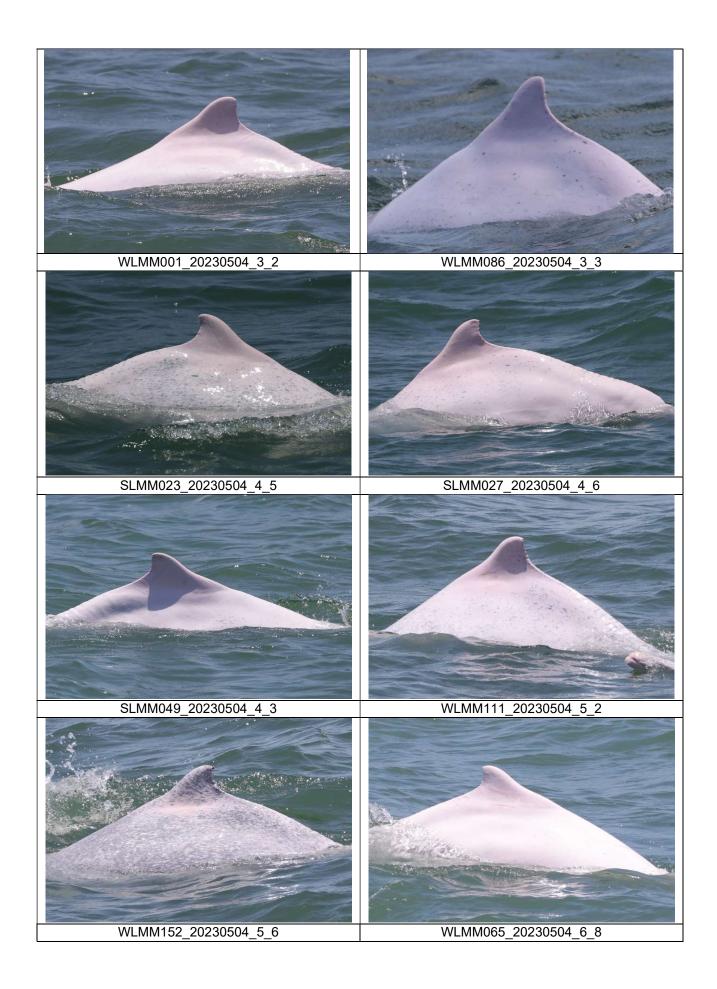
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

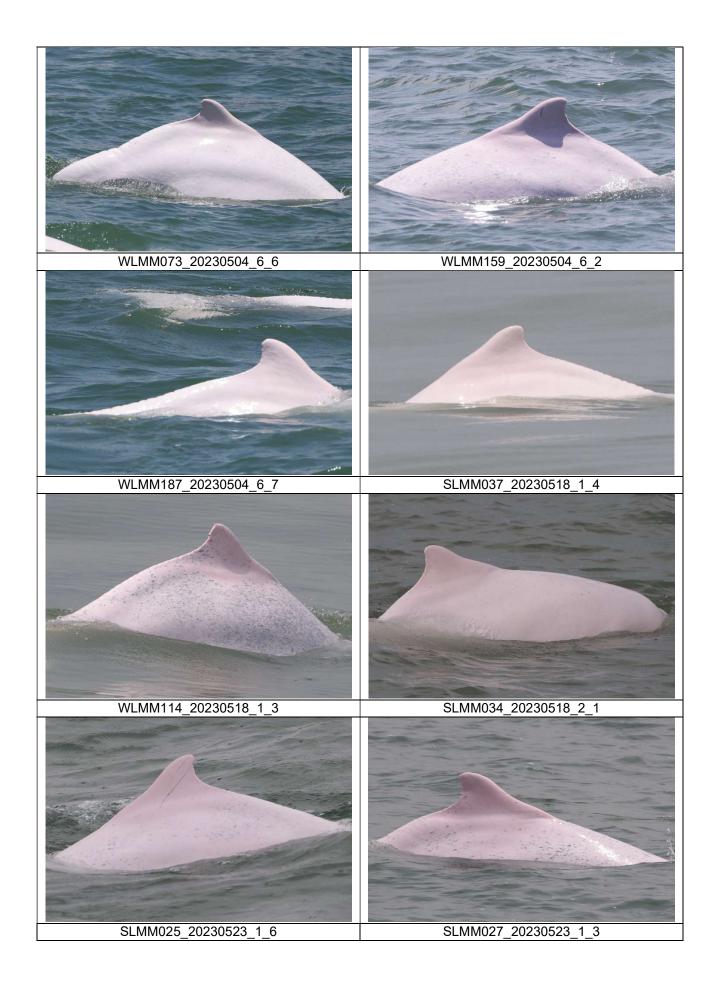
$$ANI = \frac{162}{1280.996} \times 100 = 12.65$$

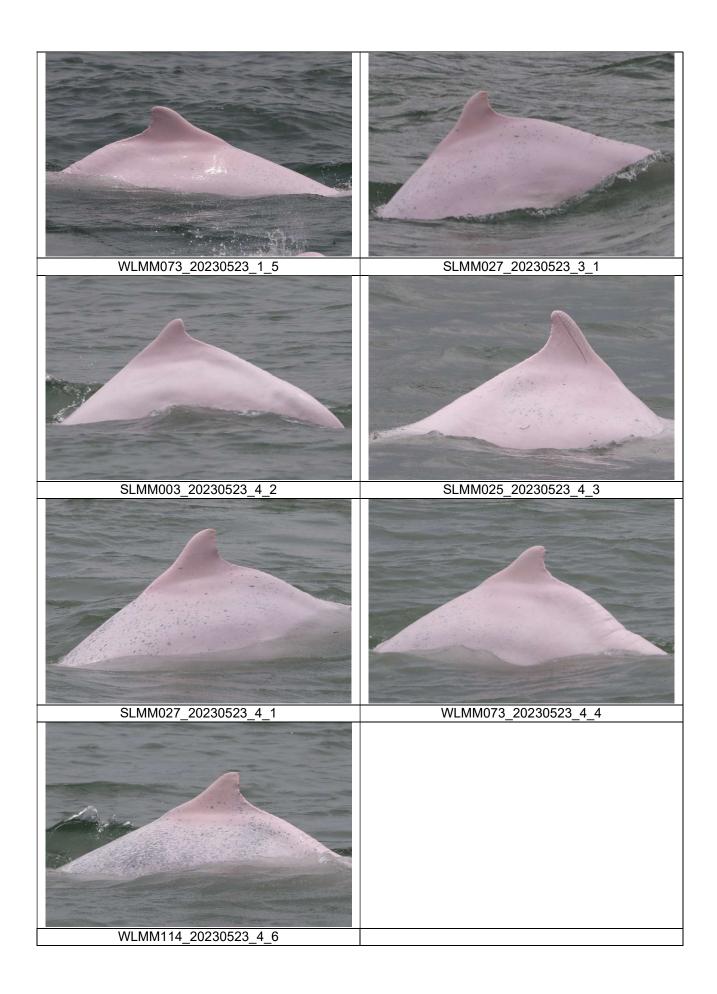
#### **CWD Small Vessel Line-transect Survey**

#### **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
24/May/23	Lung Kwu Chau	9:24	15:24	6:00	3	3	0	NA
25/May/23	Sha Chau	10:48	16:48	6:00	3	1	0	NA

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

# Appendix D. 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	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-RS0045- 23	Valid from 30 Jan 2023 to 20 Jul 2023
			GW-RS0347- 23	Valid from 3 May 2023 to 1 Nov 2023
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3302	Notification of Construction	Works area of 3302	490404	Receipt acknowledged by EPD on 10 Mar 2023
	Work under APCO	Staging area of 3302	490407	Receipt acknowledged by EPD on 10 Mar 2023
			490408	Receipt acknowledged by EPD on 10 Mar 2023
			490409	Receipt acknowledged by EPD on 10 Mar 2023
	Registration as Chemical Waste Producer	Works area of 3302	5296-951- C4331-01	Completion of Registration on 4 Jan 2019
	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	Works area of 3302	GW-RS0887-22	Valid from 3 Nov 2022 to 2 May 2023 Superseded by GW-RS0336-23
	(General Works)		GW-RS0301-23	Valid from 20 Apr 2023 to 19 Oct 2023
			GW-RS0336-23	Valid from 3 May 2023 to 2 Nov 2023
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 No 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019
	Construction Noise Permit (General Works)	Works area of 3305	GW-RS0965-22	Valid from 1 Dec 2022 to 31 May 2023
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	489966	Receipt acknowledged by EPD on 28 Feb 2023
	Registration as Chemical Waste Producer	Works area of 3307	5211-951- P3379-01	Completion of Registration on 8 Jun 2020
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
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-RS0305-23	Valid from 17 Apr 2023 to 16 Oct 2023
3310	Notification of Construction Work under APCO	Works area of 3310	485057	Receipt acknowledged by EPD on 10 Dec 2021
	Registration as Chemical Waste	Works area of 3310	5213-951- C4682-01	Completion of Registration on 21 Dec 2021
	Producer	Works area of 3310	5213-000- C3317-27	Completion of Registration on 31 Aug 2022
	Discharge License under WPCO	Works area of 3310	WT00039654- 2021	Valid from 31 Dec 2021 to 31 Dec 2026
	Bill Account for disposal	Works area of 3310	A/C 7042793	Approval granted from EPD on 4 Jan 2022
	Construction Noise Permit (General Works)	Works area of 3310 (Existing airport)	GW-RS0421-23	Valid from 24 May 2023 to 21 Nov 2023
		Works area of 3310 (Reclamation area)	GW-RS0294-23	Valid from 13 Apr 2023 to 10 Oct 2023
		Tsing Chau Wan	GW-RW0703-22	Valid from 26 Nov 2022 to 25 May 2023
		Tsing Chau Wan	GW-RW0340-23	Valid from 26 May 2023 to 25 Nov 2023
3402	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction	Works area of 3403	485039	Receipt acknowledged by EPD on 06 Oct 2022
	Work under APCO	Works area of 3403 (with Area 17 and Area 15)	475369	Receipt acknowledged by EPD on 28 Dec 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951- S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841- 2020	Valid from 5 Jun 2020 to 30 Jun 2025 Approved variation on 9 Jun 2022
	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-RS0136-23	Valid from 1 Mar 2023 to 31 Aug 2023
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0137-23	Valid from 1 Mar 2023 to 31 May 2023
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	484926	Receipt acknowledged by EPD on 30 Sep 2022
	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 Mai 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0154-23	Valid from 2 Mar 2023 to 27 Aug 2023
3408	Notification of Construction	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Work under APCO	3408 CSA-CBP	488443	Receipt acknowledged by EPD on 13 Jan 2023
	Specified Process Licence (Cement Works)	3408 CSA-CBP	L-3-268(1)	Valid from 22 May 2023 to 21 May 2025
	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-RS0107-23	Valid from 16 Feb 2023 to 31 Jul 2023
	Construction Noise Permit (Special Case)	Works area of 3408	GW-RS0332-23	Valid from 23 Apr 2023 to 16 Oct 2023
3508	Notification of Construction	Works area of 3508	459017	Receipt acknowledged by EPD on 19 Aug 2020
	Work under APCO		459469	Receipt acknowledged by EPD on 4 Sep 2020
			493055	Receipt acknowledged by EPD on 30 May 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951- G2898-01	Completion of Registration on 28 Sep 2020
	Discharge License under	Works area of 3508	WT00037209- 2020	Valid from 28 Jan 2022 to 31 Mar 2026
	WPCO		WT00037523- 2021	Valid from 24 Aug 2022 to 30 Apr 2026
			WT00037225- 2020	Valid from 11 Jan 2022 to 30 Apr 2026
			WT00037549- 2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)  Construction Noise Permit (Special Case)	Works area of 3508	GW-RS1127-22	Valid from 2 Jan 2023 to 27 Jun 2023
		Works area of 3508	GW-RS1133-22	Valid from 6 Jan 2023 to 5 Jun 2023
		Works area of 3508	GW-RS0229-23	Valid from 24 Mar 2023 to 21 Sep 2023
		Works area of 3508	GW-RS0379-23	Valid from 14 May 2023 to 30 Jun 2023
		Works area of 3508	GW-RS0361-23	Valid from 11 May 2023 to 17 Oct 2023
		Works area of 3508	GW-RS0390-23	Valid from 14 May 2023 to 24 Jun 2023
		Works area of 3508	GW-RS0069-23	Valid from 1 Feb 2023 to 1 May 2023
		Works area of 3508	GW-RS0286-23	Valid from 8 Apr 2023 to 30 Jun 2023
		Works area of 3508	GW-RS0373-23	Valid from 14 May 2023 to 17 Oct 2023
		Works area of 3508	GW-RS0376-23	Valid from 14 May 2023 to 31 Jul 2023
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-RS1059-22	Valid from 8 Dec 2022 to 7 May 2023
(-	, ,	Works area of 3601	GW-RS0356-23	Valid from 8 May 2023 to 7 Nov 2023
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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste	Site office of 3603	5296-951- S4069-01	Completion of Registration on 22 Jan 2018
	Producer	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	Works area of 3603	GW-RS0922-22	Valid from 24 Nov 2022 to 23 May 2023
	(General Works)	Works area of 3603	GW-RS0357-23	Valid from 23 May 2023 to 22 Nov 2023
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 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-RS0048-23	Valid from 30 Jan 2023 to 30 Jun 2023
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 Jar 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 Oc 2021
	Construction Noise Permit (General Works)	Works area of 3733	GW-RS1028-22	Valid from 25 Nov 2022 to 22 May 2023 Superseded by GW-RS0395-23
	Construction Noise Permit (General Works)	Works area of 3733	GW-RS0395-23	Valid from 18 May 2023 to 15 Nov 2023
3801	Notification of Construction	Works area of 3801	488993	Receipt acknowledged by EPD on 2 Feb 2023
	Work under APCO	Stockpiling area of 3801	454269	Receipt acknowledged by EPD on 12 Mai 2020
			450940	Receipt acknowledged by EPD on 13 Nov 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951- C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under	Works area of 3801	WT00041429- 2022	Valid from 16 Aug 2022 to 31 Aug 2027
	WPCO	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-RS0096-23	Valid from 5 Feb 2023 to 2 Aug 2023
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste	Works area of 3802	WPN 5218-951- G2895-01	Completion of Registration on 28 Aug 2020
	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 (Existing	WT00039092- 2021	Valid from 30 Nov 2021 to 31 Nov 2026
		airport)	WT00043143- 2023	Valid from 17 Mar 2023 to 31 Mar 2028
			WT00041807- 2022	Valid from 3 Oct 2022 to 31 Oct 2027
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0253-23	Valid from 30 Mar 2023 to 27 Sep 2023
	(General Works)	Works area of 3802 (Existing airport)	GW-RS1061-22	Valid from 5 Dec 2022 to 4 Jun 2023
		Works area of 3802 (Ventilation building)	GW-RS0072-23	Valid from 1 Feb 2023 to 26 Jul 2023
3804	Notification of Construction Work under APCO	Works area of 3804	487452	Receipt acknowledged by EPD on 14 Dec 2022
	Construction	Works area of	GW-RS0102-23	Valid from 15 Feb 2023 to 14 Aug 2023
	Noise Permit (General Works)	3804 (3804/1A)	GW-RS0208-23	Valid from 16 Mar 2023 to 14 Sep 2023 Superseded by GW-RS0363-23
			GW-RS0363-23	Valid from 11 May 2023 to 05 Nov 2023
	Registration as Chemical Waste Producer	Works area of 3804	WPN 5213-951- B2686-01	Completion of Registration on 4 Jan 2023
	Bill Account for disposal	Works area of 3804	A/C 7046121	Approval granted from EPD on 3 Jan 2023
3805	Notification of Construction Work under APCO	Works area of 3805	490065	Receipt acknowledged by EPD on 2 Mar 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3805	WPN 5218-951- C4788-01	Completion of Registration on 31 Mar 2023
	Bill Account for disposal	Works area of 3805	A/C 7046828	Approval granted from EPD on 10 Mar 2023
	Construction Noise Permit (General Works)	Works area of 3805	GW-RS0359-23	Valid from 2 May 2023 to 1 Nov 2023
3901A	Notification of Construction Work under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901A	EP/RS/0000443 053	Approval granted on 11 Dec 2020
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024
	Landfill Disposal of Waste Concrete from Batching Plant	Works area of 3901A	EP195/01/18	Valid from 10 Feb 2023 to 9 Nov 2023
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951- K3400-01	Completion of Registration on 17 Jul 2020
	Bill Account for disposal	Works area of 3901A	A/C 7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0050-23	Valid from 5 Feb 2023 to 4 Aug 2023
3901B	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
	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-RS0070-23	Valid from 5 Feb 2023 to 4 Aug 2023
3913	Specified Process license under APCO	Works area of 3913	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3913	5213-951- S4405-01	Completion of Registration on 22 Ju 2022, updated on 29 Mar 2023

Contract No.	<b>Description</b> Location		Permit/ Reference No.	Status	
	Bill Account for disposal	Works area of 3913	A/C 7044632	Approval granted from EPD on 18 Aug 2022	
	Construction Noise Permit (General Works)	Works area of 3913	GW-RS0181-23	Valid from 20 Mar 2023 to 19 Sep 2023	

# Appendix E. 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	1
	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	0	0	0	
From 28 December 2015 to end of the reporting period	58	2	2	

# Appendix F. Data of SkyPier HSF Movements to/from Macau (between 1 and 31 May 2023)

### Data of SkyPier HSF Movements to/from Macau (between 1 and 31 May 2023)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [ <u>YFT</u> – Macao (Taipa)]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-May	12:01	8S912	YFT	Arrival	11.6	-	-
02-May	12:42	8S193	YFT	Departure	12.1	-	-
03-May	12:01	8S912	YFT	Arrival	12.3	-	-
03-May	12:44	8S193	YFT	Departure	11.3	-	-
05-May	12:02	8S912	YFT	Arrival	12.5	-	-
05-May	12:50	8S193	YFT	Departure	12.4	-	-
09-May	12:09	8S912	YFT	Arrival	11.9	-	-
09-May	12:46	8S193	YFT	Departure	11.7	-	-
10-May	11:58	8S912	YFT	Arrival	11.6	-	-
10-May	12:54	8S193	YFT	Departure	11.9	-	-
12-May	12:04	8S912	YFT	Arrival	11.5	-	-
12-May	12:43	8S193	YFT	Departure	11.4	-	-
16-May	12:04	8S912	YFT	Arrival	12.9	-	-
16-May	12:42	8S193	YFT	Departure	11.3	-	-
17-May	12:14	8S912	YFT	Arrival	12.1	-	-
17-May	12:47	8S193	YFT	Departure	11.2	-	-
19-May	12:01	8S912	YFT	Arrival	12.3	-	-
19-May	12:47	8S193	YFT	Departure	11.7	-	-
23-May	12:05	8S912	YFT	Arrival	10.8	-	-
23-May	12:44	8S193	YFT	Departure	11	-	-
24-May	12:07	8S912	YFT	Arrival	11.1	-	-
24-May	12:45	8S193	YFT	Departure	11.6	-	-
26-May	12:01	8S912	YFT	Arrival	12	-	-
26-May	12:42	8S193	YFT	Departure	12.5	-	-
30-May	12:05	8S912	YFT	Arrival	12	-	-
30-May	12:48	8S193	YFT	Departure	11.6	-	-
31-May	11:55	8S912	YFT	Arrival	13.3	-	-
31-May	12:47	8S193	YFT	Departure	12.2	-	-

#### Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in May 2023, no instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded.