

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

Construction Phase Monthly EM&A Report No.64 (For April 2021)

May 2021

Airport Authority Hong Kong

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# This Monthly EM&A Report No. 64 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 May 2021



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#### By Email

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

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

14 May 2021

Dear Sir,

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

# Submission of Monthly EM&A Report No. 64 (April 2021)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 64 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 May 2021.

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

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

Yours faithfully, AECOM Asia Co. Ltd.

Jackel Law

Independent Environmental Checker

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# **Abbreviations**

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

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

# **Executive Summary**

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

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

This is the 64<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 30 April 2021.

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

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

#### **EM&A Activities Conducted in the Reporting Period**

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	36
Noise monitoring	16
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

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

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



Small Vessel Line-transect Survey of CWD Conducted by ET



On-site Checking of Construction Noise Permit conducted by ET



Dump Truck with Mechanical Truck Cover used for Delivering C&D Materials

# **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**

#### **Reclamation Works:**

## **Contract 3206 Main Reclamation Works**

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

#### **Airfield Works:**

## **Contract 3301 North Runway Crossover Taxiway**

- Cable ducting works; and
- Subgrade compaction and paving works.

# Contract 3302 Eastern Vehicular Tunnel Advance Works

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

# Contract 3303 Third Runway and Associated Works

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

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

Delivery and installation of lighting system.

## **Contract 3307 Fire Training Facility**

- Excavation; and
- Drainage works.

# **Third Runway Concourse:**

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

- Architectural, Builder's Work and Finishing works;
- Roof lifting works; and
- Underground utilities construction.

## Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation;
- Pre-drilling; and
- Piling work.

## **Terminal 2 Expansion:**

## **Contract 3503 Terminal 2 Foundation and Substructure Works**

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

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

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

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

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

Concreting work and rebar fixing.

# Contract 3602 Existing APM System Modification Works

Concreting work.

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

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

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

# **Contract 3722 Construction Support Facilities**

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

# **Contract 3723 Construction Support Facilities**

- Foundation works;
- Erection of superstructure; and

Site establishment.

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

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

- Construction of working platform and ventilation building;
- Box culvert connection works;
- Cofferdam for shaft;
- Excavation works; and
- Site clearance.

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

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

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

# **Contract 3901A Concrete Batching Facility**

Plant operation.

# **Contract 3901B Concrete Batching Facility**

- Plant operation; and
- Foundation works.

## **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^		$\sqrt{}$	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		$\checkmark$	No breach of Action Level was recorded.	Nil
Complaint Received		V	A complaint regarding alleged dusty and muddy vehicles from Three Runway System Project at Tuen Mun Public Cargo Working Area was received on 20 April 2021.	The complaint is under investigation. Findings will be reported in the next Monthly EM&A Report.
Notification of any summons and status of prosecutions		<b>V</b>	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note

<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**. Description of relevant contracts was presented in **Appendix A**.

# 1.2 Scope of this Report

This is the 64<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 30 April 2021.

#### 1.3 Project Organisation

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

<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).

**Table 1.1: Contact Information of Key Personnel** 

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance, Sustainability	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong	Environmental Team Leader	Terence Kong	2828 5919
Kong Limited)	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

# **Reclamation Works:**

Party	Position	Name	Telephone	
Contract 3206 Main Reclamation Works	Project Manager	Alan Mong	3763 1352	
(ZHEC-CCC-CDC Joint Venture)	Environmental Officer	Kwai Fung Wong	3763 1452	

# **Airfield Works:**

Party	Position	Name	Telephone	
Contract 3301 North Runway Crossover Taxiway	Deputy Project Director	Kin Hang Chung	9800 0048	
(FJT-CHEC-ZHEC Joint Venture)	Environmental Officer	Joe Wong	6182 0351	
Contract 3302 Eastern Vehicular Tunnel Advance	Project Manager	Dickey Yau	5699 4503	
Works (China Road and Bridge Corporation)	Environmental Officer	Dennis Ho	5645 0563	
Contract 3303 Third Runway and Associated	Project Manager	Andrew Keung	6277 6628	
Works (SAPR Joint Venture)	Environmental Officer	Max Chin	6447 5707	
Contract 3305 Airfield Ground Lighting System	Coordination Manager	Kelvin Law	6289 2151	
(ADB Safegate Hong Kong Limited)	Environmental Officer	Calvin Sze	9205 9277	
Contract 3307 Fire Training Facility	Project Manager	Steven Meredith	6109 1813	
(Paul Y. Construction Company Limited)	Environmental Officer	Albert Chan	9700 1083	

# **Third Runway Concourse:**

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres	Project Manager	Alice Leung	9220 3162
Building and Civil Works (Sun Fook Kong Construction Limited)	Environmental Officer	Ray Cheung	9785 1566
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Jacky Lai	9028 8975
Contract 3408 Third Runway Concourse and Apron Works	Assistant Project Manager	Qian Zhang	5377 7976
(Beijing Urban 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	
Party	Position	Name	reiephone	
Contract 3503 Terminal 2 Foundation and	Project Manager	Eric Wu	3973 1718	
Substructure Works (Leighton – Chun Wo Joint Venture)	Environmental Officer	Gomez Yuen	9098 7807	
Contract 3508 Terminal 2 Expansion Works	Project Director	Richard Ellis	6201 5637	
(Gammon Engineering & Construction Company Limited)	Environmental Officer	Gena Tsang	9511 2283	

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

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line)	Project Manager	Hongdan Wei	158 6180 9450
(CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Environmental Officer	P L Wong	9143 2185
Contract 3602 Existing APM System Modification Works (Niigata Transus Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
(Niigata Transys Co., Ltd.)	Environmental Officer	Carrie Kwan	9276 0551

Party	Position	Name	Telephone
Contract 3603 3RS Baggage	Project Manager	K C Ho	9272 9626
Handling System (VISH Consortium)	Environmental Officer	Eric Ha	9215 3432

# **Construction Support (Facilities):**

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works	Site Agent	Thomas Lui	9011 5340
(China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support	Deputy Project Director	Philip Kong	9049 3161
Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Environmental Officer	Jay Chua	6688 0237
Contract 3723 Eastern Support Area – Construction Support	Deputy Project Director	Philip Kong	9049 3161
Facilities (Tapbo Construction Company Limited and Konwo Modular House Ltd. Joint Venture.)	Environmental Officer	Jay Chua	6688 0237
Contract 3728 Minor Site Works	Contract Manager	C K Liu	9194 8739
(Shun Yuen Construction Company Limited)	Environmental Officer	KFLi	9086 1793

# **Airport Support Infrastructure:**

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island	Project Manager	Kingsley Chiang	9424 8437
(China State Construction Engineering (Hong Kong) Ltd.)	Environmental Officer	Federick Wong	9842 2703
Contract 3802 APM and BHS Tunnels and Related	Project Director	John Adams	6111 6989
Works (Gammon Engineering & Construction Company Limited)	Environmental Officer	Phoebe Ng	9869 1105

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

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

# 1.4 Summary of Construction Works

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

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

# 1.5 Summary of EM&A Programme Requirements

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

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

wanuai		
Parameters	EM&A Requirements	Status
Air Quality		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid- ebb tides, for at least four weeks prior to the commencement of marine works.	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and midebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	On-going
Sewerage and Sewage Tr	eatment	
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The proposed methodology of the annual sewage flow monitoring was submitted to EPD.
Details of the routine H <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 details of the routine H <sub>2</sub> S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management		
Waste Monitoring	At least weekly	On-going On-going

Parameters	EM&A Requirements	Status
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted to EPD pursuant to 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 to EPD.
	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted to EPD.
Terrestrial Ecology		
Pre-construction Egretry Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	-	The coral translocation was completed.
Post-Translocation Coral Monitoring	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (C	WD)	
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works.  Vessel line transect surveys: Two full surveys per month;  Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and  Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
Landscape & Visual		
Landscape & Visual Plan		
	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	commencement of construction works on	submitted and approved by EPD under EP Condition 2.18  The baseline landscape & visual monitoring result has been reported in
Baseline Monitoring Impact Monitoring	commencement of construction works on the formed land of the Project.  One-off survey within the Project site boundary prior to commencement of any	submitted and approved by EPD under EP Condition 2.18  The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted
_	commencement of construction works on the formed land of the Project.  One-off survey within the Project site boundary prior to commencement of any construction works	submitted and approved by EPD under EF Condition 2.18  The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.

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

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

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

- One skipper training session provided by ET: 28 April 2021; and
- Seventeen environmental management meetings for EM&A review with works contracts: 1, 8, 9, 13, 14, 19, 21, 22, 28, 29 and 30 April 2021.

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

# 2 Air Quality Monitoring

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

**Table 2.1: Locations of Impact Air Quality Monitoring Stations** 

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

#### 2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

## 2.2 Monitoring Equipment

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

**Table 2.3: Air Quality Monitoring Equipment** 

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 2020	Monthly EM&A Report No. 58, Appendix E
	SIBATA LD-3B-1 (Serial No. 597337)	27 May 2020	Monthly EM&A Report No. 57, Appendix D

# 2.3 Monitoring Methodology

# 2.3.1 Measuring Procedure

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

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

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

# 2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix E of Construction Phase Monthly EM&A Report No. 58, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

# 2.4 Summary of Monitoring Results

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

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

**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	18 - 33	306	500
AR2	10 - 35	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

<b>Monitoring Station</b>	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

Note:

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

#### 3.1 Action and Limit Levels

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

Table 3.2: Action and Limit Levels for Noise Monitoring

<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:

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

# 3.2 Monitoring Equipment

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

**Table 3.3: Noise Monitoring Equipment** 

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

# 3.3 Monitoring Methodology

# 3.3.1 Monitoring Procedure

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

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

#### 3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

# 3.4 Summary of Monitoring Results

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

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

**Table 3.4: Summary of Construction Noise Monitoring Results** 

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)	
	Leq (30mins)	Leq (30mins)	
NM1A <sup>(1)</sup>	66 – 72	75	
NM4 <sup>(1)(3)</sup>	60 – 64	70(2)	
NM5 <sup>(1)(3)</sup>	53 – 57	75	
NM6 <sup>(1)</sup>	64 – 68	75	

#### Notes:

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

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

## 3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A, school activities at NM4 and aircraft noise near NM5 and NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

# 4 Water Quality Monitoring

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

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

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

Monitoring Station	Description	Coordinates		Parameters	
		Easting	Northing		
SR5A	San Tau Beach SSSI	810696	816593		
SR6A <sup>(5)</sup>	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	General Parameters	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	DO, pH, Temperature, Salinity, Turbidity, SS	
SR8 <sup>(6)</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) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (http://env.threerunwaysystem.com/en/epsubmissions.html). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.
- (3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.
- (4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.
- (5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.
- (6) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

## 4.1 Action and Limit Levels

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

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

Parameter	's	Action Level (AL)		Limit Level	(LL)
	Limit Levels for genera SR1A & SR8)	Il water quality mor	nitoring and regular	DCM monitori	ng
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5mg/l		Surface and Middle 4.1mg/l 5mg/l for Fish Culture Zone (SR7) only	
Worldoning		Bottom 3.4mg/l		Bottom 2.7mg/l	
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control	37	or 130% of upstream control
	Turbidity in NTU	22.6	station at the same tide of the	36.1	station at the same tide of the
Regular	Total Alkalinity in ppm 95 same day,	99	same day,		
DCM Monitoring	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/l	0.2	whichever is higher	0.2	whichever is higher
	Representative Heavy Metals for regular DCM monitoring (Nickel) in µg/l	3.2	_	3.6	
Action and	Limit Levels SR1A				
SS (mg/l))		33		42	
Action and	Limit Levels SR8				
SS (mg/l)		52		60	

#### Notes:

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

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

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

#### Note:

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

# 4.2 Monitoring Equipment

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

**Table 4.4: Water Quality Monitoring Equipment** 

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter	YSI 6920V2 (Serial No. 0001C6A7)	22 Apr 2021	Appendix E
(measurement of DO, pH, temperature, salinity and	YSI ProDSS (Serial No. 17H105557)	3 Feb 2021	Monthly EM&A Report No. 62, Appendix D
turbidity)	YSI ProDSS (Serial No. 18A104824)	25 Feb 2021	Monthly EM&A Report No. 62, Appendix D
	YSI ProDSS (Serial No. 15M100005)	25 Mar 2021	Monthly EM&A Report No. 63, Appendix E
	YSI ProDSS (Serial No. 16H104234)	22 Apr 2021	Appendix E
	YSI ProDSS (Serial No. 16H104233)	25 Feb 2021	Monthly EM&A Report No. 62, Appendix D
	YSI ProDSS (Serial No. 17E100747)	25 Mar 2021	Monthly EM&A Report No. 63, Appendix E
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml	26 Feb 2021	Monthly EM&A Report No. 62,
	(Serial No. 10N64701)		Appendix D

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

**Table 4.5: Other Monitoring Equipment** 

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

# 4.3 Monitoring Methodology

# 4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 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, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen), delivered to the laboratory within 24 hours of collection.

#### 4.3.2 Maintenance and Calibration

#### Calibration of In-situ Instruments

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

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

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

## 4.3.3 Laboratory Measurement / Analysis

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

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

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

# 4.4 Summary of Monitoring Results

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

The water quality monitoring results for all parameters (i.e. DO, turbidity, SS, total alkalinity, chromium, and nickel) obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix D**.

#### 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 during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly for reclamation works including DCM works, marine filling and seawall construction as recommended in the Manual.

# 5 Waste Management

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

#### 5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

#### 5.2 Waste Management Status

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

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

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

**Table 5.2: Construction Waste Statistics** 

	C&D <sup>(1)</sup> Material Stockpiled for Reuse or Recycle (m <sup>3</sup> )	Reused in the Project	Reused in other		Chemical Waste (kg)	Chemical Waste (I)	General Refuse (tonne)
March 2021 <sup>(2)(3)</sup>	*9,968	*60,721	0	7,984	1400	62,640	1,838
April 2021 <sup>(2)(4)</sup>	25,441	55,442	0	4,140	0	0	1,194

#### Notes:

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

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

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

## 5.3 Marine Sediment Management

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

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

# 6 Chinese White Dolphin Monitoring

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

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

#### 6.1 Action and Limit Levels

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

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

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

Notes: (referring to the baseline monitoring report)

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

## 6.2 CWD Monitoring Transects and Stations

#### 6.2.1 Small Vessel Line-transect Survey

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

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

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

			EL, NVVL, AVV,		
Waypoint	Easting	Northing	Waypoint	Easting	Northing
	0.40505	NE		0.40500	224422
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
38	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NV			
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
		A	N		
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		W	L		
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	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			
		SV	VL		
18	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
28	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
38	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
		301070	011	303341	301330
48	805478	802105	9S	810542	800423

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

#### 6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

#### 6.3 CWD Monitoring Methodology

#### 6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

#### 6.3.2 Photo Identification

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

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

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

#### 6.3.3 Land-based Theodolite Tracking Survey

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

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

of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

#### 6.4 Monitoring Results and Observations

#### 6.4.1 Small Vessel Line-transect Survey

#### **Survey Effort**

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 7, 12, 13, 14, 15, 19, 20 and 21 April 2021, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 453.52km of survey effort was collected from these surveys and around 76.2% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

#### **Sighting Distribution**

In April 2021, 7 sightings with 23 dolphins were sighted. All these sightings are on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in April 2021 is illustrated in **Figure 6.3**. In WL, CWD sightings were scattered between Tai O and Fan Lau with two sightings recorded within Southwest Lantau Marine Park. In SWL, the two CWD sightings were recorded near Fan Lau Tung Wan. No CWD sightings were recorded in neither NEL nor NWL survey areas during the reporting period.

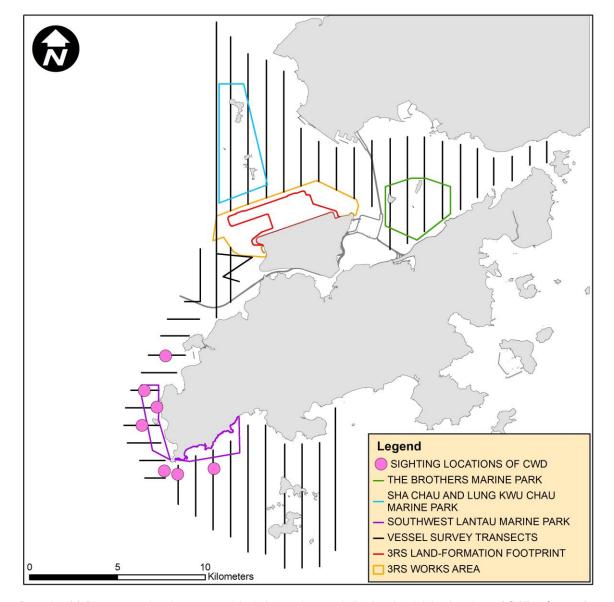


Figure 6.3: Sightings Distribution of Chinese White Dolphins

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

#### **Encounter Rate**

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

Encounter Rate by Number of Dolphin Sightings (STG)

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

#### Encounter Rate by Number of Dolphins (ANI)

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

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

In April 2021, a total of around 345.70 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 7 on-effort sightings with 23 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from February to April 2021), a total of around 1160.53 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 32 on-effort sightings and a total number of 106 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of April 2021 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. Although the running quarterly encounter rate ANI fall below the Action Level, the Action Level is not triggered as the running quarterly STG remain above the Action Level.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
April 2021	2.02	6.65
Running Quarter from February to April 2021 <sup>(1)</sup>	2.76	9.13
Action Level	Running quarterly <sup>(1)</sup> ST	G < 1.86 & ANI < 9.35

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

#### **Group Size**

In April 2021, 7 groups of 23 dolphins in total were sighted, and the average group size of CWDs was 3.29 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) were dominant. There were no CWD sightings with large group size (i.e. 10 or more dolphins).

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

Three CWD sightings were recorded engaging in feeding activities in April 2021 and all these sightings were observed associated with operating purse seiners in WL or SWL.

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

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

#### 6.4.2 Photo Identification

In April 2021, a total number of 13 different CWD individuals were identified for totally 17 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

**Table 6.5: Summary of Photo Identification** 

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM003	12-Apr-21	4	WL	WLMM007	12-Apr-21	4	WL
SLMM007	12-Apr-21	4	WL	WLMM028	12-Apr-21	2	WL
SLMM014	12-Apr-21	2	WL	WLMM029	12-Apr-21	2	WL
		4	WL	WLMM039	12-Apr-21	4	WL
SLMM031	13-Apr-21	6	SWL	WLMM114	13-Apr-21	7	SWL
SLMM037	12-Apr-21	4	WL	WLMM131	13-Apr-21	6	SWL
	13-Apr-21	6	SWL			7	SWL
		7	SWL	WLMM160	12-Apr-21	2	WL
SLMM073	12-Apr-21	4	WL				<u>.</u>

#### 6.4.3 Land-based Theodolite Tracking Survey

#### **Survey Effort**

Land-based theodolite tracking surveys were conducted at SC on 15 April 2021 and at LKC on 21 April 2021, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Two CWD groups were tracked from Lung Kwu Chau while no CWD was observed from Sha Chau 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 D**. The first sighting location of CWD group tracked at LKC station during land-based theodolite tracking survey in April 2021 was depicted in **Figure 6.4**.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	2	0.33
Sha Chau	1	6:00	0	0
TOTAL	2	12:00	2	0.17

Legend

C CWD GROUP OFF LUNG KWU CHAU
LUNG KWU CHAU LAND-BASED
STATION
SHA CHAU AND LUNG KWU CHAU
MARINE PARK

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

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

#### 6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. During this reporting period, the PAM device was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.5**). The C-POD was last deployed on 8 March 2021 and the next re-deployment is scheduled on mid-May 2021 to retrieve the data for analysis. Acoustic data would be reviewed to give an indication of CWDs occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

#### 6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling, in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 2 to 5 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works and seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 703 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

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

#### 6.7 Timing of Reporting CWD Monitoring Results

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

#### 6.8 Summary of CWD Monitoring

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

### 7 Environmental Site Inspection and Audit

#### 7.1 Environmental Site Inspection

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

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

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

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

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

#### 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 B**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase shall be audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the

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

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

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures were checked by ET during weekly site inspection and clarified by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures	3RS Project 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	Tree Protection Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project.	3302, 3503, 3508, 3602, 3801
Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas	The Contractors' performance on the implementation of the trees maintenance and protection measures were observed and checked by the ET weekly during construction period.	3802 (To be implemented)

#### Landscape and Visual Mitigation Measures during Construction

#### **Implementation Status**

#### Relevant Contract(s) in the Reporting Period

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

3503, 3508, 3801

3802 (To be implemented)

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

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

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

CM 10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical To be implemented around taxiways and runways as soon as practicable.

To be implemented

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



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



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



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



General view of Tree Protection Zone for retained tree (CM8)



General view of a transplanted tree (CM9)

In accordance with the EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained and transplanted trees under the Project remained unchanged (i.e. 140 and 14 respectively) comparing to previous reporting period. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5**: Photos of transplanted trees are presented in **Table 7.7**.

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

Table 7.3: Monitoring Programme for Landscape and Visual

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

Table 7.4: Event and Action Plan for Landscape and Visual

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

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

Existing				
Contract	Retain (nos.)	Transplant	ted (nos.)	To-be-transplanted
		Establishment Period	Maintenance Period	(nos.)
3302	9	0	0	0
3503	19	6	3	0
3508 <sup>(1)</sup>	21	0	0	12
3602	2	0	0	0
3801	89	0	5	0
Sub-total	140	6	8	12
Provisional				
Contract	Retain (nos.)	Transplant	ted (nos.)	To-be-transplanted (nos.)
3508 <sup>(1)</sup>	134	0		10
Sub-total	134	0		10
Grand Total	274	14	1	22

#### Notes:

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

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

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

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	Establishment period	Contract 3801	Next inspection will be conducted in
		4 May 2018 - May 2019		February 2022. Photos of the last
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	inspection in February 2021 were shown in <b>Table 7.7</b> .
CT1253	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801	_
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	_
T835	22 Jan 2020	Establishment period	Contract 3503	Next inspection will be conducted in
		23 Jan 2020 – Jan 2021		February 2022. Photos of the last inspection in February 2021 were
		Long Term Management period Feb 2021 – Jan 2030		shown in <b>Table 7.7</b> .
T836	13 Dec 2019	Establishment period	Contract 3503	
		14 Dec 2020 – Jan 2021		
		Long Term Management period	<del>-</del>	
		Feb 2021 – Jan 2030		
T838	22 Jan 2020	Establishment period	Contract 3503	
		23 Jan 2020 – Jan 2021		
		Long Term Management period		
		Feb 2021 – Jan 2030		
T812	21 Dec 2020	Establishment period	Contract 3503	Next inspection will be conducted in
		22 Dec 2020 – Dec 2021		May 2021. Photos of the last inspection in April 2021 were shown
T814	20 Dec 2020	Establishment period 21 Dec 2020 – Dec 2021	Contract 3503	in <b>Table 7.7</b> .
T815	15 Dec 2020	Establishment period	Contract 3503	<u> </u>
		16 Dec 2020 – Dec 2021		
T829	18 Dec 2020	Establishment period	Contract 3503	
		19 Dec 2020 – Dec 2021		
T830	14 Dec 2020	Establishment period	Contract 3503	<u> </u>
		15 Dec 2020 – Dec 2021		
T831	19 Dec 2020	Establishment period	Contract 3503	
		20 Dec 2020 – Dec 2021		
CT1194	4 May 2018	Establishment period	Contract 3801	NA
		5 May 2018 - May 2019		
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.

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

**Table 7.7: Photos of the Existing Transplanted Trees** 





#### 7.3 Land Contamination Assessment

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

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

#### 7.4 Audit of SkyPier High Speed Ferries

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

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

The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 2 to 3 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

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

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

Requirements in the SkyPier Plan	1 to 30 April 2021
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap for all SkyPier HSFs including those not using diverted route	2 to 3 daily movement (within the maximum daily cap - 125 daily movements)

#### 7.5 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

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

- Six skipper training sessions were held by contractors' Environmental Officers.
   Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 8 skippers were trained by ET and 10 skippers were trained by contractors' Environmental Officers. In total, 1742 skippers were trained from August 2016 to April 2021.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

#### 7.6 Implementation of Dolphin Exclusion Zone

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

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

#### 7.7 Status of Submissions under Environmental Permits

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

Table 7.9: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	
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  Accepted / appropriate to the construction of the construction and Associated by EPD	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretry Survey Plan	
2.15	Silt Curtain Deployment Plan	_
2.16	Spill Response Plan	_

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

#### 7.8 Compliance with Other Statutory Environmental Requirements

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

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

#### 7.9.1 Complaints

A complaint was received on 20 April 2021 regarding alleged dusty and muddy vehicles from 3RS Project at Tuen Mun Public Cargo Working Area. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. Findings of investigation will be reported in the next Monthly EM&A Report.

#### 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 G**.

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

#### 8.1 Construction Programme for the Coming Reporting Period

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

#### **Reclamation Works:**

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

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

#### **Airfield Works:**

#### **Contract 3301 North Runway Crossover Taxiway**

- Cable ducting works; and
- Subgrade compaction and paving works.

#### Contract 3302 Eastern Vehicular Tunnel Advance Works

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

#### Contract 3303 Third Runway and Associated Works

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

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

Delivery and installation of lighting system.

#### **Contract 3307 Fire Training Facility**

- Excavation; and
- Drainage works.

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

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

- Architectural, Builder's Work and Finishing works;
- Roof lifting works; and
- Underground utilities construction.

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

- Plant mobilisation;
- · Pre-drilling; and
- Piling work.

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

#### **Contract 3503 Terminal 2 Foundation and Substructure Works**

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

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

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

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

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

Concreting work and rebar fixing.

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

Concreting work.

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

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

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

#### **Contract 3722 Construction Support Facilities**

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

#### **Contract 3723 Construction Support Facilities**

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

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

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

- Construction of working platform and ventilation building;
- Box culvert connection works;
- Cofferdam for shaft;
- Excavation works; and
- Site clearance.

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

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

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

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

Plant operation.

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

- Plant operation; and
- Foundation works.

#### 8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

#### 8.3 Monitoring Schedule for the Coming Reporting Period

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

#### 8.4 Review of the Key Assumptions Adopted in the EIA Report

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

#### 9 Conclusion and Recommendation

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

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

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

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

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

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

### **Figures**

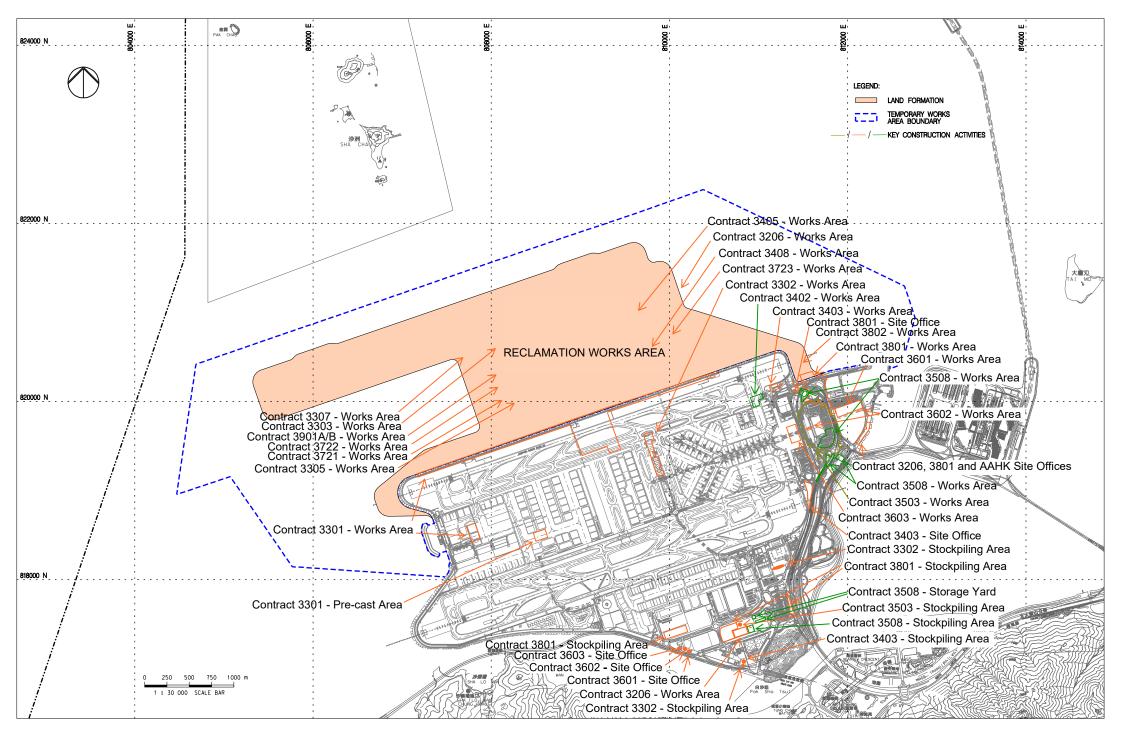
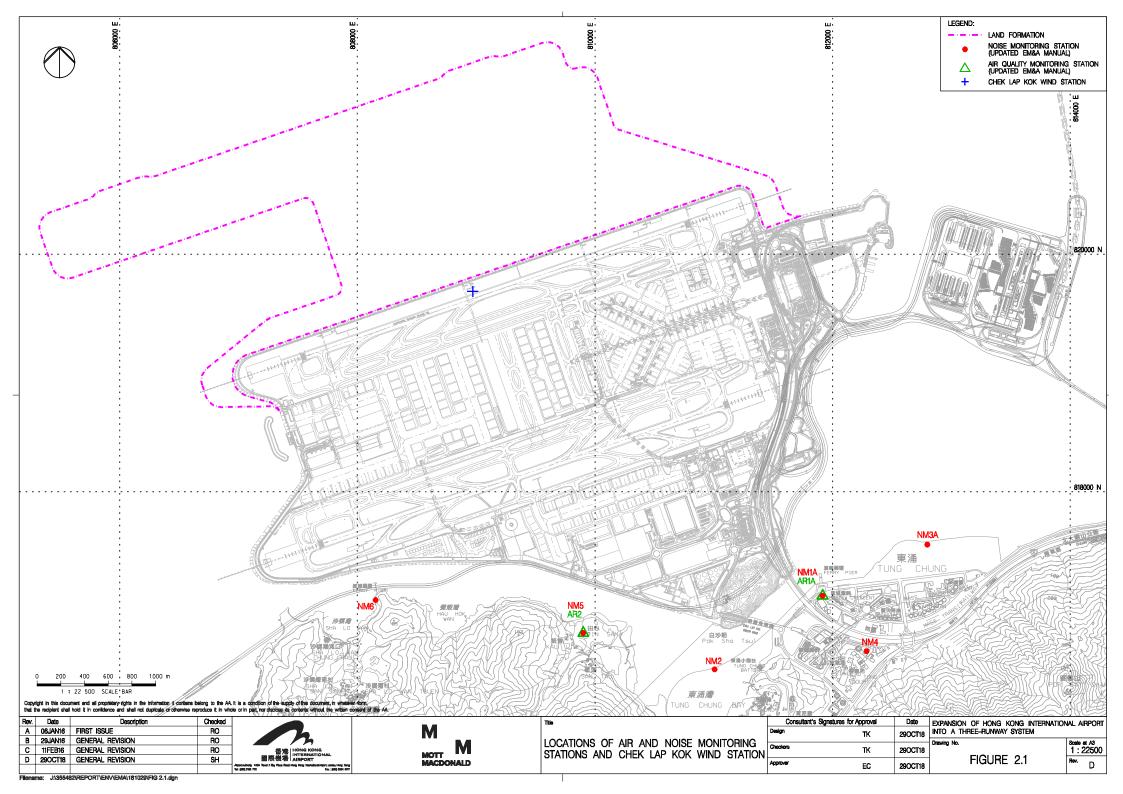
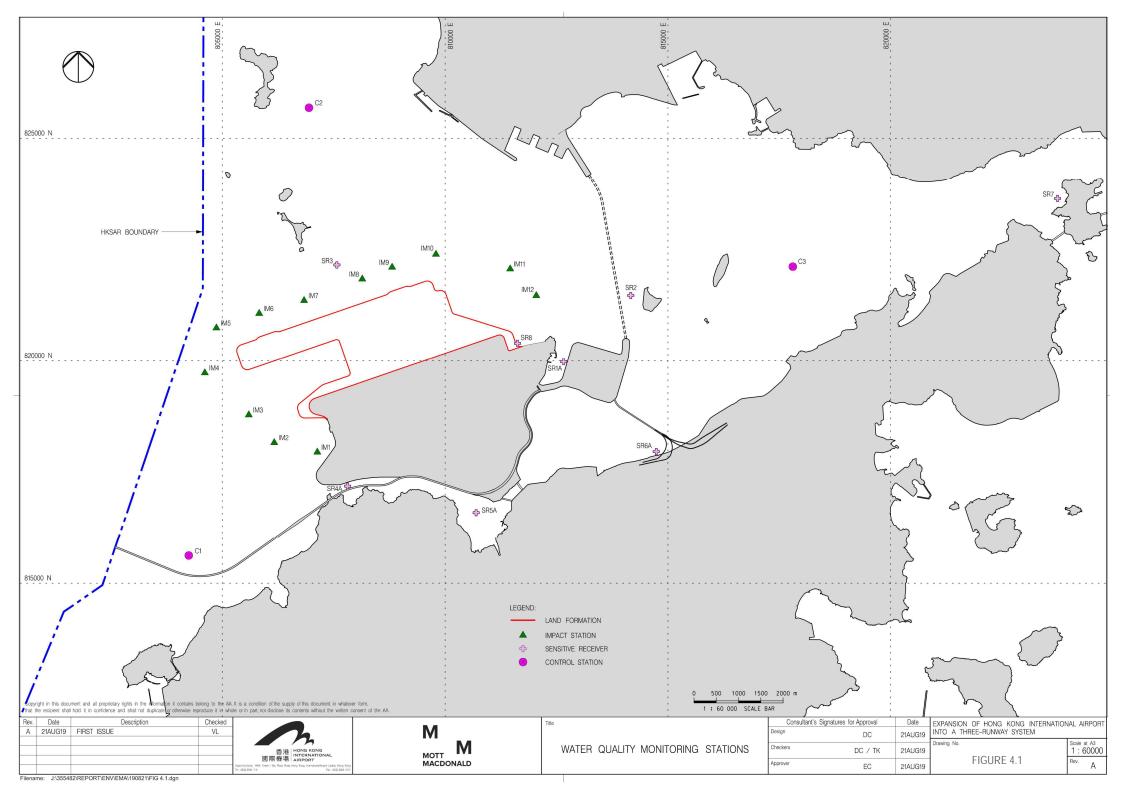
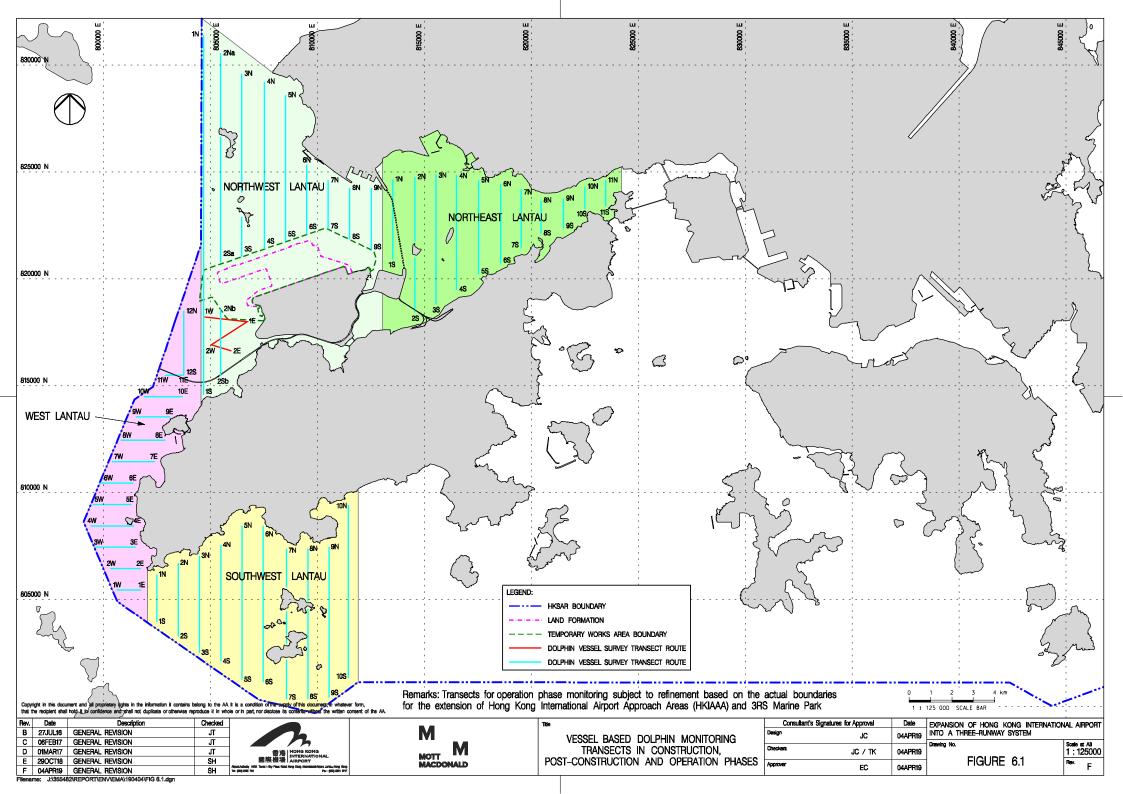
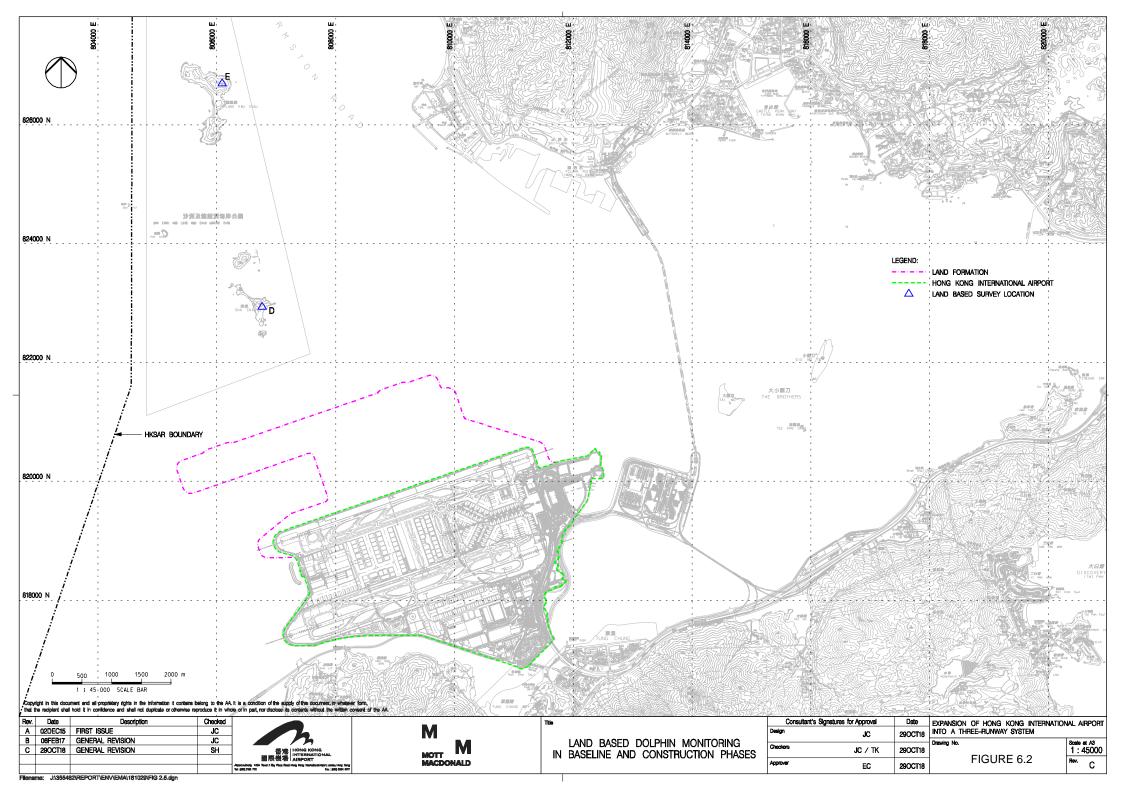


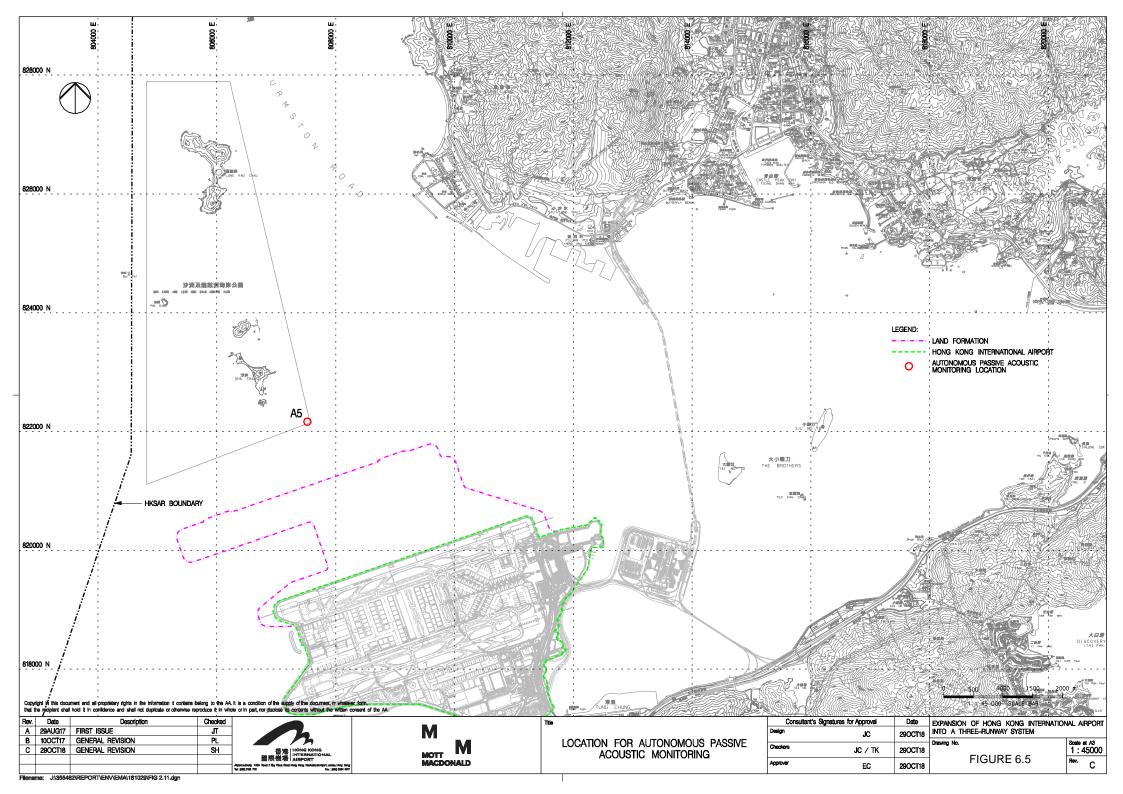
FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES











## Appendix A. Contract Description

### **Contract Description**

Contract No.	Contract Title	Contractor	Key Construction Activities
3206	Reclamation Contract	Zhen Hua Engineering Company LtdChina Communications Construction Company LtdCCCC Dredging (Group) Company Ltd. Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following  • Geotechnical and ground improvement works;  • Seawall construction;  • Marine and land filling works; and  • Civil works.
3301	North Runway Crossover Taxiway	Fujita Corporation-China Harbour Engineering Company LtdZhen Hua Engineering Company Ltd. Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following: <ul> <li>Construction of a new dual taxiway;</li> <li>Cable ducting works;</li> <li>Extension of existing portable water supply system; and</li> <li>All associated works.</li> </ul>
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following:  • Foundation and structural works;  • Cast-in / Underground electrical & mechanical works and utility services; and  • All associated testing and commissioning works.
3303	Third Runway and Associated Works	Sinohydro Corporation Limited, Powerchina Airport Construction Company Limited, Paul Y. Construction Company Limited, and Rock-One	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following:  • New runway, taxiways, and associated works;

Contract No.	Contract Title	Contractor	Key Construction Activities
		Engineering Company Limited Joint Venture	<ul> <li>Infrastructure works;</li> <li>Construction of ancillary buildings and facilities;</li> <li>Set up of various airport systems; and</li> <li>All associated testing and commissioning works.</li> </ul>
3305	Airfield Ground Lighting System	ADB Safegate Hong Kong Limited	The works covered by the Contract 3305 comprise the design, manufacture, installation and handover of the Airfield Ground Lighting (AGL) System. The major construction activities include without limitation the following:  • Light fittings works;  • Power Supply System installation;  • Fibre optic cables and data cables supply and connection;  • Set up Control and Communication system;  • All associated testing and commissioning works.
3307	Fire Training Facility	Paul Y. Construction Company Limited	The works covered by the Contract 3307 comprise the construction of a Fire Training Facility on the new reclamation area to replace the existing facility at the Airport Island. The major construction activities include without limitation the following:  • Building services works;  • Civil works; and  • All associated testing and temporary works.
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following:  • Site clearance and demolition;  • Building services works;  • Utilities diversion and installation works;  • Roadworks including associated facilities; and  • All associated testing and commissioning works.
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&A) works for converting the existing IAC into a back-up IAC, including without limitation the following:  • Site clearance and demolition;

Contract No.	Contract Title	Contractor	Key Construction Activities
			<ul> <li>Building structure and envelope;</li> <li>Building Services and Airport Systems; and</li> <li>Utilities division and installations.</li> </ul>
3405	Third Runway Concourse Foundation and Substructure Works	China Road and Bridge Corporation - Bachy Soletanche Group Limited - LT Sambo Co., Ltd. Joint Venture	The works covered by the Contract 3405 comprise without limitation the following:  • Piled foundation works;  • Basement and tunnel structure works;  • Associated internal reinforced concrete structures;  • Backfilling and compaction of works area; and  • Associated testing and temporary works.
3408	Third Runway Concourse and Apron Works	Beijing Urban Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture	The works covered by the Contract 3408 comprise the design and construction of the Third Runway Concourse (TRC), the TRC Apron, two cross-field taxiways, Ancillary Buildings, specific section of the Eastern Vehicular Tunnel (EVT), and the associated infrastructure, testing, and commissioning works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works.  The major construction activities include without limitation the following:  Re-configuration and demolition of existing utilities and structures;  Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building;  Construction of new South Annex Building;  Diversion and provisions of utilities; and  All associated testing and commissioning works.
3508	Terminal 2 Expansion Works	Gammon Engineering and Construction Co., Ltd	The works covered by the Contract 3508 comprise the construction of T2, North Annex Building (NAB) and South Annex Building (SAB) with interconnecting bridges, landside transport infrastructure including viaducts and at grade roads, underground utility services, one sewage pumping

Contract No.	Contract Title	Contractor	Key Construction Activities
			station with the associated electrical building, footbridges, external works and modification works to existing facilities. The major construction activities include without limitation the following:  • Superstructure, interior landscaping, building services and airport system of T2, NAB, SAB and associated footbridges;  • Additions and Alteration (A&A) works of the existing Airport World Trade Centre (AWTC);  • Modification of the existing APM and BHS tunnels;  • External works and road networks around T2; and  • Utilities.
3601	New Automated People Mover System (TRC Line)	CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture	The works covered by the Contract 3601 comprise the initial phase of the Automated People Mover (APM) system connecting the Third Runway Concourse (TRC) and the APM Interchange Station in the modified T2, and extension of the new APM system into the new APM Depot east of T2. The major construction activities include without limitation the following:  • New 3-guideway APM system between TRC and T2;  • Extension of the TRC Line into the new APM Depot;  • APM associated sub-systems (communications, signalling, etc.)  • Associated civil works; and  • All associated testing, commissioning works.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems:  • Modification of existing APM depot and APM cars;  • Modification of existing T1 & T2 tunnels; and  • Preparation of new APM depot.
3603	3RS Baggage Handling System	Vanderlande Industries Hong Kong Limited and Shun Hing Systems Integration Company Limited	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.

Contract No.	Contract Title	Contractor	Key Construction Activities
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following:  • Project site road;  • Utilities;  • Cargo loading quays; and  • Security fencing and hoarding.
3722	Western Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: <ul> <li>Construction of support facilities;</li> <li>Foundation and structural works; and</li> <li>Building services works.</li> </ul>
3723	Eastern Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Ltd. Joint Venture	The works covered by the Contract 3723 comprise the design and construction of support facilities, including site office, sewage treatment facility, canteen, and centralised power supply building. The major construction activities include without limitation the following: <ul> <li>Construction of support facilities;</li> <li>Foundation, structural and superstructure works;</li> <li>Sewage pipe network and connection works; and</li> <li>Building services works.</li> </ul>
3728	Minor Site Works	Shun Yuen Construction Company Limited	The works to be executed by the Contract 3728 comprise minor works within the Airside and Landside areas of the existing airport island to support the Project.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: <ul> <li>Construction of APM and BHS tunnels;</li> <li>Construction of ventilation building and associated infrastructure; and</li> <li>Construction, testing and commissioning of sewerage pumping station; and</li> </ul>

Contract No.	Contract Title	Contractor	Key Construction Activities
			Civil and structural engineering works.
3802	APM and BHS Tunnels and Related Works	Gammon Construction Limited	The works covered by the Contract 3802 comprise the construction of the APM and BHS tunnels on existing airport island. The major construction activities include without limitation the following:  • Construction of APM/ BHS Tunnels;  • Construction of ancillary buildings/ facilities;  • Building services and airport systems;  • Infrastructure Works;  • Underground utilities and services; and  • All associated testing and commissioning works.
3901A	Concrete Batching Facility	K. Wah Concrete Company Limited	The works covered by the Contract 3901A comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: <ul> <li>Supply of all equipment for the installation of the Facility to the Site; and</li> <li>Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.</li> </ul>
3901B	Concrete Batching Facility	Gammon Construction Limited	The works covered by the Contract 3901B comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following:  • Supply of all equipment for the installation of the Facility to the Site; and  • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.

# Appendix B. 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	ı
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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?
			Loading, Unloading or Transfer of Dusty Materials  All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	Within construction site / Duration of the construction phase	I
			Debris Handling  • Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and	Within construction site / Duration of the construction phase	1
			<ul> <li>Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.</li> <li>Transport of Dusty Materials</li> <li>Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards.</li> </ul>	Within construction site / Duration of the construction phase	ı
			Wheel washing  Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	Within construction site / Duration of the construction phase	1
			Use of vehicles  The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site;	Within construction site / Duration of the construction phase	I
			<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>		
			<ul> <li>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.</li> </ul>		
			Site hoarding  • Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	Within construction site / Duration of the construction phase	I
5.2.6.5	2.1	-	Best Practices for Concrete Batching Plant  The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include:  Cement and other dusty materials	Within Concrete Batching Plant / Duration of the construction phase	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			• The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit;		
			<ul> <li>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;</li> </ul>		
			<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	I
			<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, stock piles 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 Timing of completion of measures	Mitigation 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>		
			<ul> <li>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</li> </ul>		
			■ The opening between the storage bin and weighing scale of the materials shall be fully enclosed.		
			Loading of materials for batching	Within Concrete	I
			<ul> <li>Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented:</li> </ul>	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.		
			<ul> <li>Vehicles</li> <li>All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and</li> <li>All access and route roads within the premises shall be paved and adequately wetted.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	1
			Housekeeping	Within Concrete	1
			<ul> <li>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.</li> </ul>	Batching Plant / Duration of the construction phase	1
5.2.6.6	2.1	-	Best Practices for Asphaltic Concrete Plant	Within Concrete	N/A
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include:	Batching Plant / Duration of the construction phase	
			Design of Chimney		
			<ul> <li>The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater;</li> </ul>		
			■ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented? <sup>4</sup>
			■ 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	N/A
			<ul> <li>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;</li> </ul>	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 Batching Plant / Duration of the construction phase	N/A
			• The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values;		
			<ul> <li>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;</li> </ul>		
			<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>		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
				Timing of completion of measures	
			• 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		
			<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	N/A
			<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	N/A
			<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	N/A
			• The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air.	Batching Plant / Duration of the construction phase	
			Housekeeping	Within Concrete	N/A
			A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.	Batching Plant / Duration of the construction phase	
5.2.6.7	2.1	-	Best Practices for Rock Crushing Plants	Within Concrete	N/A
			The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Batching Plant / Duration of the construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?
				Timing of completion of measures	
			Crushers		
			• The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter;		
			<ul> <li>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;</li> </ul>		
			<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. 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 Batching Plant / Duration of the construction phase	N/A
			• All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and		
			<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
			<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	
			• Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and		
			Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			Storage piles and bins	Within Concrete	N/A
			• Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required.	Batching Plant / Duration of the construction phase	
			<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>		
			<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.		
			<ul> <li>Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.</li> </ul>		
			Rock drilling equipment	Within Concrete	N/A
			<ul> <li>Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.</li> </ul>	Batching Plant / Duration of the construction phase	
			Hazard to Human Life - Construction Phase		
Table 6.40	3.2	-	■ Precautionary measures should be established to request barges to move away during typhoons.	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul> <li>An appropriate marine traffic management system should be established to minimize risk of ship collision.</li> </ul>	Construction Site / Construction Period	1
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	1
			Noise Impact – Construction Phase		
7.5.6	4.3	-	Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:	Within the Project site / During construction phase / Prior to	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>		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			<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>		
			<ul> <li>mobile plant should be sited as far away from NSRs as possible; and</li> </ul>		
			<ul> <li>material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>		
7.5.6	4.3	-	Adoption of QPME	Within the Project site /	ĺ
		<ul> <li>QPME should be adopted as far as applicable.</li> </ul>	During construction phase / Prior to commencement of operation		
7.5.6	4.3	-	Use of Movable Noise Barriers	Within the Project site /	1
			<ul> <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>	During construction phase / Prior to commencement of operation	
7.5.6	4.3	-	Use of Noise Enclosure/ Acoustic Shed	Within the Project site /	1
			<ul> <li>Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.</li> </ul>	During construction phase / Prior to commencement of operation	
	•		Water Quality Impact – Construction Phase		_



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 and 8.8.1.3	5.1	2.26	Marine Construction Activities General Measures to be Applied to All Works Areas	Within construction site / Duration of the	I
			<ul> <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> </ul>	construction phase	
			<ul> <li>Use of Lean Material Overboard (LMOB) systems shall be prohibited;</li> </ul>		
			<ul> <li>Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved;</li> </ul>		
			<ul> <li>Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly;</li> </ul>		
			<ul> <li>Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;</li> </ul>		
			<ul> <li>All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash;</li> </ul>		
			<ul> <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> </ul>		
			• For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.		
			Specific Measures to be Applied to All Works Areas	Within construction	
			<ul> <li>The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report;</li> </ul>	site / Duration of the construction phase	1
			<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>		
			<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>	<u>.</u>	I
			Closed grab dredger shall be used to excavate marine sediment;		N/A
			<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.		ı



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works  Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;  Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and	Within construction site / Duration of the construction phase	N/A  *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)  For C7a, I For C8, I  *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			■ The silt curtains and silt screens should be regularly checked and maintained.	-	ı
			<ul> <li>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</li> <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>	Within construction site / Duration of the construction phase	t (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 be applied at the south-western opening prior to commencement of marine filling activities;</li> </ul>		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 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>		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			The silt curtains and silt screens should be regularly checked and maintained.		I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul> <li>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</li> <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>	Within construction site / Duration of the construction phase	N/A
			<ul> <li>Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.</li> </ul>		
8.8.1.4	5.1	-	<ul> <li>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.</li> </ul>	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	Construction of New Stormwater Outfalls and Modifications to Existing Outfalls	Within construction	N/A
			<ul> <li>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.</li> </ul>	site / Duration of the construction phase	
8.8.1.6	5.1	2.27	Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons	Within construction	1
8.8.1.7			Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.	site / Duration of the construction phase	
			For construction of the eastern approach lights at the CMPs	<del>-</del>	1
			<ul> <li>Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works;</li> </ul>		
			<ul> <li>Steel casings shall be installed to enclose the excavation area prior to commencement of excavation;</li> </ul>		
			The excavated materials shall be removed using a closed grab within the steel casings;		
			No discharge of the cement mixed materials into the marine environment will be allowed; and		
			<ul><li>Excavated materials shall be treated and reused on-site.</li></ul>		
8.8.1.8	5.1	-	Construction of Site Runoff and Drainage  The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:	Within construction site / Duration of the construction phase	
			<ul> <li>Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site</li> </ul>	_	I



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);	_	
			Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;	_	I
			<ul> <li>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.</li> <li>Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;</li> </ul>	_	I
			<ul> <li>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;</li> </ul>	_	I
			• In the event that contaminated groundwater is identified at excavation areas, this should be treated onsite using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and	_	1
			• All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		
8.8.1.9	5.1	-	Sewage Effluent from Construction Workforce	Within construction	I
			Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	site / During construction phase	
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	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
			Timing of completion of measures	Implemented?^	
			• Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.		
8.8.1.12	5.1	2.28	Drilling Activities for the Submarine Aviation Fuel Pipelines	Within construction	1
8.8.1.13		To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:	site / During		
			<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>		
			<ul> <li>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.</li> </ul>		
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:	Within construction site / During construction phase	I
			<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>		
			<ul> <li>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.</li> </ul>		
			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	1
			<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>		I
			<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>	_	I
			<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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
			■ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include:	Project Site Area /	I
			Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site:	Construction Phase	
			<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>		
			<ul> <li>The speed of the trucks including dump trucks carrying C&amp;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</li> </ul>		
			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	
			<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>		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			<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>		
			<ul> <li>Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>		
10.5.1.5	7.1		<ul> <li>Inert and non-inert C&amp;D materials should be handled and stored separately to avoid mixing the two types of materials.</li> </ul>	Project Site Area / Construction Phase	1
10.5.1.5	7.1	-	<ul> <li>Any recyclable materials should be segregated from the non-inert C&amp;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.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	<ul> <li>A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&amp;D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	<ul> <li>The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.</li> </ul>	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	I
			<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>		I
			<ul> <li>All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;</li> </ul>		I
			<ul> <li>Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;</li> </ul>	_	I
			Treated and untreated sediment should be clearly separated and stored separately; and	<del>-</del>	I
			<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>	-	I
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly	Project Site Area / Construction Phase	N/A



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
			Timing of completion of measures	implemented?*	
			followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:		
			<ul> <li>Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material;</li> </ul>		
			<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>		
			<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>		
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	-	<ul> <li>General refuse should be stored in enclosed bins or compaction units separated from inert C&amp;D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</li> </ul>	Project Site Area / Construction Phase	1
10.5.1.21	7.1	-	<ul> <li>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.</li> </ul>	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2	8.1	2.32	For areas inaccessible during site reconnaissance survey	Project Site Area	
to 11.10.1.3			• Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	inaccessible during site reconnaissance / Prior to Construction Phase	1
			<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>	-	ı



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<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>		I *(CAR for golf course and Terminal 2 Emergency Power Supply System Nos.1, 2, 3, 4 and 5)
			<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
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
			<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>		
			<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>		
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	Pre-construction Egretry Survey	Breeding season (April	1
			<ul> <li>Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.</li> </ul>	- July) prior to commencement of	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
12.7.2.3	9.1	2.30 Avoidance and Minimisation of Direct Impact to Egretry	During construction	I	
and 12.7.2.6			<ul> <li>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;</li> </ul>	phase at Sheung Sha Chau Island	
			<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	Preservation of Nesting Vegetation	During construction	1
			• The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved.	phase at Sheung Sha Chau Island	
12.7.2.4	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season	During construction phase at Sheung Sha Chau Island	I
and 12.7.2.6			<ul> <li>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.</li> </ul>		
12.10.1.1	9.3	-	Ecological Monitoring	at Sheung Sha Chau	I
			<ul> <li>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.</li> </ul>	Island	
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	■ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	1
			Marine Ecological Impact – Construction Phase		
13.11.1.3	-	-	Minimisation of Land Formation Area	Land formation	I
to 13.11.1.6			<ul> <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>	footprint / during detailed design phase to completion of construction	
13.11.1.7	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance	During construction	
to 13.11.1.10			<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	1



EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
			Timing of completion of 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 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>		ı
		<ul> <li>Avoid bored piling during CWD peak calving season (Mar to Jun);</li> </ul>	_	1
		■ 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>		I
-	-	Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
		<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	1
		<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> </ul>		1
		<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>		I
		Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
-	-	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>		
-	-	Good Construction Site Practices     Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;     Keep the number of working or stationary vessels present on-site to the minimum anytime; and     Neschoduled, on site audits for all good site practice restrictions should be conducted, and fines or	All works area during the construction phase	1
			**Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment;   **Use of bored pilling in short duration to form the new approach lights and marker beacons for the new runway;   **Avoid bored pilling during CWD peak calving season (Mar to Jun);   **Prohibition of underwater percussive pilling; and     **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.   **Alternative construction for Indirect Disturbance due to Deterioration of Water Quality     **Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;     **Alternative construction methods including use of non-dredge methods for ground improvement (e.g., Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);     **Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and     **Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.     **Strict Enforcement of No-Dumping Policy     **A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area;     **Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works;     **Fines for infractions should be implemented; and     **Unscheduled, on-site audits shall be implemented.     *	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 manine environment:



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
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 to 13.11.5.13	10.3.1	-	<ul> <li>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</li> <li>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&amp;A data and taking reference to changes in total SkyPier HSF numbers; and</li> <li>A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.</li> </ul>	Area between the footprint and SCLKC Marine Park during construction phase	1
			The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and  The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	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	ı
			<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>		I
			<ul> <li>A DEZ would also be implemented during bored piling work but as a precautionary measure only.</li> </ul>		l
13.11.5.19	10.4	2.31	Acoustic Decoupling of Construction Equipment  Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and  Specific acoustic decoupling measures shall be specified during the detailed design of the project for	Around coastal works area during construction phase	1
10.11.5.00	40.04	0.00	use during the land formation works.	0 1 1 1 1	
13.11.5.20	10.6.1	2.29	Spill Response Plan	Construction phase	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul> <li>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.</li> </ul>		
13.11.5.21 to 13.11.5.23	10.6.1	-	Construction Vessel Speed Limits and Skipper Training  A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and  Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		<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 fisheries resources.</li> </ul>	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance  Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	ı
			<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>	_	I
			<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>	_	I
14.9.1.11	-		Strict Enforcement of No-Dumping Policy  A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area;  Mandatory educational programme of the no-dumpling policy be made available to all construction site	All works area during the construction phase	I
			personnel for all project-related works;  Fines for infractions should be implemented; and  Unscheduled, on-site audits shall be implemented.		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
14.9.1.12	-		<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
14.9.1.13	-		Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 14.9.1.18	to		<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	1
			• Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);	-	I
			<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>	-	1
			<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>		I
			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.	ı
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.	1



EIA Ref.	EM&A Ref.		Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^	
Table 15.6	12.3	-	<b>CM5</b> - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I	
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and	I	
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	completion of works.  All works areas for duration of works; Upon handover and completion of works. — may be disassembled in phases	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 be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	1	
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 necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	1	
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 runways and verges/Duration of works;	N/A	



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

#### Notes:

<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 where applicable.

<sup>&</sup>quot; N/A" Not applicable to the construction works implemented during the reporting month.

<sup>&</sup>quot;^" Checked by ET through site inspection and record provided by the Contractor.

### **Appendix C. Monitoring Schedule**

## Monitoring Schedule of This Reporting Period

## Apr-21

Stunday   Monday   Thursday   Wodered St   Thursday   Friday   Saturday				/ (PI ZI			
1   1   1   1   1   1   1   1   1   1	Sunday	Monday	Tuesday	Wednesday	Thu <u>rsday</u>	Friday	Saturday
WG General & Regular DCM   models   153   150					1		
15					AR1A, AR2		
Site Inspection					mid-ebb: 15:33 mid-flood: 09:04		mid-ebb: 17:19 mid-flood: 10:12
CVVD Durrey (West)	4	5	6				10
Mode				Site Inspection	Site Inspection	Site Inspection	
NMIA, NMS				CWD Survey (Vessel)			
WG General & Regular DCM   MG General & Regula					NIMA NIMA		
11				NIVITA, NIVIS	INIVI4, INIVIO		
11							
11 12 Site Inspection CVD Survey (Vessel) AR1A, AR2 NM1A, AM6 NM6 NMA, AM6 NM6 NM6 NM6 NM6 NM6 NM6 NM6 NM6 NM6 N							
CWD Survey (Vessel) AR1A, AR2 MIA, NMS WO General & Regular DCM mod-ebb: mod-lood: mod	11	12				16	
AR1A, AR2 NM1A, NM6 WG General & Regular DCM mid-ebb: mid-lood: mi		Site Inspection	Site Inspection		Site Inspection	Site Inspection	
AR1A, AR2 NM1A, NM6 WG General & Regular DCM mid-ebb: mid-lood: mi		CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel, Land-based)		
WQ General & Regular DCM   mid-elbc   mid-		AR1A, AR2		, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,		AR1A, AR2
18		NM1A, NM5	NM4, NM6				
18 19 Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: mid-lood: 18.41 mid-ebb: mid-lood: 14.36 MQ General & Regular DCM mid-ebb: mid-lood: 06.49 MQ General & Regular DCM mid-ebb: mid-lood: 07.56 MQ General & Regular DCM mid-e							
19   Site Inspection   20   Site Inspection   CWD Survey (Vessel)   CWD Survey (Vessel, Land-based)   CWD Survey (Vessel, Land-based)   NMM, NM6   WCG General & Regular DCM   Mid-abb:				55 39			
Site Inspection  CWD Survey (Vessel)  NM4, NM6  WQ General & Regular DCM  mid-ebb: mid-flood: mi	18	19				23	
NM4, NM6   NM4, NM6   NM4, NM6   NM4, NM6   NM4, NM5   NM4, NM6   NM6, NM6, NM6, NM6, NM6, NM6, NM6, NM6,		Site Inspection	Site Inspection		Site Inspection		
NM4, NM6   NM4, NM6   NM4, NM6   NM4, NM6   NM4, NM5   NM4, NM5   NM4, NM5   NM4, NM5   NM4, NM5   NM4, NM5   NM4, NM6   NM4, NM6   NM6, NM6, NM6, NM6, NM6, NM6, NM6, NM6,		CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel, Land-based)			
WQ General & Regular DCM   Mid-ebb:   18.41   Mid-ebb:   14.36   Mid-lood:   16.55							
Mid-ebb:   18.41   mid-ebb:   09.59   mid-ebb:   11:18   mid-flood:   14:36   mid-flood:   14:36   mid-flood:   16:55				NM4, NM6		NM1A, NM5	
25 26 Site Inspection Site Ins							
25 Site Inspection  28 29 Site Inspection  AR1A, AR2 NM1A, NM5  WQ General & Regular DCM mid-ebb: mid-flood:  CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality  Notes: NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan							
Site Inspection  Site Inspection  Site Inspection  Site Inspection  AR1A, AR2 NM1A, NM5 NM4, NM6  WQ General & Regular DCM mid-ebb: mid-llood: 06:49  Notes:  CWD - Chinese White Dolphin  Air quality and Noise Monitoring Station WQ - Water Quality  NG - Water Quality  Site Inspection	25	26				30	10.55
WQ General & Regular DCM mid-ebb: mid-flood: 06:49  Notes:  CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ General & Regular DCM mid-ebb: mid-flood: 06:49  NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan					Site Inspection	Site Inspection	
WQ General & Regular DCM mid-ebb: mid-flood: 06:49  Notes:  CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ General & Regular DCM mid-ebb: mid-flood: 06:49  NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan							
WQ General & Regular DCM mid-ebb: 13:06 mid-flood: 06:49 mid-flood: 14:32 mid-flood: 07:54  Notes:  CWD - Chinese White Dolphin Air quality and Noise Monitoring Station NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan							
mid-ebb: 13:06 mid-flood: 06:49 mid-flood: 07:54  Notes:  CWD - Chinese White Dolphin  Air quality and Noise Monitoring Station  WQ - Water Quality  mid-ebb: mid-ebb: 14:32 mid-flood: 07:54  NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan					NM1A, NM5	NM4, NM6	
Motes:  CWD - Chinese White Dolphin  Air quality and Noise Monitoring Station  WQ - Water Quality  mid-flood: 07:54  NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan							
Notes:  CWD - Chinese White Dolphin  NM1A/AR1A - Man Tung Road Park  NM4 - Ching Chung Hau Po Woon Primary School  NM5/AR2 - Village House, Tin Sum  NM6 - House No. 1, Sha Lo Wan							
NM1A/AR1A - Man Tung Road Park Air quality and Noise Monitoring Station Air quality and Noise Monitoring Station Air quality and Noise Monitoring Station AM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				·~[	07.04	ļ	
NM1A/AR1A - Man Tung Road Park Air quality and Noise Monitoring Station Air Quality and Noise Monitoring Station Air Quality and Noise Monitoring Station AM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan							
Air quality and Noise Monitoring Station  NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan			CWD - Chinese White Dolphin	NM1A/AR1A - Man Tung Road Park			
NNIO/AR2 - Village House, I in Sum  NM6 - House No. 1, Sha Lo Wan  WQ - Water Quality			Air quality and Noise Monitoring Station	NM4 - Ching Chung Hau Po Woon Primar	ry School		
WQ - Water Quality			7 in quality and Holse Monitoring Station				
DCM - Deep Cement Mixing				TAINIO - LIOUSE INO. 1, SHA LO WAIT			
			DCM - Deep Cement Mixing				

## Tentative Monitoring Schedule of Next Reporting Period

May-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
						WQ General & Regular DCM
						mid-ebb: 16:10 mid-flood: 09:05
2	3	4	5	6	7	8
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
			CWD Survey (Vessel)			
			AR1A, AR2			
		NM4, NM6	NM1A, NM5			
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 19: mid-flood: 06:		mid-ebb: 10:29 mid-flood: 15:26		mid-ebb: 11:38 mid-flood: 17:17
9	10	11	12	13	14	15
	Site Inspection	Site Inspection	'-	Site Inspection	Site Inspection	
		CWD Survey (Vessel)		CWD Survey (Land-based)		
		AR1A, AR2		CVVD Survey (Land-based)		
	NM4, NM6	NM1A, NM5				
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 13: mid-flood: 06:	01	mid-ebb: 14:00 mid-flood: 07:12		mid-ebb: 15:05 mid-flood: 07:58
16	17	18	19	20	21	22
.,	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
				CWD Survey (Vessel)	CWD Survey (Vessel)	
	AR1A, AR2				CVVD ourvey (vesser)	AR1A, AR2
	NM1A, NM5			NM4, NM6		
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 17: mid-flood: 04:		mid-ebb: 19:26 mid-flood: 06:57		mid-ebb: 10:02 mid-flood: 15:33
23	24	25	26	27	28	29
	Site Inspection	Site Inspection		Site Inspection	Site Inspection	
	CWD Survey (Land-based)	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)	
	OWD Survey (Land-based)	CWD durvey (vesser)		OWD Survey (Vessel)	AR1A, AR2	
			NM4, NM6		NM1A, NM5	
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 12: mid-flood: 18:	03	mid-ebb: 13:33 mid-flood: 06:45	3	mid-ebb: 15:09 mid-flood: 08:03
30	31	Notes:	<del>40</del> ]	mia-1100a. 06:48	7]	mia-1100a. 08:03
	<b>1</b> 3.					
		CWD - Chinese White Dolphin	NM1A/AR1A - Man Tung Road Park			
		Air quality and Noise Monitoring Station	NM4 - Ching Chung Hau Po Woon Prima	ary School		
		All quality and ivoise Monitoring Station	NM5/AR2 - Village House, Tin Sum			
		WQ - Water Quality	NM6 - House No. 1, Sha Lo Wan			
		DCM - Deep Cement Mixing				

## **Appendix D. Monitoring Results**

Air Quality Monitoring Results

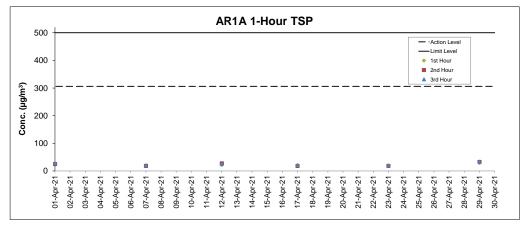
#### 1-hour TSP Results

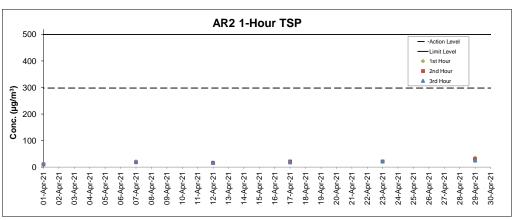
#### Station: AR1A- Man Tung Road Park

D-4-	T:	W+b	Wind Speed	Wind Direction		Action Level	Limit Level
Date	Time	Weather	(m/s)	(deg)	1-hr TSP (µg/m³)	(μg/m³)	(μg/m³)
1-Apr-21	13:22	Cloudy	5.3	199	25	306	500
1-Apr-21	14:22	Cloudy	6.7	206	25	306	500
1-Apr-21	15:22	Cloudy	5.0	208	28	306	500
7-Apr-21	13:26	Cloudy	7.5	84	20	306	500
7-Apr-21	14:26	Cloudy	6.9	81	18	306	500
7-Apr-21	15:26	Cloudy	6.7	87	20	306	500
12-Apr-21	13:09	Cloudy	4.2	260	21	306	500
12-Apr-21	14:09	Cloudy	3.9	255	27	306	500
12-Apr-21	15:09	Cloudy	2.2	306	25	306	500
17-Apr-21	13:04	Cloudy	2.5	96	19	306	500
17-Apr-21	14:04	Cloudy	2.5	107	18	306	500
17-Apr-21	15:04	Cloudy	3.3	90	21	306	500
23-Apr-21	13:13	Cloudy	4.7	255	19	306	500
23-Apr-21	14:13	Cloudy	5.3	257	18	306	500
23-Apr-21	15:13	Cloudy	6.7	240	19	306	500
29-Apr-21	13:20	Cloudy	3.9	274	29	306	500
29-Apr-21	14:20	Cloudy	4.2	282	32	306	500
29-Apr-21	15:20	Cloudy	3.3	279	33	306	500

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

Station: AKZ- Villa	ige nouse, ili	1 Sum					
Date	Time	Weather	Wind Speed	Wind Direction	4 1 700 / / 3	Action Level	Limit Level
Date	Time	weather	(m/s)	(deg)	1-hr TSP (μg/m³)	(μg/m³)	$(\mu g/m^3)$
1-Apr-21	13:15	Cloudy	5.3	200	10	298	500
1-Apr-21	14:15	Cloudy	5.8	209	10	298	500
1-Apr-21	15:15	Cloudy	4.7	207	13	298	500
7-Apr-21	13:47	Cloudy	7.8	90	19	298	500
7-Apr-21	14:47	Cloudy	6.7	87	18	298	500
7-Apr-21	15:47	Cloudy	5.8	100	21	298	500
12-Apr-21	12:50	Cloudy	3.9	265	15	298	500
12-Apr-21	13:50	Cloudy	3.1	264	16	298	500
12-Apr-21	14:50	Cloudy	2.2	297	16	298	500
17-Apr-21	9:39	Cloudy	2.2	72	17	298	500
17-Apr-21	10:39	Cloudy	2.8	73	21	298	500
17-Apr-21	11:39	Cloudy	2.8	120	18	298	500
23-Apr-21	12:46	Sunny	4.7	254	20	298	500
23-Apr-21	13:46	Sunny	5.0	240	21	298	500
23-Apr-21	14:46	Sunny	5.8	239	21	298	500
29-Apr-21	14:04	Cloudy	3.9	282	35	298	500
29-Apr-21	15:04	Cloudy	3.3	274	30	298	500
29-Apr-21	16:04	Cloudy	3.6	267	25	298	500





- Notes

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

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

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

Noise Monitoring Res	ults	

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

#### **Noise Measurement Results**

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured	Measured	Ι Δ
Date	weather	Time	<b>L</b> <sub>10</sub> dB(A)	$\mathbf{L}_{90}$ dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
07-Apr-21	Cloudy	17:29	65.2	59.7	
07-Apr-21	Cloudy	17:34	65.4	61.7	
07-Apr-21	Cloudy	17:39	65.4	61.7	66
07-Apr-21	Cloudy	17:44	64.2	59.4	00
07-Apr-21	Cloudy	17:49	63.4	59.7	
07-Apr-21	Cloudy	17:54	63.3	59.6	1
12-Apr-21	Cloudy	16:24	73.4	50.3	
12-Apr-21	Cloudy	16:29	70.0	50.5	
12-Apr-21	Cloudy	16:34	73.4	50.7	72
12-Apr-21	Cloudy	16:39	73.5	52.3	72
12-Apr-21	Cloudy	16:44	72.2	50.7	1
12-Apr-21	Cloudy	16:49	70.9	50.6	1
23-Apr-21	Cloudy	13:19	73.8	61.9	
23-Apr-21	Cloudy	13:24	74.1	63.0	1
23-Apr-21	Cloudy	13:29	68.4	57.3	70
23-Apr-21	Cloudy	13:34	68.2	57.5	70
23-Apr-21	Cloudy	13:39	68.3	57.4	
23-Apr-21	Cloudy	13:44	64.9	53.3	1
29-Apr-21	Cloudy	13:20	70.0	60.4	
29-Apr-21	Cloudy	13:25	70.3	61.1	]
29-Apr-21	Cloudy	13:30	70.6	61.4	70
29-Apr-21	Cloudy	13:35	72.6	61.0	] / /
29-Apr-21	Cloudy	13:40	68.1	58.8	]
29-Apr-21	Cloudy	13:45	66.5	58.3	

Remark:

#### **Noise Measurement Results**

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured	Measured	I 40(A) A
Date	weather	Tille	$\mathbf{L}_{10}$ dB(A)	$\mathbf{L}_{90}$ dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
08-Apr-21	Cloudy	13:16	64.5	57.9	
08-Apr-21	Cloudy	13:21	63.1	58.0	
08-Apr-21	Cloudy	13:26	63.1	58.8	64
08-Apr-21	Cloudy	13:31	62.8	58.8	04
08-Apr-21	Cloudy	13:36	61.9	57.2	
08-Apr-21	Cloudy	13:41	62.2	57.7	
13-Apr-21	Cloudy	13:02	60.7	57.0	
13-Apr-21	Cloudy	13:07	61.5	57.7	
13-Apr-21	Cloudy	13:12	62.5	58.2	60*
13-Apr-21	Cloudy	13:17	65.0	58.1	60
13-Apr-21	Cloudy	13:22	65.6	58.3	
13-Apr-21	Cloudy	13:27	64.6	58.3	
21-Apr-21	Cloudy	13:02	71.8	59.3	
21-Apr-21	Cloudy	13:07	66.9	60.0	
21-Apr-21	Cloudy	13:12	65.4	58.9	64*
21-Apr-21	Cloudy	13:17	69.5	57.7	04
21-Apr-21	Cloudy	13:22	65.4	57.7	
21-Apr-21	Cloudy	13:27	62.1	56.9	
30-Apr-21	Cloudy	13:12	61.0	55.8	
30-Apr-21	Cloudy	13:17	61.7	55.3	
30-Apr-21	Cloudy	13:22	60.3	54.5	62
30-Apr-21	Cloudy	13:27	60.6	54.7	02
30-Apr-21	Cloudy	13:32	61.7	54.8	
30-Apr-21	Cloudy	13:37	61.1	55.9	

<sup>^: +3</sup>dB (A) correction in  $L_{\text{eq}(30\text{mins})}\,\text{dB(A)}$  was applied to free-field measurement.

A: +3dB (A) correction in L<sub>eq(30mins)</sub> dB(A) was applied to free-field measurement.
\*: The measurement result was corrected with reference to the baseline monitoring levels.

#### **Noise Measurement Results**

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured	Measured	Ι Δ
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) ^
07-Apr-21	Cloudy	14:28	61.6	53.2	
07-Apr-21	Cloudy	14:33	57.6	52.9	
07-Apr-21	Cloudy	14:38	57.8	48.9	53*
07-Apr-21	Cloudy	14:43	57.5	48.7	33
07-Apr-21	Cloudy	14:48	58.0	48.4	
07-Apr-21	Cloudy	14:53	57.4	47.3	
12-Apr-21	Cloudy	12:54	50.3	45.7	
12-Apr-21	Cloudy	12:59	53.6	44.5	
12-Apr-21	Cloudy	13:04	50.5	44.3	54
12-Apr-21	Cloudy	13:09	50.0	43.0	54
12-Apr-21	Cloudy	13:14	56.3	43.3	
12-Apr-21	Cloudy	13:19	52.5	43.9	
23-Apr-21	Sunny	13:01	50.8	41.0	
23-Apr-21	Sunny	13:06	50.7	41.6	
23-Apr-21	Sunny	13:11	46.3	41.3	53
23-Apr-21	Sunny	13:16	51.6	43.0	33
23-Apr-21	Sunny	13:21	48.6	43.1	
23-Apr-21	Sunny	13:26	56.8	42.4	
29-Apr-21	Cloudy	14:10	53.8	44.7	
29-Apr-21	Cloudy	14:15	55.6	45.6	
29-Apr-21	Cloudy	14:20	53.2	46.1	57
29-Apr-21	Cloudy	14:25	52.7	46.2	] 3/
29-Apr-21	Cloudy	14:30	56.5	49.0	
29-Apr-21	Cloudy	14:35	59.4	47.4	

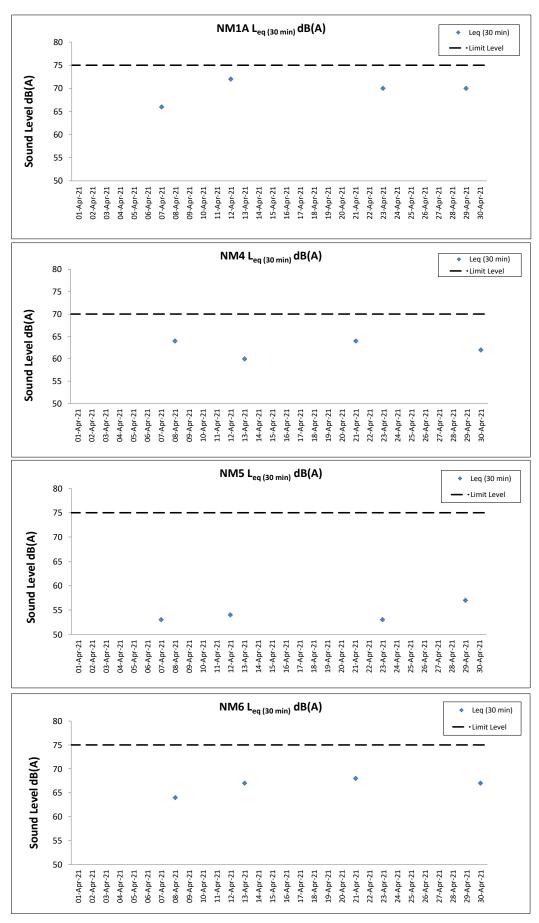
#### **Noise Measurement Results**

Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured	Measured	Ι (ο/Α) Δ
Date	weather	rime	<b>L</b> <sub>10</sub> dB(A)	<b>L</b> <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
08-Apr-21	Cloudy	15:51	65.3	55.6	
08-Apr-21	Cloudy	15:56	65.7	55.8	
08-Apr-21	Cloudy	16:01	61.2	54.8	64
08-Apr-21	Cloudy	16:06	59.5	54.9	04
08-Apr-21	Cloudy	16:11	60.1	55.4	
08-Apr-21	Cloudy	16:16	62.1	55.3	
13-Apr-21	Cloudy	15:48	65.3	55.8	
13-Apr-21	Cloudy	15:53	65.5	56.0	7
13-Apr-21	Cloudy	15:58	65.5	56.1	67
13-Apr-21	Cloudy	16:03	66.3	55.5	0/
13-Apr-21	Cloudy	16:08	71.5	56.6	7
13-Apr-21	Cloudy	16:13	66.4	56.1	7
21-Apr-21	Cloudy	15:47	70.2	58.0	
21-Apr-21	Cloudy	15:52	67.2	57.3	7
21-Apr-21	Cloudy	15:57	68.9	57.8	68
21-Apr-21	Cloudy	16:02	68.1	56.6	00
21-Apr-21	Cloudy	16:07	66.2	56.6	7
21-Apr-21	Cloudy	16:12	68.3	56.9	7
30-Apr-21	Cloudy	15:40	64.5	51.1	
30-Apr-21	Cloudy	15:45	64.8	49.4	7
30-Apr-21	Cloudy	15:50	53.5	45.1	67
30-Apr-21	Cloudy	15:55	59.0	47.3	0/
30-Apr-21	Cloudy	16:00	59.9	43.4	
30-Apr-21	Cloudy	16:05	67.7	47.0	

<sup>^:</sup>  $\pm 3dB$  (A) correction in L<sub>eq(30min3)</sub> dB(A) was applied to free-field measurement. \*: The measurement result was corrected with reference to the baseline monitoring levels.

<sup>^: +3</sup>dB (A) correction in  $\rm L_{eq(30mins)}\,dB(A)$  was applied to free-field measurement.



#### Notes

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

Water Quality Monitoring Results	S
Water Quality Monitoring Results	S

Water Qua		toring Res			01 April 21 during I	lid-Ebb Tid Current	е	I		ı		Ι.	1	DO S	aturation	Dissolved	T		Suspende	ed Solids	Total Alkalinity	d	T	Chromium	T
Monitoring	Weather	Sea	Sampling	Water	Sampling Depth (m)	Speed	Current	Water T	emperature (°C)		pН	Salir	nity (ppt)		(%)	Oxygen	Turbidity	(NTU)	(mg		(ppm)	Coordinate HK Grid	Coordinate HK Grid	(µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	-	alue DA		DA	Value	DA	Value DA	(Northing)	(Easting)	Value DA	
					Surface 1.0 1.0	2.0	97 104	24.4 24.4	24.4	8.1 8.1	8.1	33.0	33.0	107.1	107.1	7.4	4.8	1	4	ł	88 88			<0.2	0.9
C1	Misty	Calm	14:54	8.0	Middle 4.0 4.0	1.9 1.9	96 96	24.2 24.1	24.2	8.1 8.1	8.1	33.2 33.3	33.2	103.3 102.9	402.4	7.2 7.2	5.4 5.6	5.7	3	3	92 92 91	815621	804268	<0.2	nα
					Rottom 7.0	2.0	94	23.9	23.9	8.1	8.1	33.5	33.5	100.8	100.6	7.0	6.8	İ	3	İ	93			<0.2	0.9
					7.0	2.0 0.5	99 145	23.9 24.4	24.4	8.1	8.0	33.5 29.8		100.4 101.2	101.1	7.0	6.9 5.0		3		93 86			<0.2 <0.2	0.9 1.4
					Surface 1.0 6.7	0.5	157 137	24.3 24.1		8.0		29.9 30.6	29.8	100.9 99.1		7.1 7.0	5.0 4.9	I	4	1	87 89			<0.2	1.4
C2	Sunny	Moderate	13:48	13.4	Middle 6.7	0.5	141	24.0	24.1	8.0	8.0	30.6	30.6	99.1	99.1	7.0	4.9	5.3	4	4	89 69	825667	806952	<0.2	2 1.3 1.3 1.3
					Bottom 12.4 12.4	0.4	154 166	24.1 24.1	24.1	8.0	8.0	30.7	30.7	98.6 98.5	96.6	7.0 6.9 7.0	6.0		5 5		91 91			<0.2 <0.2	1.3
					Surface 1.0 1.0	0.6	122 125	24.2	24.2	8.0	8.0	30.6	30.6	101.0		7.1 7.1 7.1	4.2		6		86 87			<0.2	1.2
СЗ	Sunny	Moderate	15:41	11.7	Middle 5.9 5.9	0.4 0.5	118 125	24.0 24.0	24.0	8.0	8.0	31.0 31.0	31.0	99.6 99.6	00.0	7.0 7.0	4.4 4.4	4.9	5	5	88 87	822096	817821	<0.2	4.6
					Rottom 10.7	0.3	111	24.0	24.0	8.0	8.0	31.1	31.1	99.4	00.4	7.0	5.9		4	<u> </u>	90			<0.2	1.3
					10.7 Surface 1.0	0.3	113 192	24.0 24.5	24.5	8.0 8.1	8.1	31.1 32.4	32.4	99.4 102.3	103.0	7.0 7.0 7.1	6.0 4.2		5		89 87			<0.2	1.1 0.8
					1.0	0.1	196	24.5		8.1	0.1	32.4	32.4	101.7	102.0	7.1	4.5		2	I	88			<0.2	0.8
IM1	Misty	Calm	14:32	5.0	Middle - 4.0	- 0.1	172	24.3	-	- 8.1		32.5	-	97.0	-	6.8	7.1	5.8	-	2	90 89	817960	807128	<0.2	2 - 0.8
					Bottom 4.0	0.1	173	24.3	24.3	8.1	8.1	32.5	32.5	95.4	96.2	6.6	7.3		2		91			<0.2	0.7
					Surface 1.0 1.0	2.3 2.5	295 299	24.2	24.2	8.1 8.1	8.1	32.6 32.7	32.6	102.4 102.2	102.3	7.1 7.1	3.7 4.0	ł	<2 <2	ł	87 87			<0.2	0.8
IM2	Misty	Calm	14:25	7.0	Middle 3.5 3.5	2.5	300 326	24.0 24.0	24.0	8.1 8.1	8.1	32.9 32.8	32.8	101.1	101.1	7.1 /.1 7.1	5.0 5.3	5.2	<2 <2	<2	91 92 90	818158	806170	<0.2	2 0.8 0.8
					Bottom 6.0	2.3	303 331	23.9	23.9	8.1	8.1	33.3	33.3	98.0 97.2	07.0	6.8	0.0	1	<2 <2	İ	92			<0.2	0.9
					Surface 1.0	2.4 1.7	269	23.9 24.3	24.3	8.1	8.1	32.4	22.5	104.0	400.7	7.2	3.9		<2		89			<0.2	0.9
IM3	Misty	Calm	14:19	7.2	1.0 Middle 3.6	1.7	289 266	24.3	24.2	8.1 8.1	8.1	32.5 32.6		103.4 101.9	101.0	7.2 7.1	5.6	5.4	<2 2	2	92 91	818763	805591	<0.2	0.8 2 0.7 0.8
livio	iviisty	Caim	14:19	1.2	3.6	1.9 1.8	275 276	24.2 23.9		8.1 8.1		32.6 33.2		101.6 99.0		7.1 6.9	5.3 6.7	5.4	3		92 91	010/03	805591	<0.2 <0.2	0.8
					Bottom 6.2	1.8	276	23.9	23.9	8.1	8.1	33.2	33.2	98.8	98.9	6.9	6.9		2		93			<0.2	1.0
					Surface 1.0 1.0	2.2	247 260	24.6 24.4	24.5	8.0 8.1	8.0	31.5 31.7	31.6	101.5 101.8	101.7	7.1 7.1 7.1	3.5 3.7	i	<2 <2		88 89			<0.2	0.8
IM4	Misty	Calm	14:10	8.6	Middle 4.3 4.3	2.3	245 250	24.1	24.1	8.1 8.1	8.1	32.6	32.6	101.1	100.9	7.0 7.1 7.0	4.3 4.6	4.6	2	3	91 91	819739	804608	<0.2	2 0.8 0.8
					Bottom 7.6 7.6	2.1 2.2	248 256	24.0 24.0	24.0	8.1 8.1	8.1	33.0 33.0	33.0	98.6 97.8		6.9 6.8	5.8 5.7	İ	3	Ī	92 92			<0.2 <0.2	0.8
					Surface 1.0	2.0	264	24.5	24.4	8.1	8.1	31.7	31.7	102.4	102.5	7.1	2.8		2		87			<0.2	8.0
IM5	Misty	Moderate	14:02	8.0	1.0 Middle 4.0	2.1 2.3	272 263	24.4 24.1	24.1	8.1 8.1	8.1	31.8 32.6	32.6	102.6 101.2	101.0	7.2 7.1	2.9 3.4	3.4	2	3	91 90	820719	804848	<0.2	0.8 0.8 0.8
IIVIS	iviisty	Woderate	14.02	0.0	4.0	2.5	281 266	24.1		8.1 8.1	<b>-</b>	32.7 33.0		100.8 99.1		7.0 6.9	3.5 3.8	3.4	3	J	91 90	020713	004040	<0.2	0.7
					7.0	2.2	273 117	24.0 24.6	24.0	8.1 8.0	8.1	33.0 31.4	33.0	98.7 101.5	96.9	6.9 6.9 7.1	3.8		3		92 87			<0.2	0.8
l					Surface 1.0	1.5	127	24.5	24.6	8.0	8.0	31.5	31.4	101.2	101.4	7.1	3.2	İ	3	İ	88			<0.2	0.8
IM6	Misty	Moderate	13:55	7.8	Middle 3.9 3.9	1.6 1.6	118 125	24.1 24.1	24.1	8.1 8.1	8.1	32.6 32.5	32.5	99.8 99.5		7.0	4.2	5.5	3	3	90 90	821080	805849	<0.2	2 0.8 0.8
					Bottom 6.8 6.8	1.7	121 131	24.0 24.0	24.0	8.1 8.1	8.1	32.7	32.7	96.4 96.3	96.4	6.7 6.7	8.9 9.0	I	4	1	91 91			<0.2	0.8
					Surface 1.0	1.8	42 45	24.5	24.4	8.1 8.1	8.1	31.6 31.7	31.7	103.1 102.5	400.0	7.2	3.6		4		87			<0.2	0.8
IM7	Misty	Calm	13:49	9.2	1.0 Middle 4.6	1.6	52	24.4 24.2	24.2	8.1	8.1	32.3	32.3	100.0		7.0	3.9 6.1	5.8	3	4	90 90	821356	806840	<0.2	0.7 2 0.8 0.8
11917	ivilacy	Odilli	15.43	9.2	4.6	1.8	53 49	24.2		8.1 8.1	<b>-</b>	32.3 32.6		100.0 98.2		7.0 6.9	6.2 7.2	3.0	4 5	1	90 90	021330	000040	<0.2	0.8
					8.2	1.7	52 131	24.1	24.1	8.1	8.1	32.6 29.9	32.6	98.4	90.3	6.9 6.9 7.2	7.8		4	<u> </u>	92			<0.2	0.8
					Surface 1.0	0.2	142	24.4	24.5	8.0	8.0	30.0	29.9	102.5	102.6	7.2	4.1		5	1	87			<0.2	1.4
IM8	Sunny	Moderate	14:09	8.4	Middle 4.2 4.2	0.1	86 89	24.1 24.1	24.1	8.1 8.1	8.1	30.8	30.8	102.7 102.9	102.8	7.2 7.3	5.6 5.9	5.4	4	4	91 91 91	821829	808120	<0.2 <0.2	1.4
					Bottom 7.4 7.4	0.3	48 49	24.0 24.0	24.0	8.1	8.1	31.4	31.4	102.4		7.2 7.2	6.5 6.4		3	Ī	92 92			<0.2 <0.2	1.3
A: Depth-Ave					1.4	0.0	43	24.0	<u> </u>	0.1		31.4		102.0		1.4	1 0.4		J		34	<u> </u>	<u> </u>	1 ~0.2	1.4

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

Water Qua	Weather	Sea	Sampling	Water	01 April 21	during Mid-	Current		Water T	emperature (°C)	T	pН	Salir	ity (ppt)	DO S	aturation	Dissolve		Turbidity(	NITLI)	Suspende				Coordinate	Coordinate	Chromium	Nickel (µg/L)
Monitoring Station					Sampling De	pth (m)	Speed	Current Direction			+		<del> </del>			(%)	Oxyge	n		_	(mg		(ppi		HK Grid	HK Grid	(µg/L)	<del>                                     </del>
Otation	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average		Average	Value	Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0	0.4	137 148	24.6 24.6	24.6	8.0	8.0	30.0	30.0	104.1	104.0	7.3		3.4		3	ł	84 85				<0.2	1.1
IM9	Sunny	Moderate	14:14	7.4	Middle	3.7	0.3	120	24.1	24.1	8.1	8.1	30.6	30.7	102.4		7.2	7.3	5.4	5.6	3	3	88	87	822084	808801	<0.2	1.2
					Bottom	3.7 6.4	0.3	123 111	24.1	24.0	8.1	8.1	30.7	31.3	102.6 102.8		7.2 7.2	7.2	5.7 7.6		2	ł	88 89				<0.2	1.3
					BOILOTTI	6.4 1.0	0.4	120 108	24.0	24.0	8.1	0.1	31.3 30.5	31.3	102.6 102.6	102.7	7.2	1.2	7.7 6.0		3		90 86				<0.2	1.4
					Surface	1.0	0.6	109	24.3	24.3	8.0	8.0	30.6	30.6	102.4	102.5	7.2	7.2	5.9		3	İ	87				<0.2	1.1
IM10	Sunny	Moderate	14:20	8.1	Middle	4.1 4.1	0.5 0.5	102 104	24.1 24.1	24.1	8.0	8.0	30.7	30.7	100.9		7.1	, <u>.</u>	6.3 6.2	6.9	2	3	90	89	822366	809787	<0.2	1.1 1.1
					Bottom	7.1	0.4	111	24.1	24.1	8.0	8.0	30.8	30.7	99.8	00.7	7.0 .	7.0	8.6		5	İ	91				<0.2	1.0
					1 .	7.1	0.4	118 120	24.1		8.0		30.7		99.5 99.3		7.0		8.5 5.8		5 4		91 87				<0.2	1.1
					Surface	1.0	0.8	127	24.1	24.2	8.0	8.0	30.5	30.5	99.1	99.2	7.0	7.0	6.0		4	1	88				<0.2	1.1
IM11	Sunny	Moderate	14:30	8.5	Middle	4.3 4.3	0.6	120 129	24.1	24.1	8.0	8.0	30.5	30.5	98.5 98.4		7.0 6.9	ŀ	7.9 8.1	7.8	4	4	89 90	90	822038	811440	<0.2	1.0
					Bottom	7.5 7.5	0.5	130 140	24.1 24.1	24.1	8.0	8.0	30.5 30.5	30.5	97.9 97.8		6.9 6.9	6.9	9.5 9.7		2	Ī	92 91				<0.2 <0.2	1.1
					Surface	1.0	0.5 0.6	92	24.1	24.4	8.0	8.0	30.5	30.3	102.2		7.2	+	4.3		3		86				<0.2	1.0
					Surface	1.0 4.8	0.7	95 100	24.4 24.2	24.4	8.0	6.0	30.3 30.5	30.3	102.0 99.4		7.2	7.1	4.6 5.5		4		87 88				<0.2	1.1
IM12	Sunny	Moderate	14:36	9.6	Middle	4.8	0.6	101	24.2	24.2	8.0	8.0	30.5	30.5	99.4	99.4	7.0		5.7	5.4	3	3	88	89	821474	812062	<0.2	1.1
					Bottom	8.6 8.6	0.5	87 94	24.2	24.2	8.0	8.0	30.5	30.5	98.8		7.0	7.0	6.3 6.3		3		91				<0.2	1.2
					Surface	1.0	-	-	24.4	24.4	8.0	8.0	30.6	30.6	100.3	100.1	7.0	T	4.0		3		-				-	-
0044	0	0.1	45.04			1.0	-	-	24.4		8.0		30.6		99.8		7.0	7.0	4.1	4.2	3	3	-		040000	040004	-	-
SR1A	Sunny	Calm	15:04	5.7	Middle	2.9 4.7	-	-	24.3		8.0		30.8		98.4		-		4.4	4.2	- 2	3	-	-	819982	812661		
					Bottom	4.7	-	-	24.3	24.3	8.0	8.0	30.8	30.8	98.5		6.9 6.9	6.9	4.4		3		-				-	-
					Surface	1.0	0.4	82 86	24.3 24.3	24.3	8.0	8.0	30.4	30.4	102.3 102.1		7.2	-	7.0 7.0		7 6		88 89				<0.2	1.2
SR2	Sunny	Calm	15:19	4.8	Middle	-	-	-	-		-		-		-		- 7	7.2	-	6.8	-	6	-	90	821461	814153	- <0.2	- 12
						3.8	0.4	82	24.3		8.0		30.4		101.4		7.1		6.6		5		91				<0.2	1.1
					Bottom	3.8	0.4	87	24.3	24.3	8.0	8.0	30.4	30.4	101.1	101.3	7.1	7.1	6.5		6		92				<0.2	1.2
					Surface	1.0	0.1	215 226	24.3 24.3	24.3	8.0	8.0	30.2	30.2	101.1		7.1	7.2	4.4 4.4		5	ł	-				-	-
SR3	Sunny	Moderate	14:03	9.4	Middle	4.7	0.1	123 134	24.1 24.1	24.1	8.0	8.0	30.6 30.6	30.6	101.6 101.8	101.7	7.2	′. <u>′</u> F	5.5 5.6	6.2	4	4	-	-	822146	807574	-	-
					Bottom	8.4	0.1	120	24.1	24.1	8.0	8.0	31.3	31.3	101.7	101.4	7.1	7.1	8.6		3	İ	-					
						8.4 1.0	0.1 2.1	121 257	24.1		8.0 8.1		31.3 32.6		101.0		7.1 <sup>1</sup>		8.7 3.8		4		-				-	-
					Surface	1.0	2.2	268	24.3	24.3	8.1	8.1	32.7	32.6	100.1		7.0	7.0	3.9		3		-				-	-
SR4A	Misty	Calm	15:18	8.8	Middle	4.4	2.3	257 273	24.0 24.0	24.0	8.1	8.1	32.7	32.7	98.9 99.0		6.9	ŀ	4.2 4.2	4.8	4 5	4	-	-	817207	807824	<del></del>	
					Bottom	7.8 7.8	2.4 2.6	257	24.0 24.0	24.0	8.1 8.1	8.1	32.9 32.8	32.9	96.5 96.5	06.6	6.7	6.7	6.4 6.4		5 4	Ī	-				-	-
					Surface	1.0	0.1	277 48	24.0	24.7	8.0	8.0	32.8	32.4	98.9		6.8		3.7		3		-				-	-
					Surface	1.0	0.1	51	24.6	24.1	8.0	6.0	32.4	32.4	97.8	98.4	6.8	6.8	4.0		4		-				-	-
SR5A	Misty	Calm	15:36	4.8	Middle	-	-	-	-	-	-	-	-	-	-		-		-	4.6	-	4	-	-	816573	810693	-	- '
					Bottom	3.8	0.1	52 53	24.5 24.5	24.5	8.0 7.8	7.9	32.4	32.4	96.0 94.8		6.7 6.6	6.7	5.4 5.4		4		-				-	-
					Surface	1.0	0.1	347	24.9	24.9	8.1	8.1	31.6	31.6	102.2	102.2	7.1		2.0		5		-				-	-
0004		0.1	40.40			1.0	0.1	319	24.9		8.1		31.6		102.2		7.1	7.1	2.1		4	١.	-		047074	04.4750	-	-
SR6A	Misty	Calm	16:18	3.6	Middle	2.6	-	-	-	-	-	-	-		-	1	-		-	2.8	- 4	4	-	-	817971	814753		
					Bottom	2.6	0.0	345 346	24.8 24.8	24.8	8.1 8.1	8.1	31.6 31.6	31.6	100.2 99.6	99.9	6.9 6.9	6.9	3.5 3.6		3		-				-	
					Surface	1.0	0.7 0.7	73 79	24.2 24.2	24.2	8.0	8.0	31.0 31.0	31.0	102.7 102.7		7.2 7.2	T	2.9		4 5		-				-	
SR7	Sunny	Calm	16:09	20.2	Middle	10.1	0.5	55	24.1	24.1	8.0	8.0	31.1	31.1	101.4	101.4	7.1	7.2	3.0	3.1	4	4			823636	823728		-
0	Ju,	Cum	10.00	LUIL		10.1 19.2	0.5	56 34	24.1		8.0		31.1 31.2		101.3		7.1	+	2.9 3.6	0	3	· ·	-		320000	020.20	-	-
					Bottom	19.2	0.4	35	24.1	24.1	8.0	8.0	31.2	31.2	100.6	100.7	7.1	7.1	3.2		3	<u> </u>	-	•			-	-
					Surface	1.0	-	-	24.4	24.4	8.0	8.0	30.4	30.4	101.0	1009	7.1	.,	5.2 5.3		3	+	-				-	-
SR8	Sunny	Moderate	14:43	4.4	Middle	-	-	-	-	-	-	-	-	-	-		- '	7.1	-	5.8	-	4	-	-	820372	811641	<u> </u>	
					Bottom	3.4	-	-	24.4	24.4	8.0	0.0	30.4	20.4	99.3	00.0	7.0	-	6.1		4	ł	-					-
A: Denth-Aver					Bottom	3.4	-		24.4	24.4	8.1	8.0	30.4	30.4	99.0		7.0	7.0	6.8		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

Water Quality Monitoring Results on during Mid-Flood Tide 01 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Value Value (Easting) 23.8 1.4 234 Surface 23.8 8.1 33.0 100.6 1.0 1.5 255 23.8 33.0 100.4 7.0 2.3 86 <0.2 0.8 234 23.7 4.9 3 0.9 89 <0.2 C1 8 1 33.0 99.8 804244 09-29 84 Middle 23.7 88 815626 Mistv Calm 0.9 250 33.0 99.8 7.0 4.5 4 89 <0.2 0.9 1.5 23.7 8.1 0.9 7.4 1.5 232 23.7 8.1 33.1 98.4 6.9 5.3 3 89 <0.2 8.1 6.9 Bottom 23.7 33.1 97.8 97.2 6.8 5.6 7.4 1.7 237 23.7 <0.2 8.1 33.1 90 1.0 0.6 319 3.8 87 24.3 < 0.2 1.2 28.4 Surface 24.3 7.9 28.4 99.4 7.1 4.0 24.2 24.1 99.2 3 88 1.0 0.6 323 327 28.4 <0.2 1.2 6.3 0.5 7.9 97.0 6.9 89 28.9 C2 Fine Moderate 10:11 126 Middle 24.1 7.9 28.9 97.1 90 825683 806931 1.2 353 28.9 97.1 6.9 5.6 3 89 <0.2 6.3 0.5 24.1 7.9 11.6 0.5 349 24.1 7.9 97.0 6.9 7.4 3 92 <0.2 1.3 29.3 7.9 97.0 6.9 Bottom 24.1 29.3 11.6 0.5 357 24.1 7.9 29.3 96.9 6.9 7.6 3 92 <0.2 1.2 1.0 0.5 256 24.0 8.0 2.7 <2 88 <0.2 1.0 Surface 24.0 8.0 30.4 100.5 1.0 0.5 277 24.0 8.0 30.4 100.4 7.1 2.7 <2 87 <0.2 0.9 3.5 2 1.0 5.7 0.5 258 6.9 89 89 <0.2 23.9 8.0 30.7 98.1 97.9 C3 08:11 822107 817815 Fine Moderate 11.4 Middle 23.9 8.0 30.7 98.0 89 1.0 0.5 260 23.9 10.4 0.6 263 23.8 7.9 96.5 6.8 6.8 2 90 <0.2 1.0 Bottom 23.8 7.9 31.1 96.5 6.8 10.4 0.6 279 23.8 7.9 31.1 96.4 6.8 6.8 0.9 1.0 1.9 254 24.0 8.0 32.4 5.1 <0.2 0.8 Surface 24.0 8.0 32.4 97.9 1.0 1.9 262 24.1 8.0 32.4 97.9 6.8 5.4 10 85 <0.2 0.7 807118 IM1 Mistv Calm 09:47 5.6 Middle 817971 46 16 249 24 0 8.0 32.4 94.9 6.6 8.7 89 < 0.2 0.7 Bottom 8.0 32.4 94.4 6.6 4.6 1.6 273 24 0 8.0 32.4 93.9 6.6 8.9 8 86 <0.2 0.8 1.7 86 1.0 24.0 8.1 32.5 100.9 7.1 5.7 < 0.2 0.8 Surface 8.1 32.5 100.7 1.0 1.8 53 24.0 8.1 32.5 100.5 7.0 6.0 8 85 <0.2 0.8 3.7 1.6 51 24.0 8.1 32.5 100. 7.0 8.6 8 90 <0.2 0.8 IM2 Misty Calm 09:55 7.4 Middle 8.1 32.5 100.2 89 818146 806181 <0.2 0.9 0.8 0.8 3.7 1.7 53 24.0 8.1 100. 7.0 8.4 3 90 6.4 10.2 10.5 4 15 55 24.0 8 1 32.5 98.9 6.9 91 <0.2 8.1 32.5 98.9 6.9 6.4 1.5 98.8 3 59 8 1 32.5 6.9 91 <0.2 24 0 1.0 2.5 24 0 8.1 32.4 99.2 6.9 43 4 87 < 0.2 0.8 Surface 8.1 32.4 99.0 1.0 2.7 98.8 4.7 5 90 24.0 8.1 32.4 6.9 <0.2 0.8 0.8 0.7 7.5 7.2 9.3 3.8 2.7 6.9 5 90 <0.2 24.0 8.0 32.4 98.7 IM3 Misty Calm 10:01 7.6 Middle 24.0 8.0 32.4 98.7 90 818798 805576 4 2.8 98.6 6.9 91 3.8 24.0 8.0 <0.2 6.6 24.0 8.0 32.4 97.1 6.8 92 Rottom 24.0 8.0 32.4 96.8 6.8 6.6 2.9 24.0 8.0 32.4 96.5 6.8 9.5 6 87 <0.2 0.7 0.7 1.0 2.7 24.0 10 8.0 32.2 99.3 7.0 2.3 6 88 <0.2 Surface 24.0 8.0 32.2 99.3 1.0 2.8 24.0 6.9 2.5 5 90 <0.2 0.9 0.9 0.8 4.4 3.4 <0.2 24.0 6.9 6 91 3.0 8.0 32.2 98.7 IM4 Calm 10:09 8.8 Middle 24.0 8.0 32.2 98.7 819721 804610 Mistv 4.4 24.0 8.0 98.6 6.9 3.5 91 <0.2 3.2 5 7.8 3.1 5.9 5 24.0 8.0 96.6 6.8 Bottom 24 0 8.0 32.2 96.3 6.8 7.8 3.2 24.0 8.0 32.2 86 <0.2 0.8 0.9 1.0 2.0 269 24.0 8.0 32.3 98.8 6.9 4.3 86 <0.2 6 Surface 24.0 8.0 32.3 98.8 1.0 2.1 275 24.0 8.0 98.7 6.9 4.1 86 <0.2 4.0 2.2 265 24.0 7.5 7 90 <0.2 0.7 8.0 6.9 IM5 Calm 10:15 8.0 Middle 24.0 8.0 32.2 98.4 820741 804857 Misty 4.0 278 24.0 7.1 6 91 <0.2 2.2 10.1 5 0.8 1.9 266 24.0 8.0 32.2 97.2 6.8 91 <0.2 24.0 8.0 32.2 97.3 6.8 Bottom 97.4 7.0 2.0 292 24.0 8.0 32.2 86 <0.2 1.0 1.9 288 24.4 8.0 30.7 98.8 6.9 6.8 8 86 <0.2 0.8 Surface 8.0 30.7 98.6 1.0 1.9 299 24.4 8.0 30.7 98.4 6.9 6.4 7 89 <0.2 0.8 3.8 2.0 289 24.2 8.0 31.6 6.8 9.1 8 89 <0.2 Misty Calm 10:22 Middle 24.2 8.0 31.7 96.6 821055 805821 <0.2 3.8 2.2 304 24.2 8.0 31.7 96.5 6.8 9.2 8 89 6.7 0.7 6.6 1.9 291 24.1 8.0 95.5 94.8 11.0 8 91 <0.2 6.7 6.6 2.0 309 24.1 8.0 10.9 q 91 0.8 0.9 0.7 0.8 1.0 1.8 46 24.4 8.0 29.7 98.6 3.5 88 <0.2 Surface 24.4 98.8 7.0 3.4 4.5 1.0 19 49 24.4 8.0 29.7 98.9 5 88 <0.2 4 4.5 48 89 <0.2 2.0 24.4 8.0 30.2 98.1 6.9 IM7 Misty Calm 10:30 9.0 Middle 24.3 8.0 97.7 821326 806817 5 90 4.5 2.1 48 24.3 8.0 30.3 97.3 6.9 4.8 8.0 2.0 59 24.1 8.0 31.9 96.3 6.7 8.0 4 91 <0.2 0.7 Bottom 24.1 8.0 31.9 96.1 6.7 8.0 59 24.1 8.0 31.9 95.9 7.9 <0.2 0.8 1.0 0.2 112 24.4 8.0 28.5 104.9 7.5 7.5 3.0 5 87 < 0.2 1.2 Surface 24.4 8.0 28.5 104.9 28.6 1.2 8.0 104. <0.2 1.0 0.2 115 24.4 3.0 6 99 8.0 29.6 7.1 3.8 6 88 <0.2 1.1 4.2 0.2 109 24.2 100.1 8.0 29.6 100.0 821810 808132 IM8 Fine Moderate 09:47 8.3 Middle 24.2 1.2 99.8 7.1 1.2 29.6 4.1 88 4.2 113 8.0 5 0.2 24.2 90 1.2 7.3 0.1 68 24.2 24.2 8.0 29.8 98.9 99.0 7.0 4.9 4 <0.2 24.2 8.0 29.8 99.0 7.0 Rottom

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

Marchand   Control   Con	F	Resu	ilts on		01 April 21	during Mid-		ide																				
Section   Contine   Cont	a	١	Sampling	Water			Current Speed	Current	Water T	emperature (°C)		рН	Salir	nity (ppt)					Turbidity(	NTU)						Coordinate	Chromium (µg/L)	Nickel (µg/L
Fig.   Makes	liti	tion	Time	Depth (m)	Sampling De	epth (m)		Direction	Value	Average	Value	Average	e Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		HK Grid (Easting)	Value DA	Value DA
Marie   Mari					Surface					24.2		8.0		30.0		98.5											<0.2 <0.2	1.2
Marcon   M																		7.0									-O 2	1.2
Marie   Mari	ra	ate	09:39	7.8	Middle					24.2		8.0		30.0		98.2				4.2		9		88	822111	808802	<0.2	1.2
Modelle No. 1					Bottom					24.2		8.0		30.0		97.6		6.9		}							<0.2	1.2
Mode					Confess					24.4				20.2		00.5											<0.2	1.1
Mode   Mode					Surface					24.1		6.0		30.2		99.5		7.0									<0.2	1.1
Miles	ra	ate	09:33	8.2	Middle					24.1		8.0		30.2		99.3		1		9.1		9		87	822387	809808	<0.2 <0.2	2 1.1 1.1
Mail Free Motions 00:24 8.4 Models 00:24					Bottom					2/ 1	8.0	8.0		30.2	98.5	08.4	7.0	7.0		İ			89				<0.2	1.1
Miles   Moderate   M					Bottom			299				0.0		00.2				7.0									<0.2 <0.2	1.0
Miles   Pro					Surface					24.1		8.0		30.2		99.4				-							<0.2	1.1
Part   Part	era	ate	09:24	8.4	Middle	4.2	0.6	282	24.0	24.0	8.0	8.0	30.3	30.3	98.4	98.4	7.0	7.0	8.5	8.4	9	8	89	90	822079	811447	<0.2	1.2
Moderate No. 10 10 10 10 10 10 10 10 10 10 10 10 10																											<0.2	1.2
Moderate   Pare   Moderate   Opt					Bottom					24.0		8.0		30.4		97.2	6.9	6.9									<0.2	1.1
Mile					Surface			269		24.0		8.0		30.5		99.4							87				<0.2	1.1
Miles   Price   Moderate   Unit   Moderate   Data   Social   Soc																		7.0		}							<0.2	1.0
Red	ra	ate	09:18	10.0	Middle	5.0		270		24.0		8.0		30.5		98.9	7.0	L	7.9	8.5	10	9	90	90	821444	812026	<0.2	1.1
Surface   Surf					Bottom	9.0	0.7	263	24.0	24.0	8.0	8.0	30.5	30.5		97.9	6.9	6.9	9.8		12		92				<0.2	1.2 0.9
Second   S								1																			<0.2	- 0.9
SR1A   Fire   Calm   OB-40   S.0   Models   S.0   Models   C.2   S.   S.   S.   S.   S.   S.   S.					Surface	1.0	-		24.1	24.1	8.0	8.0		30.5		98.7	7.0	7.0	2.7		2		-				-	-
Second   S	lm	n	08:46	5.0	Middle			-	-			-	-	-	-	-		1		2.7		5		-	819979	812666		
Surface   1.0					Dotto-			-	24.1	24.4			30.6	20.0	97.4	07.4				ŀ			-				-	-
SRZ Fine Moderate OB.31					Bottom			-		24.1		6.0		30.6		97.4		0.9					-				-	-
SR2   Fine   Moderat					Surface					24.1		7.9		30.1		99.0		1		ł							<0.2	0.9
Record   R	·ra	ate	08:31	4.8	Middle										-			7.0		5.5		5	-	88	821479	814156	- <0.2	, 🗀 10
SR3 Fine Moderate 09.52 9.4 Surface 1.0 0.1 8 8 24.3 24.3 8.0 8.0 28.7 28.6 10.0 1.0 0.2 8 8 24.3 8.0 8.0 28.7 28.6 10.0 1.0 1.0 0.2 8 8 24.3 8.0 8.0 28.7 28.6 10.0 1.0 1.0 1.0 0.2 8 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	,,,	4.0	00.01	1.0	Middle				- 24.1		7.0		- 20.2		- 07.6		- 60			0.0				00	021110	011100	<0.2	0.9
Surface   1.0					Bottom					24.2		7.9		30.1		97.5		6.9									<0.2	1.0
SR3 Fine Moderate 08:52 9.4 Middle 47 02 351 242 242 8.0 8.0 23.5 29.3 99.4 99.4 7.1 7, 3 4.9 4.3 3 4 7. 82137  Bottom 6.4 02 359 24.2 242 8.0 8.0 23.5 29.5 98.0 99.4 99.4 7.1 7, 4 4.9 4.3 3 4 4 7. 2 82137  Bottom 6.4 0.2 359 24.2 24.2 8.0 8.0 8.0 23.5 29.5 98.0 99.4 99.4 7.1 7, 4 4.9 4.3 3 4 4 7. 2 82137  SR4A Mety Calm 09:03 8.2 Middle 11 17 222 242 242 8.0 8.0 8.0 24.2 24.2 8.0 8.0 8.0 24.2					Surface					24.3		8.0		28.6		103.8							-				-	-
R3 Fine Moderate 08:52 94 Moderate 08:52 94 Moderate 08:52 94 Moderate 08:52 94 Moderate 08:52 95 Mode																		7.3					-				-	-
SREAM Misty Calm Misty Calm Misty Moderate Misty Misty Moderate Misty Moderate Misty Misty Moderate Misty Misty Moderate Misty Misty Misty Misty Misty Moderate Misty	ra	ate	09:52	9.4	Middle					24.2		8.0		29.3		99.4				4.3	4	4	-	-	822137	807589	-	-
SR4A Mety Calm 09:03 8.2 Surface 1.0 1.6 278 242 242 8.0 8.0 8.0 32.4 32.4 94.9 95.0 66.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6					Bottom					24.2		8.0		29.5		99.0		7.0					-				-	-
SR4A Misty Calm 09:03 8.2 Middle 4.1 177 286 242 24.2 8.0 8.0 8.0 32.4 32.4 93.6 93.0 6.5 6.5 3.3 3.4 4 4 7 1.7 1.7 1.8 1.8 1.2 1.9 1.2 1.2 1.4 1.8 1.8 1.2 1.4 1.4 1.8 1.8 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4																							-				-	-
RRAA Misty Calm 09:03 82 Middle 4.1 1.8 282 242 24.2 8.0 8.0 8.0 32.4 32.4 93.6 93.6 6.5 8.3 3.4 4 5					Surface	1.0	1.7	286	24.2	24.2	8.0	8.0	32.4	32.4	95.0	95.0	6.6	6.6	3.0		4						-	-
Bottom   7.2   1.9   2.82   24.1   24.1   8.0   8.0   32.4   32.4   92.0   6.5   6.5   6.5   4.5   5	lm	n	09:03	8.2	Middle					24.2	0.0	8.0		32.4		93.7		0.0		3.6		4		-	817197	807802		-
SR5A Misty Calm 08:46					Dattaca					24.4				22.4		02.0					4		-				-	-
SR5A Misty Calm 08:46 5.0 Middle 1.0 0.3 310 24.2 24.2 8.0 8.0 8.0 32.3 93.7 93.8 6.5 6.5 1.					Bollom					24.1		6.0		32.4		92.0		0.5									-	-
SR5A Misty Calm 08:46 5.0 Middle					Surface					24.2		8.0		32.3		93.8		1		-							-	-
Bottom   A	lm	,	08:46	5.0	Middle	-	-	-	-				-		-		-	6.5	-	36	-		-	_	816578	810695	-	-
SREA Misty Moderate 08:19 3.8 Surface 1.0 0.1 293 24.1 24.1 7.9 7.9 31.7 31.7 31.7 31.7 31.8 32.3 92.0 92.3 6.4 0.5 3.6 4 3.1 3.1 3.1 4.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5		"	00.40	3.0	Wildelie	- 40		- 205	- 24.0		-		- 20.0		- 00.5					5.0		7		-	010370	010033	-	-
SR6A Misty Moderate 08:19 3.8 Middle					Bottom					24.2		8.0		32.3		92.3		6.5		ł							-	-
SR6A Misty Moderate 08:19 3.8 Middle					Surface					24.1		7.9		31.7		94.0							-				-	-
RRA Misty Moderate 08:9 3.8 Middle							0.1		24.1				31.7	•	94.0		6.6	6.6		-	4		-				-	-
SR7 Fine Calm 07:41 20.0 Surface 1.0 0.0 104 23.9 23.8 8.0 8.0 30.5 93.2 99.2 99.2 99.2 99.5 6.5 0.5 3.4 2 2	ra	ate	08:19	3.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	3.3		3	-	-	817972	814734	-	-
SR7 Fine Calm 07:41 20.0 Middle 10.0 0.1 104 23.9 23.9 8.0 8.0 8.0 30.5 30.5 93.2 99.2 7.0 7.0 2.4 2.5 2.5 2.5 2.5 2.5 2.5 2.5 3.4 2.5 3.5 3.6 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0					Bottom					24.1		7.9		31.8		93.1	6.5	6.5									-	-
SR7 Fine Calm 07:41 20.0 Middle 10.0 0.1 105 23.9 23.9 8.0 8.0 30.5 30.5 30.5 30.5 30.5 30.5 30.5 30					<del>                                     </del>																		-		<u> </u>		-	-
SR7 Fine Calm 07:41 20.0 Middle 10.0 0.1 156 23.8 23.8 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8					Surface			105		23.9	8.0	8.0		30.5	99.2	99.2	7.0	7.0	2.4		2		-				-	_
Bottom 19.0 0.2 151 23.8 23.8 7.9 7.9 31.0 31.0 96.7 96.7 6.8 6.8 2.8 <2 - 1.0 1.0 - 24.3 24.3 8.0 8.0 8.0 29.9 29.9 100.1 10.3 7.1 3.5 8 - 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	lm	n	07:41	20.0	Middle					23.8		8.0		30.8		98.4		1		2.5		2		-	823625	823726	-	
Surface 1.0 24.3 24.3 8.0 8.0 8.0 29.9 29.9 100.5 100.3 7.1 3.5 7.					D.#===					22.0		7.0		24.0		00.7		6.0		1							-	-
Surface 1.0 24.2 24.3 8.0 8.0 29.9 29.9 100.1 100.3 7.1 7.1 3.5 7					Bottom	19.0			23.8	23.8	7.9	7.9	31.0	31.0	96.7	96.7	6.8	6.8	2.8		<2		-				-	-
					Surface		-	-		24.3		8.0		29.9		100.3		ł		-			-				-	-
SR8   Fine   Calm   09:10   4.9   Middle   820379	lr~		09:10	4.9	Middle	-	Ŀ		-		-				-			7.1	-	3.7		6			820379	811629		
20 20 20 005 70 40 4	411	"	03.10	7.3	MINUTE	-	_	-	- 04.0		_			<u> </u>	- 00.5	<u> </u>	-		_	5.1				-	020313	011023	-	-
Bottom 3.9 24.2 24.2 8.0 8.0 29.9 29.9 99.5 99.4 7.0 7.0 4.0 4					Bottom		-			24.2		8.0		29.9		99.4		7.0		}	4						-	<del></del>

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 during Mid-Ebb Tide 03 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Value Value (Northing) (Easting) 25.0 0.3 31.0 1.0 229 24.9 1.1 43 0.3 220 24.7 8.1 31 1 106.7 7.4 3.0 3 91 <0.2 1.0 105.1 804263 C1 Cloudy Moderate 16:43 8.1 31.1 90 815643 4.3 0.3 237 24.7 8.1 31.2 103.4 7.2 3.1 3 92 <0.2 1.1 7.5 0.4 224 24.6 8.1 31.2 102.9 7.2 5.2 3 92 <0.2 1.2 Bottom 8.1 31.2 102.9 7.2 7.5 0.4 233 24.6 8.1 31.2 102 9 72 5.2 3 92 <0.2 1.1 135 1.0 0.2 24.8 8.0 29.1 98.0 6.9 4.3 88 < 0.2 1.7 Surface 8.0 29.1 97.9 <0.2 1.0 0.2 146 24.8 8.0 29.1 97.8 6.9 4.3 6 88 1.8 6.2 0.5 154 24.6 8.0 29.9 94.5 6.6 4.5 4.5 5 6 91 92 <0.2 1.8 C2 Cloudy Moderate 15:34 12.4 Middle 8.0 30.0 94.5 825704 806945 6.2 0.5 154 24.6 8.0 30.0 94.5 6.6 11.4 0.5 144 8.0 7.8 5 6 93 1.5 24.4 30.7 93.7 6.6 < 0.2 Bottom 8.0 30.7 93.7 6.6 6.6 7.8 1.5 11 4 0.5 157 24.4 8.0 30.7 93.7 94 <0.2 0.4 286 24.9 3.1 1.0 8.0 4 86 7.2 < 0.2 1.3 Surface 8.0 30.0 102.8 1.3 1.0 300 7.2 3.1 3 87 <0.2 0.4 24.9 8.0 30.0 1.1 3.5 3.5 4 5 101 89 <0.2 257 266 24.8 7.0 6.1 8.0 30.1 C3 Cloudy Moderate 17:32 12.2 Middle 8.0 30.1 100.7 92 822120 817786 1.2 6.1 24.8 0.2 8.0 5 1.1 11.2 0.1 120 24.4 8.0 30.9 95.6 6.7 5.2 93 <0.2 6.7 Bottom 24.4 8.0 30.9 95.6 11.2 0.1 125 24.4 8.0 30.9 95.6 6.7 5.2 4 93 <0.2 1.0 0.1 25.6 4 86 8.1 29.4 7.6 <0.2 Surface 25.6 8.1 29.4 110.3 1.0 0.1 214 25.5 8.1 29.4 110.2 7.6 8.5 3 86 <0.2 1.0 807134 IM1 Cloudy Moderate 16:23 5.0 Middle 88 817947 4.0 0.1 173 25.0 8.1 29.7 7.1 7.1 6.1 2 90 <0.2 1.0 Bottom 25.0 8.1 29.7 101 1 7.1 4.0 0.1 185 25.0 8.1 29.7 6.5 1.1 0.3 176 24.9 8.1 29.9 1.4 3 86 <0.2 1.0 Surface 24.9 8.1 30.0 102.1 1.0 0.3 181 24.9 1.5 2 85 <0.2 3.6 0.2 182 24.8 3.3 2 <0.2 <0.2 <0.2 0.9 1.0 1.0 90 806178 Cloudy Moderate 16:16 Middle 8.1 30.6 100.9 818143 24.8 3 90 91 3.6 0.2 189 24.7 6.1 0.2 115 8.1 30.8 99.8 7.0 5.9 Bottom 24.8 8.1 30.8 99.7 7.0 6.9 11 6.1 0.2 116 24.8 8.1 30.8 99.6 6.1 2 91 <0.2 1.0 0.2 154 24.9 8.1 30.1 103 1.6 88 <0.2 1.4 Surface 8.1 30.1 103.0 1.0 0.2 155 24.9 8.1 30.1 1.7 4 88 <0.2 1.6 1.9 1.9 3.5 0.2 145 24.8 8.1 30.4 3.1 2 90 <0.2 IM3 Cloudy Moderate 16:09 7.0 Middle 102.4 818786 805605 3.2 5.5 <0.2 3.5 0.2 149 24.8 30.5 91 24.7 <2 91 2.2 6.0 0.1 126 8.1 30.7 7.1 101.4 6.2 0.1 24.7 8.1 30.7 <2 <0.2 6.0 130 91 1.0 0.4 193 25.0 8.1 29.6 100.4 7.0 11 2 87 <0.2 1.2 Surface 8.1 29.7 100.6 87 8 1 12 2 1.0 0.4 194 25.0 29.7 <0.2 4.3 176 1.2 <2 <2 1.0 0.4 24.9 8.1 30.2 7.1 89 89 <0.2 IM4 Cloudy Moderate 15:59 Middle 8.1 101.4 819728 804619 7.1 1.3 4.3 177 24.9 8.1 30.2 0.4 <2 <2 7.6 7.6 0.3 166 24.9 24.9 8.1 8.1 30.4 98.9 98.7 6.9 8.8 9.3 90 91 <0.2 1.1 6.9 Rottom 24.9 8.1 30.4 98.8 30.4 0.3 180 < 0.2 1.2 1.0 221 0.9 0.3 25.0 8.1 29.8 100.3 7.0 2 86 <0.2 Surface 25.0 8.1 29.7 100.3 1.0 8.1 29.7 7.0 3 <0.2 1.0 0.3 240 25.0 100. 0.9 86 4.0 197 24.9 6.9 1.4 2 89 <0.2 1.1 0.3 8.1 30.2 99.3 IM5 15:52 8.1 30.2 99.3 820752 804871 Cloudy Moderate Middle 24.9 4.0 209 24.9 8.1 30.2 99.3 1.4 3 90 < 0.2 1.1 0.3 1.0 2.8 2.8 <0.2 7.0 0.1 221 239 24.9 8.1 30.4 98.4 98.4 6.9 3 91 8.1 98.4 6.9 Bottom 24 9 30.4 0.1 24.9 <0.2 1.0 0.9 1.0 1.0 1.0 0.1 243 24.9 8.1 29.8 6.9 5 86 <0.2 99.3 Surface 24.9 8.1 29.9 99.3 1.0 0.1 249 24.9 8.1 29.9 99.2 6.9 1.0 4 87 <0.2 3.9 0.2 216 24.9 8.1 30.0 6.9 1.1 4 89 <0.2 15:44 7.8 Middle 24.9 8.1 30.1 98.7 821054 805827 IM6 Cloudy Moderate 3.9 224 24.9 8.1 30.1 98.7 6.9 1.1 3 89 <0.2 0.9 0.2 0.9 6.8 0.1 205 24.9 30.1 97.5 6.8 1.5 3 90 <0.2 Bottom 24.9 8.1 30.1 97.8 6.8 6.8 0.1 8.1 30.1 6.8 1.5 212 24.9 1.0 0.1 195 25.1 8.1 29.5 102.0 1.4 86 <0.2 1.1 Surface 25.1 8.1 29.5 101.9 1.0 0.1 210 25.1 8.1 29.5 101 7.1 1.4 4 86 <0.2 1.0 89 0.9 4.6 0.1 195 25.1 8.1 7.0 1.9 5 <0.2 29.6 IM7 Cloudy Moderate 15:36 9.1 Middle 25.1 8.1 29.6 100.7 821361 806846 4.6 0.1 214 25.0 8.1 7.0 1.8 4 89 <0.2 8.1 0.1 149 25.0 8.1 29.7 7.0 1.9 4 90 <0.2 8.1 29.7 100.0 7.0 8.1 0.1 154 25.0 8.1 20.7 1.9 5 91 <0.2 11 1.0 2.4 358 24 9 8.0 29.3 7.2 3.5 2 87 < 0.2 1.6 Surface 29.3 102.6 1.6 1.0 2.4 329 24.9 8.0 29.3 102.7 7.2 3.6 2 86 <0.2 4 0 2.6 359 25.0 8.0 30.0 106.0 7.4 4.0 2 89 91 <0.2 1.6 1.7 IM8 Cloudy Moderate 15:56 8.0 Middle 8.0 30.0 106.0 821810 808154 1.7 4.0 2.8 330 25.0 8.0 30.0 106.0 7.4 3.9 < 0.2 7.0 2.7 358 24.9 8.0 30.3 7.2 4.3 2 93 <0.2 1.8 Bottom 24.9 8.0 30.3 103.7 7.2

DA: Depth-Averaged

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

Water Qua Water Qua		toring Res	ults on		03 April 21	during Mid-		е																				
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	mperature (°C)		рН	Salir	nity (ppt)		aturation (%)	Dissolv Oxyge		idity(NTU)	Suspende (mo		Total A		Coordinate	Coordinate	Chrom		Nickel (µg/L
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	th (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Ť	DA Val	ue DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	Value		Value DA
					Surface	1.0	2.8 3.0	31 33	24.9	24.9	8.0	8.0	29.3	29.3	101.8 101.8	101.8	7.1	3.		3		87 87				<0.2	-	1.5
IM9	Cloudy	Moderate	16:01	7.6	Middle	3.8	2.9	31	24.9	24.9	8.0	8.0	30.0	30.0	102.6	102.7	7.2	7.2	7 46	3	3	89	90	822099	808806	<0.2	<0.2	1.5
IIVIS	Cioddy	Woderate	10.01	7.0	Wilde	3.8 6.6	3.0	33 26	24.9 24.9	24.3	8.0	0.0	30.0	30.0	102.7 102.6		7.2 7.2	4. 5.	3	3	ľ	91 92	30	022033	000000	<0.2	-	1.6
					Bottom	6.6	3.1	26	24.9	24.9	8.0	8.0	30.2	30.2	102.5	102.6	7.1	7.2 5.		4		92				<0.2		1.5
					Surface	1.0	2.8	35 38	25.3 25.3	25.3	8.0	8.0	28.9	28.9	108.6 108.5	108.6	7.6	2.		3		87 87				<0.2	-	1.4
IM10	Cloudy	Moderate	16:08	7.3	Middle	3.7	2.7	35	24.8	24.8	8.0	8.0	30.1	30.1	100.8	100.8	7.0	7.3	<u> </u>	4	3	91	90	822388	809808	<0.2	<0.2	1.7
	Cicacy	Moderate	10.00	7.0		3.7 6.3	2.9	35 29	24.8 24.8		8.0		30.1	-	100.8 99.6		7.0	5. 7.0 6.	′	3		91 92	- 00	022000	000000	<0.2	-	1.6
					Bottom	6.3	3.1	31	24.8	24.8	8.0	8.0	30.1	30.1	99.8	99.7	7.0	7.0	3	3	<u> </u>	93				<0.2		1.4
					Surface	1.0	2.2	26 26	25.1 25.1	25.1	8.0	8.0	29.5 29.5	29.5	105.1 105.0	105.1	7.3	3.		5	1	86 88	-			<0.2	-	1.5
IM11	Cloudy	Moderate	16:17	7.8	Middle	3.9	2.4	21	24.7	24.7	8.0	8.0	30.1	30.1	98.4	98.4	6.9	4.	5.0	4	4	90	90	822080	811469	<0.2	<0.2	1.3
	,					3.9 6.8	2.5	22 20	24.7 24.6		8.0		30.1		98.4 93.9		6.9 6.6	6.	)	3	1	92 93				<0.2	L	1.2
					Bottom	6.8	2.3	20	24.6	24.6	8.0	8.0	30.3	30.3	94.0	94.0	6.6	6.	5	3	<u> </u>	91				<0.2		1.4
					Surface	1.0	0.5	95 101	25.1 25.1	25.1	8.0	8.0	29.4	29.4	102.7 102.7	102.7	7.2	3.		3	1	86 86	-			<0.2	-	1.3
IM12	Cloudy	Moderate	16:23	9.3	Middle	4.7	0.4	116	24.8	24.8	8.0	8.0	30.0	30.0	96.8	96.8	6.8	7.0 5.	5 49	4	3	87	89	821458	812046	<0.2	<0.2	1.5
	,				_	4.7 8.3	0.4	125 92	24.8 24.7		8.0		30.0		96.8 96.2		6.8	5.		3	1	90 92				<0.2	-	1.5
					Bottom	8.3	0.2	100	24.7	24.7	8.0	8.0	30.0	30.0	96.2	96.2	6.7	5.7	9	3	<u> </u>	92				<0.2		1.3
					Surface	1.0	-	-	25.1 25.1	25.1	8.0	8.0	29.4	29.4	102.5 102.4	102.5	7.2	3.		3	1	-	1			-	F	-
SR1A	Cloudy	Moderate	16:56	5.5	Middle	2.8	-	-	-		-	-	-	-	-	-	-	7.2		-	4	-		819977	812662	-		
					D.#	2.8 4.5	-	-	24.9	24.0	8.0		29.8	00.0	97.2	97.2	6.8	. 4.	3	4	1	-	1			-	-	-
					Bottom	4.5		-	24.9	24.9	8.0	8.0	29.8	29.8	97.2	97.2	6.8	6.8 4.		4	1	-						-
					Surface	1.0	0.4	100 104	24.9 24.9	24.9	8.0	8.0	29.4	29.4	101.1 101.1	101.1	7.1	4.		6	1	90 91	1			<0.2		1.1
SR2	Cloudy	Moderate	17:11	4.4	Middle	-	-	-	-	-	-	-	-		-	-	-	7.1	5.1	-	7	-	92	821468	814170	-	<0.2	- 1.
					Bottom	3.4	0.4	100	24.9	24.9	8.0	8.0	29.5	29.5	99.2	99.2	7.0	7.0 5.		7	1	92	1			<0.2	-	1.1
					Bollom	3.4	0.4	106 8	24.9	24.9	8.0	6.0	29.5	29.5	99.2		6.9	5.		6		93				<0.2	<b>—</b> [	1.0
					Surface	1.0	2.4	8	24.9 24.9	24.9	8.0	8.0	29.1 29.1	29.1	100.6 100.5	100.6	7.1	7.1	3	3	1	-				-	t	-
SR3	Cloudy	Moderate	15:51	9.1	Middle	4.5 4.5	2.5	10 10	24.8 24.8	24.8	8.0	8.0	29.7	29.7	100.9	100.9	7.1	4.		3	4	-		822146	807593	-		-
					Bottom	8.1	2.5	6	24.9	24.9	8.0	8.0	30.2	30.2	105.3	105.3	7.3	73 5.		5	İ						t	-
						8.1 1.0	2.6 0.1	6 10	24.9 25.4		8.0 8.1		30.2 29.8		105.2 103.6		7.3 7.2	7.5 5. 2.		5		-				-		-
					Surface	1.0	0.1	10	25.4	25.4	8.1	8.1	29.8	29.8	103.4	103.5	7.2	7 1 2.	7	3	1	-				_	Į	
SR4A	Cloudy	Moderate	17:06	8.8	Middle	4.4	0.1	10 10	24.9 24.9	24.9	8.1	8.1	30.2	30.2	99.3 99.2	99.3	6.9	3.		3	4	-	-	817182	807829	-		-
					Bottom	7.8	0.1	33	24.8	24.8	8.1	8.1	30.4	30.4	98.8	98.9	6.9	e o 2.	7	4	1	-				_	ļ	-
						7.8 1.0	0.1	35 307	24.8 25.3		8.1		30.3 29.8		98.9 98.5		6.9	2.		5		-				-	_	-
					Surface	1.0	0.1	333	25.3	25.3	8.0	8.0	29.8	29.8	98.3	98.4	6.8	6.8 2.	9	4	1	-				-	Ī	-
SR5A	Cloudy	Calm	17:22	4.0	Middle	-	-	-	-	-	-	-	+	-	-	-	-	···	5.6	-	4	-	-	816590	810682	-		
					Bottom	3.0	0.1	321	25.2	25.2	8.1	8.1	29.8	29.8	97.6	97.7	6.8	6.8		3	1	-	1			-	Į	-
						3.0 1.0	0.1	335 17	25.2 25.5		8.1 8.1		29.7		97.7 105.2		6.8 7.3	8.		4		-				-	$\rightarrow$	-
					Surface	1.0	0.1	18	25.5	25.5	8.1	8.1	29.0	29.0	104.8	105.0	7.2	7.3 3.	_	3	1	-				-	Į	-
SR6A	Cloudy	Calm	18:03	4.2	Middle	- :	-	-	-	-	-	-	-	-	-	-	-	·	3.5	-	4	-	-	817961	814740	-		<del></del>
					Bottom	3.2	0.1	359	25.5	25.5	8.1	8.1	29.1	29.1	100.0	101.7	7.0	7.1 3.		4	1	-				-	Į	-
					0(	1.0	0.1	330 61	25.5 25.1	05.4	8.1 8.0		29.1	00.0	103.4	400.0	7.2 7.6	3.		5 4		-				-	$\rightarrow$	
					Surface	1.0	0.7	61	25.1	25.1	8.0	8.0	29.9	29.9	109.3	109.3	7.6	7.6		3	Ţ	-					F	-
SR7	Cloudy	Moderate	18:01	15.8	Middle	7.9 7.9	0.2	14 14	25.0 25.0	25.0	8.0	8.0	30.2	30.2	107.8 107.8	107.8	7.5 7.5	2.		3	3	Ė	-	823616	823741	-	-  -	-
					Bottom	14.8	0.2	55	24.6	24.6	8.0	8.0	30.9	30.8	100.6	100.7	7.0	7.0 2.	2	2	]	Ė				-	F	-
					Quef	14.8 1.0	0.2	- 60	24.6 25.4	25.4	8.0		29.5	20.5	100.6	100.0	7.0	4.	2	3 5		-					$\dashv$	=
					Surface	1.0	-	-	25.4	25.4	8.0	8.0	29.5	29.5	100.6	100.6	7.0	7.0 4.	2	4	]	-				-	F	-
SR8	Cloudy	Moderate	16:32	5.5	Middle			-	-	-		-	1	-	-	-	-		4.6	-	5		-	820390	811644	-		-
					Bottom	4.5 4.5	-	-	25.2 25.2	25.2	8.0	8.0	29.5 29.5	29.5	98.9 98.9	98.9	6.9 6.9	6.9 5.		5	Į	-				-	F	-
A: Denth-Ave			1		l	4.5			25.2		V.0		29.5	<u> </u>	98.9		6.9	5.		1 4		1 -		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

Water Quality Monitoring Results on during Mid-Flood Tide 03 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Value Value Average Value (Northing) (Easting) 24.7 0.5 Surface 24.7 8.1 30.4 99.1 1.0 0.6 45 24.7 30.4 98.9 6.9 2.0 85 <0.2 0.9 0.4 33 24.5 6.9 2.2 88 0.9 <0.2 C1 8 1 30.6 98.2 804236 10:51 8.8 Middle 24.6 88 815599 Cloudy Moderate 0.9 24.6 30.6 98.2 6.9 3 89 <0.2 0.9 0.4 8.1 2.2 3.2 7.8 0.4 26 24.1 8.1 31.4 95.2 6.7 4 89 <0.2 0.8 8.1 6.7 24.1 31.4 95.2 Rottom 95.2 6.7 0.8 7.8 0.4 24.1 8.1 31.4 3 89 < 0.2 1.0 0.3 2.4 86 < 0.2 1.4 8.0 Surface 25.1 8.0 27.9 106.6 2.5 1.5 25.1 24.8 86 1.0 0.4 8.0 4 <0.2 3 89 1.3 6.2 0.4 8.0 7.1 28.8 100.2 C2 Cloudy Moderate 11:47 124 Middle 24.8 8.0 28.8 100.2 89 825680 806928 8.0 28.8 100. 7.1 4.2 4 90 <0.2 6.2 0.4 44 24.8 11.4 0.3 62 24.8 8.0 98.6 6.9 6.4 4 91 <0.2 1.5 29.0 8.0 98.7 7.0 Bottom 24.8 29.0 11.4 0.4 66 24.8 8.0 29.0 6.1 3 92 <0.2 1.4 0.6 8.0 29.6 2.1 83 <0.2 1.2 Surface 24.9 8.0 29.6 103.4 2.2 2.5 2.5 1.0 0.7 240 24.8 8.0 29.7 7.2 2 83 <0.2 1.2 1.2 6.5 6.7 2 86 85 <0.2 0.6 238 24.2 8.0 95.1 C3 817790 Cloudy Moderate 09:36 12.9 Middle 24.2 8.0 31.0 95.1 86 822116 1.3 0.7 24.2 11.9 0.5 238 24.1 8.0 93.9 6.6 3.0 3 88 <0.2 1.5 Bottom 24.1 8.0 31.3 93.9 6.6 11.9 0.5 257 24.1 8.0 31.3 93.0 6.6 3.0 88 1.4 1.0 0.2 25.1 29.4 1.3 86 <0.2 0.9 Surface 25.1 8.1 29.4 100.4 1.0 25.0 8.1 29.5 100. 7.0 1.5 5 85 <0.2 0.9 0.2 807149 IM1 Cloudy Moderate 11:08 Middle 817952 44 0.1 24.8 8.0 29.7 94.0 6.6 3.8 88 < 0.2 11 Bottom 24.8 8.0 29.7 94.0 6.6 44 0.1 13 24.8 8.0 29.7 94.0 6.6 3.8 4 89 <0.2 1.0 1.0 25.0 85 0.4 8.1 29.2 7.1 1.2 5 < 0.2 1.0 Surface 8.1 29.2 101.3 1.0 0.4 24.9 8.1 29.2 101.1 7.1 1.3 6 85 <0.2 1.1 3.4 0.3 353 24.8 8.1 29.6 98.1 6.9 3.1 5 88 <0.2 0.9 IM2 Cloudy Moderate 11:17 6.8 Middle 8.1 29.6 98.0 818160 806145 <0.2 1.0 1.0 0.9 3.4 0.3 325 24.8 8.1 97.9 6.9 3.2 4 89 24.8 9.3 4 5.8 0.2 339 8 1 29.7 95.8 6.7 89 <0.2 8.1 29.7 95.8 6.7 95.7 6.7 5.8 0.2 358 8.1 29.7 9.4 4 ٩n <0.2 24.8 1.0 0.4 342 24.8 8.1 29.5 97.2 6.8 2.5 4 85 < 0.2 1.2 Surface 8.1 29.5 97.0 2.7 1.1 1.0 96.8 3 86 0.4 315 24.8 8.1 6.8 <0.2 29.5 5.2 5.5 6.7 1.1 3.8 0.4 6.7 3 88 <0.2 336 24.8 8.1 29.7 95.0 IM3 Cloudy Moderate 11:23 7.6 Middle 24.8 8.1 29.7 95.0 88 818762 805574 6.7 0.4 4 89 90 3.8 309 24.8 8.1 94.9 <0.2 4 1.1 6.6 317 24.8 8.1 29.8 94.4 6.6 94.4 Rottom 24.8 8.1 29.8 6.6 6.6 0.3 348 24.8 8.1 29.8 94.3 6.6 6.8 5 90 1.0 <0.2 1.0 0.7 356 24.9 1.1 1.1 8.1 28.9 101.1 7.1 3 86 <0.2 Surface 24.9 8.1 28.9 101.1 328 24.9 1.1 3 86 <0.2 1.0 28.9 3.6 4 89 <0.2 1.1 4.2 0.7 354 24.7 6.8 8.1 29.8 96.3 IM4 Moderate 11:31 8.4 Middle 24.7 8.1 29.8 96.3 819737 804630 Cloudy 4.2 7.4 0.7 326 24.7 8.1 29.8 96.2 3.8 3 89 <0.2 0.5 356 4.8 90 1.0 24.8 29.8 95.3 6.7 8.1 6.7 Bottom 24.8 29.8 95.3 7.4 0.6 328 24.8 29.8 95.2 6.7 5.0 <0.2 1.1 1.1 1.0 1.0 25.0 8.1 29.4 98.4 2.7 3 85 <0.2 6.9 Surface 25.0 8.1 29.5 98.4 1.0 1.1 98.3 6.9 2.9 3 85 <0.2 25.0 3.8 1.0 12 24.9 5.6 3 88 <0.2 1.1 8.1 29.6 6.8 IM5 11:37 7.6 Middle 24.9 8.1 29.6 97.3 820744 804847 Cloudy Moderate 3.8 24.9 5.6 <0.2 1.0 1.0 6.6 0.9 24.9 8.1 8.1 29.6 96.5 96.4 6.8 6.5 6.5 5 5 89 <0.2 24.9 8.1 96.5 6.8 Bottom 29.6 6.6 1.0 24.9 29.6 < 0.2 1.0 0.2 25.1 8.1 28.9 97.7 1.7 6 85 <0.2 0.9 Surface 8.1 29.0 97.5 1.0 0.2 25.0 8.1 29.1 97.2 6.8 1.9 5 85 <0.2 1.0 4.0 0.2 40 25.0 8.1 6.7 2.8 4 88 <0.2 Cloudy Moderate 11:43 Middle 25.0 8.1 29.5 96.2 821070 805816 <0.2 4.0 0.3 41 25.0 8.1 29.5 96.1 6.7 2.9 5 88 1.2 7.0 0.3 51 25.0 8.1 29.6 95.4 95.3 6.7 4.1 2 88 <0.2 6.7 7.0 0.3 52 25.0 8 1 29.6 43 89 1.2 1.0 0.1 23 25.2 8.0 27.9 99.0 0.9 89 <0.2 Surface 99.0 25 147 7.0 1.0 0.1 25.2 8 1 28 N 98.9 1.0 3 86 <0.2 3 1.1 4.5 0.2 8.1 3.6 86 <0.2 25.0 29.3 96.6 6.8 IM7 Moderate 11:50 9.0 Middle 96.5 821350 806851 Cloudy 88 4.5 0.2 149 25.0 8.1 29.4 96.3 6.7 3.8 2 8.0 0.3 128 25.0 8.1 29.8 95.3 6.7 5.8 3 88 <0.2 1.4 Bottom 25.0 8.1 29.8 95.3 6.7 8.0 0.3 130 25.0 8.1 29.8 5.8 <0.2 1.0 2.2 212 25.0 8.0 28.1 105.3 7.4 2.4 2 86 < 0.2 1.3 Surface 25.0 8.0 28.1 105.3 28.1 7.4 1.3 8.0 105. 1.0 2.4 226 25.0 2.5 3 86 < 0.2 8.0 29.0 7.0 3.0 3 91 <0.2 1.4 4.2 2.1 209 24.8 98.8 8.0 29.0 98.9 821816 808153 IM8 Cloudy Moderate 11:21 8.3 Middle 24.8 89 90 1.4 98.9 7.0 3.0 4.2 221 24.8 8.0 2 2.2 91 1.4 7.3 1.8 205 24.7 8.0 29.9 95.3 95.3 6.7 4.1 <0.2 2 24.7 8.0 29.9 95.3 6.7 Rottom

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

rater wild		toring Res		M.	03 April 21	during Mid-	Current	uc			I	att	C-1	ite i fair it	DO S	aturation	Dissol	lved	Total Control	NITE OF	Suspende	ed Solids	Total A	dkalinity	Caracitata	C	Chromium	NEST 117
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Speed	Current	Water Te	emperature (°C)		pH	Salin	nity (ppt)		(%)	Oxyg	gen	Turbidity(	NTU)	(mg			om)	Coordinate HK Grid	Coordinate HK Grid	(µg/L)	Nickel (µg
Station	Condition	Condition	Time	Depth (m)	Camping Dop	()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	Value E
					Surface	1.0	1.8	272	25.0	25.0	8.0	8.0	28.6	28.6	101.7	101.8	7.2		2.6		2		86				<0.2	1.4
						1.0 4.0	2.0 1.7	278 271	25.0 24.9		8.0		28.6 28.8		101.8 98.2		7.2 6.9	7.1	2.6	H	3	ł	86 89	1			<0.2	1.4
IM9	Cloudy	Moderate	11:14	7.9	Middle	4.0	1.7	280	24.9	24.9	8.0	8.0	28.8	28.8	98.1	98.2	6.9		2.8	3.3	3	3	90	89	822115	808791	<0.2	1.4
					Bottom	6.9	1.5 1.6	282 294	24.8 24.8	24.8	8.0	8.0	29.0 29.0	29.0	95.9 95.9	95.9	6.7	6.7	4.5 4.4	L	3	ļ	90 91	1			<0.2	1.3
						1.0	2.6	294	25.1		8.0		28.6		103.6		7.3		2.3		4		83				<0.2	1.4
					Surface	1.0	2.8	252	25.1	25.1	8.0	8.0	28.6	28.6	103.5	103.6	7.3	7.0	2.4		4	İ	84	1			<0.2	1.5
IM10	Cloudy	Moderate	11:06	8.4	Middle	4.2	2.6 2.7	238 259	24.8 24.8	24.8	8.0	8.0	29.6 29.6	29.6	96.2 96.1	96.2	6.7		5.8 5.9	4.8	3	3	87 88	87	822367	809774	<0.2	1.4
					Bottom	7.4	2.7	234	24.8	24.8	8.0	8.0	29.6	29.6	95.8	95.9	6.7	6.7	6.4	t	2	İ	90	1			<0.2	1.5
					Bottom	7.4	2.8	248	24.8	24.0	8.0	0.0	29.6	29.0	95.9	33.3	6.7	0.7	6.1		2		90				<0.2	1.5
					Surface	1.0	1.2	38	25.0 24.9	25.0	8.0	8.0	29.5	29.5	100.3	100.3	7.0		4.3	H	4 5	ł	84 85	1			<0.2	1.4
IM11	Cloudy	Moderate	10:57	8.3	Middle	4.2	1.1	42	24.8	24.8	8.0	8.0	29.9	29.9	96.9	96.9	6.8	6.9	6.4	6.3	5	5	86	85	822053	811483	<0.2	1.5
	Oloudy	Moderate	10.01	0.0		4.2 7.3	1.2	43	24.8 24.8		8.0		29.9 29.9		96.9 96.3		6.8		6.4 8.3	-	4	Ĭ	85 86	- 00	OZZOGO	011100	<0.2	1.4
					Bottom	7.3	1.1	43	24.8	24.8	8.0	8.0	29.9	29.9	96.3	96.3	6.7	6.7	8.3	-	5	ļ	86	1			<0.2	1.4
					Surface	1.0	1.3	227	24.9	24.9	8.0	8.0	29.8	29.9	98.8	98.7	6.9		4.7		6		84	1			<0.2	1.3
						1.0 4.0	1.3	227 223	24.9 24.7		8.0		29.9 30.0		98.6 97.1		6.9	6.9	4.9 6.7	-	5	1	85 85	1			<0.2	1.3
IM12	Cloudy	Moderate	10:51	8.0	Middle	4.0	1.0	227	24.7	24.7	8.0	8.0	30.0	30.0	97.1	97.1	6.8		6.9	6.5	6	6	86	86	821460	812048	<0.2	1.5
					Bottom	7.0	0.9 1.0	222 227	24.7	24.7	8.0	8.0	30.1	30.1	96.2 96.2	96.2	6.7	6.7	8.0 7.7	F	5	ļ	88 89	-			<0.2	1.3
					0(	1.0	1.0	- 221	25.1	05.4	8.0		28.4	00.4	102.9	400.0	7.2		2.2		3		- 09				-	-
					Surface	1.0	-	-	25.1	25.1	8.0	8.0	28.4	28.4	102.8	102.9	7.2	7.2	2.2	I	3	Ī	-	1			-	-
SR1A	Cloudy	Moderate	10:12	5.6	Middle	2.8	-	•	-	-	-	-	-	-	-	-	-		-	2.6	-	3	-	-	819972	812662	-	-
					Bottom	4.6	-	-	24.9	24.9	8.0	8.0	29.9	29.8	95.0	95.1	6.6	6.7	3.0		3	İ	-	1			-	-
						4.6 1.0	0.2	220	24.9		7.9		29.8 29.8		95.1 98.4		6.7	0.7	3.0		3		- 84				<0.2	1.5
					Surface	1.0	0.2	233	24.8	24.8	7.9	7.9	29.8	29.8	98.4	98.4	6.9		3.9	H	3	ł	85	1			<0.2	1.4
SR2	Cloudy	Moderate	09:56	4.9	Middle	-	-	-	-		-	-	-	-	-		-	6.9	-	4.1		3	-	86	821450	814159	- <0.2	1
	ŕ					3.9	0.2	219	24.7		7.9		30.0		96.6		6.8		4.2	-	4		87	1			<0.2	1.4
					Bottom	3.9	0.2	238	24.7	24.7	7.9	7.9	30.0	30.0	96.6	96.6	6.8	6.8	4.1		3		87				<0.2	1.4
					Surface	1.0	2.3	164 164	25.0 25.0	25.0	8.0	8.0	28.3	28.3	105.3 105.0	105.2	7.4		2.3	L	3	ļ	-	-			-	-
000	011		44.00	0.7	10.11	4.9	2.3	163	24.9	24.0	8.0		29.1	00.0	103.2	400.0	7.4	7.3	3.7		4		-	1	200450	807547	-	-
SR3	Cloudy	Moderate	11:28	9.7	Middle	4.9	2.2	165	24.9	24.9	8.0	8.0	29.0	29.0	103.2	103.2	7.2		3.5	3.3	3	3	-	] -	822159	80/54/	-	-
					Bottom	8.7 8.7	2.4 2.5	164 173	24.8 24.8	24.8	8.0	8.0	30.3	30.3	98.7 98.6	98.7	6.9	6.9	4.0 3.9	-	3		-	1			-	-
					Surface	1.0	0.0	46	24.8	24.8	8.0	8.0	29.6	29.6	93.2	93.1	6.5		1.6		4		-				-	-
						1.0 4.1	0.0	49 167	24.8		8.0		29.6 29.7		93.0 92.2		6.5 6.5	6.5	1.6 1.6	-	5		-	-			-	-
SR4A	Cloudy	Moderate	10:27	8.2	Middle	4.1	0.1	182	24.7	24.7	8.0	8.0	29.7	29.7	92.1	92.2	6.5		1.6	1.5	6	5	-	-	817202	807815	-	-
					Bottom	7.2	0.1	103	24.7	24.7	8.0	8.0	29.7 29.7	29.7	91.8 91.8	91.8	6.4	6.4	1.4		6	Į	-	]			-	-
						7.2	0.1	106 290	24.7		8.0		30.0		91.8		6.4		5.2		5		-	<u> </u>			-	-
					Surface	1.0	0.1	318	24.8	24.8	8.0	8.0	30.0	30.0	91.6	91.7	6.4	6.4	5.5		4	İ	-	1			-	-
SR5A	Cloudy	Moderate	10:10	4.1	Middle	-	-	<del>- : -</del>	-	-	-	-	-	-	-	-	-		-	6.3	-	5	-	-	816569	810699	-	-
					Bottom	3.1	0.2	289	24.8	24.8	8.0	8.0	30.0	30.0	91.4	91.4	6.4	6.4	6.8		5	İ	-	1			-	-
					Bottom	3.1 1.0	0.2	307	24.8	24.0	8.0	0.0	30.0	30.0	91.3	31.4	6.4	0.4	7.6		4		-				-	-
					Surface	1.0	0.1	282 284	24.8	24.8	7.9 7.9	7.9	29.3 29.3	29.3	90.4	90.3	6.4		9.6 9.6	H	3	ł	-	1			-	-
SR6A	Cloudy	Moderate	09:42	4.0	Middle	-	-		-		-		-	-	-		-	6.4	-	6.7	-	5	-	1.	817976	814748	<u> </u>	-
	,					3.0	0.1	336	24.7		7.9		29.3		89.4		6.3		3.6	-	- 6		-	+			-	-
					Bottom	3.0	0.1	353	24.7	24.7	7.9	7.9	29.3	29.3	89.3	89.4	6.3	6.3	3.9		6						-	-
					Surface	1.0	0.3	333	24.5	24.5	8.0	8.0	30.3	30.3	98.9	98.9	6.9		2.0	T	2		-	1			-	-
						1.0 7.9	0.3	352 352	24.5 24.4		8.0		30.4		98.9 97.8		6.9	6.9	2.0	}	2	ł _	-	1			-	-
SR7	Cloudy	Moderate	09:05	15.8	Middle	7.9	0.3	324	24.4	24.4	8.0	8.0	30.6	30.6	97.7	97.8	6.9		2.3	2.3	3	2	-	1 -	823646	823752		-
					Bottom	14.8 14.8	0.3	340 313	24.2	24.2	8.0	8.0	31.2	31.2	94.7	94.7	6.7	6.7	2.7	F	2	ļ	-	1			-	-
					Curtons	1.0	- 0.3	- 313	25.2	25.2	8.0	8.0	28.7	20.7	101.0	101.0	7.1		3.3	+	4		-				-	-
					Surface	1.0	-	-	25.2	25.2	8.0	6.0	28.7	28.7	101.0	101.0	7.1	7.1	3.4	ļ	5	Į	-	]			-	-
SR8	Cloudy	Moderate	10:40	5.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	3.7	-	5	-	-	820413	811614	-	-
					Bottom	4.7	-		24.8	24.8	8.0	8.0	29.6	29.6	96.9	96.9	6.8	6.8	4.1		4	İ		1			-	-
	1				DOLLOTTI	4.7	-	-	24.8	24.0	8.0	0.0	29.6	23.0	96.9	50.9	6.8	0.0	4.1	Γ	5	1	-		l l	l .	I - T	-

DA: Depth-Averaged

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

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

Water Quality Monitoring Results on during Mid-Ebb Tide 06 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Depth (m) Value Value (Easting) 24.3 0.0 8.1 1.0 0.0 79 24.3 30.6 104.: 2.3 41 0.1 156 24.2 8.1 31.0 99.2 7.0 3 92 <0.2 0.9 31.1 98.6 804240 C1 Mistv Calm 20:51 8.1 815600 8.0 4.1 0.1 157 24.2 8.1 31.1 97.9 6.9 3.8 2 92 <0.2 0.9 7.2 0.1 178 24.3 8.1 31.2 96.8 6.8 4.3 2 93 <0.2 0.8 Bottom 8.1 31.2 96.7 6.8 7.2 0.1 190 24.3 8.1 31.2 96.6 6.8 4.2 3 93 <0.2 0.8 1.0 0.3 167 24.9 8.0 29.1 95.5 6.7 2.0 86 < 0.2 1.6 Surface 8.0 29.1 95.5 <0.2 1.7 1.0 0.3 170 24.9 8.0 29.1 95.5 6.7 2.0 3 87 5.3 0.2 176 24.7 8.0 30.7 90.6 6.3 2.4 2 90 91 <0.2 1.7 C2 Fine Moderate 19:46 10.5 Middle 8.0 30.7 90.6 825664 806950 24.7 6.3 0.2 182 8.0 30.7 90.6 9.5 0.2 171 24.4 8.0 3.4 2 1.3 31.4 88.7 6.2 94 < 0.2 Bottom 24.4 8.0 31.4 88.7 6.2 6.2 1.4 9.5 0.2 176 24.4 8.0 31 4 88.7 3.4 95 <0.2 1.0 0.1 25.1 1.6 8.0 86 6.6 < 0.2 1.5 Surface 8.0 31.3 95.8 1.6 1.7 1.7 1.4 1.0 95.8 6.6 2 87 <0.2 0.1 33 25.1 8.0 31.3 6.6 1.4 <0.2 6.0 24.8 6.6 3 90 90 0.1 45 8.0 31.6 94.8 94.9 C3 Fine Moderate 21:52 12.0 Middle 8.0 31.6 94.9 90 822122 817818 24.8 0.1 8.0 3 94 <0.2 1.4 11.0 0.1 79 24.6 8.0 31.9 93.7 6.5 3.1 24.6 8.0 6.5 Bottom 31.9 93.6 11.0 0.2 82 24.6 8.0 31.9 93.5 6.5 3.2 3 94 <0.2 1.4 0.1 165 24.5 3.4 8.1 98.6 6.9 <0.2 0.7 30.3 Surface 24.5 8.1 30.3 98.7 1.0 0.1 173 24.5 8.1 30.3 98.7 6.9 3.4 2 88 <0.2 0.6 6.9 807147 IM1 Misty Calm 20:31 5.0 Middle 89 817927 0.7 4.0 0.1 143 24.3 8.1 93.2 6.6 4.2 2 90 <0.2 0.7 Bottom 24.4 8.1 30.5 93.2 6.6 4.0 0.1 143 24.4 8.1 30.5 93.1 6.5 4.2 0.6 0.1 200 24.5 8.1 30.2 99.1 7.0 6.9 4 87 <0.2 0.9 Surface 24.5 8.1 30.3 98.5 1.0 0.1 203 24.4 30.4 5.6 3 87 <0.2 0.7 0.6 0.7 3.5 0.0 143 24.3 7.4 3 91 <0.2 <0.2 <0.2 806169 IM2 Mistv Calm 20:24 Middle 24.3 8.1 30.9 95.1 818152 155 24.3 7.4 3 3.5 0.0 92 92 6.0 0.1 122 24.3 8.1 30.9 94.7 6.7 9.8 Bottom 24.3 8.1 30.9 94.7 6.7 94.6 6.7 6.0 0.1 123 24.3 8.1 30.9 9.8 92 <0.2 0.8 0.9 1.0 0.1 165 24.6 8.1 30.3 98.7 6.9 4.7 89 <0.2 Surface 8.1 30.5 98.9 1.0 0.1 181 24.4 8.1 30.7 99.1 7.0 4.7 2 89 <0.2 0.7 0.8 0.6 0.7 3.6 0.1 170 24.2 8.1 30.9 6.6 5.6 2 92 <0.2 IM3 Misty 20:18 7.2 Middle 93.3 818780 805615 92 89 <0.2 3.6 0.1 179 24.2 30.9 5.6 3 24.3 92.6 92.5 6.2 0.1 126 8.0 30.8 6.5 6.4 0.1 24.3 8.0 30.8 6.3 2 <0.2 6.2 133 93 1.0 0.1 219 24.3 8.1 30.6 93.9 6.6 2.1 3 88 <0.2 0.7 Surface 24.3 8.1 30.6 93.7 1.0 8 1 93.4 21 3 89 <0.2 0.1 229 24.3 30.7 4.2 187 2.8 2.8 2 91 91 0.6 0.1 24.2 8.1 30.9 92.3 6.5 <0.2 IM4 Misty Calm 20:10 Middle 24.2 8.1 92.2 819741 804585 4.2 191 8.1 30.9 92.0 0.1 24.2 2 0.7 7.4 0.1 154 24.3 24.3 8.1 8.1 30.9 92.9 6.5 3.8 3.8 92 <0.2 6.6 Rottom 24.3 8.1 30.9 93.1 0.1 162 92 < 0.2 0.7 1.0 0.1 1.4 87 245 24.3 8.1 30.3 97.1 6.8 2 <0.2 Surface 24.3 8.1 30.4 97.3 1.0 8.1 30.5 97.4 6.9 1.4 <0.2 0.8 0.1 252 24.3 3 87 4.0 0.1 180 24.3 4.1 2 91 <0.2 0.6 8.1 6.6 30.7 93.6 IM5 20:03 8.1 30.7 93.5 820743 804880 Misty Calm 8.0 Middle 24.3 90 0.7 4.0 190 24.3 8.1 30.8 93.4 6.6 4.2 2 91 < 0.2 0.6 0.1 9.1 <0.2 0.7 7.0 0.1 24.3 8.1 30.8 95.0 95.6 6.7 2 92 92 11 8.1 95.3 6.7 Bottom 24.3 30.8 0.1 24.3 30.8 0.6 0.7 0.7 0.6 1.6 87 1.0 0.1 198 24.3 8.1 30.3 94.1 6.6 3 <0.2 Surface 24.3 8.1 30.4 94.1 1.0 0.1 209 24.3 8.1 30.4 94.0 6.6 1.5 2 88 <0.2 3.8 0.1 189 24.2 8.1 30.6 93.4 6.6 1.7 3 <0.2 19:57 7.6 Middle 24.2 8.1 30.6 93.4 821045 805806 IM6 Mistv Calm 3.8 0.1 201 24.2 8.1 30.6 93.3 6.6 1.8 3 90 <0.2 0.6 6.6 0.1 24.3 30.6 94.4 6.6 7.0 3 91 <0.2 Bottom 24.3 8.1 30.6 94.6 6.7 6.6 0.1 159 8.1 30.6 94.8 7.1 24.3 1.0 0.1 217 24.5 8.1 29.3 95.1 1.0 87 <0.2 0.7 Surface 24.5 8.1 29.3 95.0 1.0 0.1 228 24.5 8.1 29.4 94.9 6.7 1.0 4 88 <0.2 0.6 0.7 4.4 0.1 108 24.3 30.1 6.6 1.5 3 90 <0.2 IM7 Misty Calm 19:50 8.8 Middle 24.3 8.2 30.1 92.9 821372 806831 <0.2 4.4 0.1 112 24.3 8.2 30.1 92.7 6.5 1.6 3 90 7.8 0.1 57 24.2 8.2 30.6 90.7 6.4 5.1 92 <0.2 0.6 Bottom 8.2 30.6 90.8 6.4 7.8 0.1 59 24.2 8.2 30.6 90.8 6.4 5.2 92 <0.2 0.7 1.0 0.1 143 25.6 8.0 29.2 98.0 6.8 1.8 88 < 0.2 1.5 98.0 Surface 29.2 1.5 1.0 0.1 147 25.6 8.0 29.2 97.9 6.8 1.8 3 87 <0.2 3.8 0.2 89 24.7 8.0 30.4 92.0 6.4 2.8 3 90 91 <0.2 1.6 1.6 IM8 Fine Moderate 20:11 7.5 Middle 24.7 8.0 30.4 92.1 821852 808143 3.8 0.2 95 24.7 8.0 30.4 92.1 6.4 2.9 < 0.2 6.5 0.2 39 24.3 8.0 32.0 91.3 6.4 3.3 2 94 <0.2 1.4 8.0 Bottom 24.3 32.0 91.3 6.4

DA: Depth-Averaged

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

Water Qua	lity Moni	toring Res	ults on		06 April 21	during Mid-		•																				
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water T	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Disso		Turbidity(	NTU)	Suspende (mg		Total All		Coordinate	Coordinate	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ith (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0	0.1	111 111	25.2 25.2	25.2	8.0	8.0	29.5	29.5	96.1 96.1	96.1	6.7 6.7		2.1		2		87 87				<0.2 <0.2	1.6
	_					3.5	0.1	98	24.6		8.0		30.7		93.2		6.5	6.6	2.7	}	3		90				-O 2	1.6
IM9	Fine	Moderate	20:17	7.0	Middle	3.5	0.1	99	24.6	24.6	8.0	8.0	30.7	30.7	93.1	93.2	6.5		2.7	2.6	2	2	91	91	822086	808827	<0.2	1.7
					Bottom	6.0	0.1	71 76	24.3	24.3	8.0	8.0	31.6 31.6	31.6	93.3 93.4	93.4	6.5 6.5	6.5	3.1	-	2		94 95				<0.2	1.6
					Surface	1.0	0.3	88	25.4	25.4	8.0	8.0	29.3	29.3	100.0	100.0	7.0		1.8		3		87				<0.2	1.6
					Surface	1.0	0.4	95	25.4	25.4	8.0	0.0	29.3	29.3	99.9	100.0	7.0	6.8	1.8		3		87				<0.2	1.8
IM10	Fine	Moderate	20:24	8.1	Middle	4.1 4.1	0.3	94 95	24.8	24.8	8.0	8.0	30.4	30.4	94.0	94.0	6.6		2.8	2.8	3 4	4	91 90	91	822391	809802	<0.2 <0.2	2 1.7 1.7
					Bottom	7.1	0.2	97	24.4	24.4	8.0	8.0	31.5	31.5	90.7	90.8	6.3	6.3	3.8	[	4		94				<0.2	1.6
						7.1	0.2	98 84	24.4		8.0		31.5 29.6		90.8		6.3		3.8 1.8		5 3		95 86				<0.2 <0.2	1.7
					Surface	1.0	0.4	87	25.2	25.2	8.0	8.0	29.6	29.6	97.2	97.3	6.8	6.7	1.8	İ	4		87				<0.2	1.6
IM11	Fine	Moderate	20:35	7.9	Middle	4.0	0.3	77	24.8	24.8	8.0	8.0	30.4	30.4	93.6	93.6	6.5	0.7	2.0	2.4	3	3	91	91	822033	811466	<0.2	2 1.6 1.6
						4.0 6.9	0.3	78 72	24.8		8.0		30.4		93.5 87.8		6.5 6.1		2.0 3.2	ŀ	2		91 94				<0.2	1.6
					Bottom	6.9	0.2	74	24.4	24.4	8.0	8.0	31.4	31.4	87.7	87.8	6.1	6.1	3.3		3		95				<0.2	1.7
					Surface	1.0	0.3	90 97	24.8	24.8	8.0	8.0	30.1	30.1	93.9	93.9	6.6		2.0	-	3		87 87				<0.2	1.8
IM12	Fine	Moderate	20:41	8.8	Middle	4.4	0.3	87	24.6	24.6	8.0	0.0	31.0	31.0	89.6	89.6	6.3	6.5	2.6	2.2	3	3	91	91	821457	812047	<0.2	1.5
IIVI I Z	rine	Woderate	20.41	0.0	ivildale	4.4	0.2	91	24.6	24.6	8.0	8.0	31.0	31.0	89.6	69.6	6.3		2.6	2.2	2	3	91	91	021457	612047	<0.2	1.6
					Bottom	7.8 7.8	0.1	68 71	24.5	24.5	8.0	8.0	31.2	31.2	89.3 89.4	89.4	6.2	6.2	2.1	ŀ	2		94 95				<0.2	1.6
					Surface	1.0	-		25.2	25.2	8.0	8.0	30.2	30.2	94.0	94.0	6.5		2.3		5		-				-	-
					Cuitado	1.0 2.7	-	-	25.2	20.2	8.0	0.0	30.2	00.2	94.0	01.0	6.5	6.5	2.3	-	4		-				-	-
SR1A	Fine	Moderate	21:13	5.4	Middle	2.7	-		1	-		-		-	-	-				2.2		4		-	819972	812657	-	-
					Bottom	4.4	-		24.7	24.7	8.0	8.0	31.0	31.0	90.7	90.7	6.3	6.3	2.0	[	4		-				-	-
						1.0	0.1	67	24.7 25.1		8.0		31.0 29.8		90.6		6.3		2.0 1.7		2		87				<0.2	1.2
					Surface	1.0	0.1	68	25.1	25.1	8.0	8.0	29.8	29.8	99.3	99.3	6.9	6.9	1.7		2		87				<0.2	1.1
SR2	Fine	Moderate	21:29	4.8	Middle	-	-		-	-	-	-	-	-	-	-	-	0.0	-	2.0	-	2	-	89	821480	814185	- <0.2	2 - 1.1
					Bottom	3.8	0.1	42	24.7	24.7	8.0	8.0	30.7	30.7	94.7	94.7	6.6	6.6	2.3	İ	3		90				<0.2	1.1
					Bollom	3.8	0.1	42	24.7	24.7	8.0	0.0	30.7	30.7	94.7	94.7	6.6	0.0	2.3		2		90				<0.2	1.1
					Surface	1.0	0.2	162 177	25.3 25.3	25.3	8.0	8.0	29.0	29.0	98.2 98.2	98.2	6.9		1.6 1.6	ŀ	3		-				-	-
SR3	Fine	Moderate	20:05	8.8	Middle	4.4	0.3	144	24.5	24.5	8.0	8.0	30.7	30.7	91.8	91.9	6.4	6.7	2.7	2.8	2	3	-	_	822161	807548	-	-
Orto	1 1110	Moderate	20.00	0.0		4.4 7.8	0.3	149 183	24.5 24.3		8.0		30.7 32.1		91.9 94.0		6.4		2.7 4.1	2.0	3	·	-		022101	007010	-	- '
					Bottom	7.8	0.1	192	24.3	24.3	8.0	8.0	32.1	32.1	93.9	94.0	6.6	6.6	4.1	İ	3		-				-	-
					Surface	1.0	0.2	78	24.3	24.3	8.1	8.1	30.6	30.6	95.3	95.2	6.7		2.0		3		-				-	-
						1.0 4.5	0.2	79 84	24.3		8.1 8.1		30.6		95.1 94.2		6.7	6.7	1.9 2.1		2		-				-	-
SR4A	Misty	Calm	21:12	9.0	Middle	4.5	0.2	86	24.2	24.2	8.1	8.1	30.7	30.7	94.2	94.2	6.6		2.1	2.2	3	3	-	-	817181	807803	-	-
					Bottom	8.0 8.0	0.1	22 24	24.3 24.3	24.3	8.1 8.1	8.1	30.7	30.7	95.3 95.6	95.5	6.7	6.7	2.4	-	3 4		-				-	-
					Surface	1.0	0.1	342	24.5	24.5	8.0	8.0	29.9	29.9	92.2	92.3	6.5		2.6		3		-				-	-
					Surface	1.0	0.1	349	24.5	24.5	8.0	0.0	30.0	29.9	92.3	92.3	6.5	6.5	2.6		3		-				-	-
SR5A	Misty	Calm	21:29	3.6	Middle	-	-		-	-	-	-	+	-	-	-	-		-	4.3	-	3	-	-	816576	810707	-	-
					Bottom	2.6	0.1	356	24.4	24.4	8.0	8.0	30.1	30.1	93.6	93.7	6.6	6.6	5.9		2		-				-	-
						2.6	0.1	358 190	24.4		8.0		30.1		93.8		6.6		5.9 2.7		2		-				-	-
					Surface	1.0	0.1	198	24.7	24.7	8.0	8.0	29.4	29.4	93.9	93.9	6.6	6.6	2.8	f	3						-	-
SR6A	Misty	Calm	21:58	4.0	Middle	-	-	-	-		-	-	-	-	-	-	-	0.0	-	3.0		3	-		817951	814749		-
						3.0	0.0	199	24.7		8.0		29.3		95.0		6.7		3.2	-	3		-				-	-
					Bottom	3.0	0.0	203	24.7	24.7	8.0	8.0	29.3	29.3	95.2	95.1	6.7	6.7	3.3		4		-				-	-
					Surface	1.0	0.1	342 315	24.7	24.7	8.0	8.0	32.5 32.5	32.5	99.0 98.8	98.9	6.8		1.1		2		-				-	-
SR7	Fine	Moderate	22:28	14.4	Middle	7.2	0.1	138	24.7	24.2	8.0	8.0	32.5	32.8	98.8	92.1	6.4	6.6	1.1	4.	3	3	-		823658	823723		-
3KI	rile	woderate	22:20	14.4	ivildale	7.2	0.1	141	24.2	24.2	8.0	0.0	32.8	32.0	92.0		6.4		1.2	1.1	4	3	-	-	023038	023123		
					Bottom	13.4 13.4	0.1	143 143	24.0	24.0	8.0	8.0	33.1	33.1	89.0 89.1	89.1	6.2	6.2	1.1	ŀ	4		-				-	-
					Surface	1.0	-	-	25.4	25.4	8.0	8.0	30.3	30.3	95.3	95.3	6.6		4.0		4		-				-	
					Guilace	1.0	-	-	25.4	20.7	8.0	0.0	30.3	30.3	95.3	33.3	6.6	6.6	3.7	I	5		-				-	-
SR8	Fine	Moderate	20:50	4.9	Middle	-	-		+ -	-	-	-	-	-	-	-	-		-	8.1	-	4	-	-	820391	811607	-	-
					Bottom	3.9	-	-	25.4	25.4	8.0	8.0	30.4	30.4	95.5	95.5	6.6	6.6	12.1	ļ	3		-				-	-
DA: Denth-Aver			11			3.9		-	25.4		8.0		30.4		95.5		6.6		12.4		4		- 1		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 boiled and underlined

Water Quality Monitoring Results on during Mid-Flood Tide 06 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Value Value Average Value (Northing) (Easting) 24.2 2.2 Surface 24.2 8.1 30.2 98.2 1.0 2.4 249 24.2 30.3 98.0 6.9 1.3 6 86 <0.2 0.6 233 24.1 7.2 5 0.6 89 <0.2 C1 8 1 31.4 95.5 804231 09:39 84 Middle 24.1 88 815643 Mistv Calm 0.6 247 24.1 31.4 95.3 6.7 7.2 5 89 <0.2 0.6 2.3 8.1 7.4 2.2 230 24.1 8.0 31.5 94.4 6.6 8.1 4 89 <0.2 0.7 6.6 Bottom 24.1 8.0 31.5 94.4 94.4 6.6 0.6 7.4 2.4 24.1 8.1 240 8.0 5 90 < 0.2 1.0 0.1 223 85 5.2 < 0.2 1.4 8.0 Surface 24.7 8.0 30.5 91.1 1.4 1.3 1.5 5.2 5.1 24.7 8.0 91.1 6.4 5 4 85 1.0 0.1 226 217 30.5 <0.2 5.5 89 0.1 24.6 8.0 30.8 89.4 6.2 C2 Sunny Moderate 10:27 10.9 Middle 24.6 8.0 30.8 89.4 89 825685 806962 30.8 89.4 6.2 5.1 5 89 <0.2 5.5 0.1 232 24.6 8.0 1.4 9.9 0.2 45 24.4 8.0 31.9 6.0 7.4 3 93 <0.2 86.2 8.0 86.3 6.0 Bottom 24.4 31.9 9.9 0.2 24.4 8.0 31.9 86.3 6.0 7.4 4 93 <0.2 1.3 1.0 0.1 146 24.2 8.0 4 <0.2 1.5 Surface 24.2 8.0 32.0 92.7 1.0 0.2 151 24.2 8.0 32.0 92.7 6.5 3.7 5 86 <0.2 1.4 3.9 4 5 5.9 354 89 90 <0.2 1.1 0.0 24.0 8.0 89.9 6.3 C3 07:57 817799 Sunnv Moderate 11.8 Middle 24.0 8.0 33.0 89.8 90 822097 1.3 0.0 326 24.0 10.8 0.0 68 24.0 8.0 88.9 6.2 4.2 3 94 <0.2 1.2 Bottom 24.0 8.0 33.2 88.8 6.2 10.8 0.0 72 24.0 8.0 33.2 88.6 6.2 4.2 2 93 <0.2 1.2 1.0 0.1 221 24.2 30.5 3.1 85 <0.2 0.7 Surface 24.2 8.0 30.5 92.0 1.0 0.1 237 24.2 8.0 30.5 91.7 6.5 3.1 4 85 <0.2 0.7 807154 IM1 Mistv Calm 09:59 5.0 Middle 817956 4 0 0.1 147 24.2 8.0 30.6 90.4 6.4 5.3 4 89 < 0.2 0.7 Bottom 24.2 8.0 30.6 90.5 4.0 0.1 158 24 1 8.0 30.6 90.5 6.4 5.2 3 86 <0.2 0.8 1.0 2.0 205 24.2 8.1 30.8 93.3 6.6 4.8 4 86 < 0.2 0.6 Surface 8.1 30.8 93.1 1.0 2.0 218 24.2 8.1 30.8 92.9 6.5 4.7 3 85 <0.2 0.7 0.7 3.5 2.0 208 24.1 8.0 30.8 92.4 6.5 5.0 2 90 <0.2 IM2 Misty Calm 10:06 7.0 Middle 8.0 30.8 92.3 89 818143 806150 <0.2 0.8 0.7 0.7 3.5 2.1 218 24.1 8.0 30.8 92.2 6.5 5.0 3 90 19 24.1 2 6.0 203 8.0 30.8 90.7 6.4 5.8 91 <0.2 8.0 30.8 90.5 6.4 6.0 6.4 5.9 2.0 204 24.1 8.0 30.7 90.2 91 <0.2 1.0 19 93 24.3 8.1 30.5 97.7 6.9 2.2 87 < 0.2 0.8 Surface 8.1 30.5 97.6 1.0 97.5 3 90 2.0 94 24.3 8.1 30.6 6.9 <0.2 0.8 0.8 0.9 3.6 1.5 6.5 4.5 2 90 <0.2 84 24.2 8.0 30.9 91.9 IM3 Misty Calm 10:12 7.2 Middle 24.2 8.0 30.9 91.8 89 818776 805587 3 5 1.6 4.4 91 91 3.6 90 24.2 8.0 30.9 91.7 6.5 <0.2 6.5 6.2 93 24.2 8.0 30.8 89.5 6.3 6.3 Rottom 24.2 8.0 30.7 89.6 6.2 1.8 24.1 8.0 30.6 89.7 6.3 6.5 4 87 <0.2 0.9 96 1.9 0.8 1.0 122 24.3 8.1 30.0 97.6 6.9 1.3 4 88 <0.2 Surface 24.3 8.1 30.0 97.5 1.0 2.0 126 24.3 1.4 4 90 <0.2 3.6 <0.2 0.8 4.2 1.7 130 24.2 3 91 8.0 30.8 95.9 6.7 IM4 Calm 10:20 8.4 Middle 24.2 8.0 30.8 95.3 819715 804617 Mistv 3 2 2 4.2 7.4 138 24.2 8.0 30.8 3.7 91 <0.2 1.8 1.7 24.2 4.3 0.8 8.0 30.9 90.4 6.4 Bottom 24.2 8.0 30.9 90.6 6.4 7.4 1.8 120 24.2 8.0 6.4 4.3 86 <0.2 0.8 0.7 1.0 1.7 12 24.4 8.1 29.6 95.9 1.4 4 86 <0.2 6.8 Surface 24.4 8.1 29.8 95.9 1.0 1.9 24.3 8.1 95.8 6.8 1.4 5 86 <0.2 3.8 1.9 24.2 1.9 5 <0.2 0.9 8.1 6.7 90 IM5 Calm 10:26 7.6 Middle 24.2 8.1 30.7 94.5 820738 804848 Misty 3.8 24.2 2.0 <0.2 1.9 0.8 6.6 2.1 24.2 8.0 30.8 92.6 92.8 6.5 3.6 3.5 3 91 <0.2 24.2 8.0 92.7 6.5 Bottom 30.8 8.0 6.6 2.2 24.2 30.8 87 < 0.2 1.0 1.6 24.5 8.0 29.1 94.0 6.6 1.1 2 86 <0.2 0.7 Surface 24.5 8.0 29.4 93.6 1.0 1.6 24.4 8.0 29.7 93.1 6.6 1.1 3 89 <0.2 1.0 3.7 1.4 24.2 8.0 30.6 91.3 6.4 1.7 3 89 <0.2 Misty Calm 10:30 Middle 24.2 8.0 30.6 91.2 821069 805827 1.7 <0.2 3.7 1.5 24.2 8.0 30.6 91.0 6.4 2 89 6.4 3.3 3.4 0.7 6.4 1.4 10 24.2 8.0 30.6 4 91 <0.2 91.3 6.4 15 24.2 8.0 30.6 5 91 0.7 0.7 0.6 0.7 1.0 1.2 24 24.4 8.1 29.3 94.1 6.7 1.8 3 88 <0.2 Surface 24.4 93.7 93.3 6.6 1.0 13 26 24.3 8 1 29.7 1.9 4 88 <0.2 5 4.1 1.4 28 8.1 4.2 89 <0.2 24.2 30.4 91.8 6.5 IM7 Misty Calm 10:34 8.2 Middle 24.2 8.1 91.7 821343 806822 90 4.1 1.5 29 24.2 8.1 30.5 91.6 6.5 4.3 5 7.2 1.7 41 24.2 8.1 30.6 91.8 6.5 4.7 5 91 <0.2 0.7 Bottom 24.2 8.1 30.6 91.9 6.5 1.8 43 24.2 8.1 30.6 4.7 4 88 <0.2 0.7 1.0 0.1 104 24.8 8.0 29.4 94.7 6.7 4.9 3 86 < 0.2 1.8 Surface 24.8 8.0 29.4 94.8 29.4 94.8 1.7 104 8.0 4.9 <0.2 1.0 0.1 24.8 2 85 8.0 30.2 92.3 6.5 6.0 2 90 <0.2 1.7 4.0 0.2 86 24.6 808118 8.0 30.2 92.3 821821 IM8 Sunny Moderate 09:56 7.9 Middle 24.6 90 1.8 92.2 90 1.7 6.5 6.0 4.0 92 24.6 8.0 30.2 3 0.2 1.8 6.9 0.2 57 24.2 8.0 32.1 90.2 8.2 8.2 94 <0.2 6.3 2 24.2 8.0 32.1 90.2 6.3 Rottom

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

Water Qua	ity Moni	toring Res	ults on		06 April 21	during Mid-		•																				
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		рН	Salin	nity (ppt)		aturation (%)	Disso		Turbidity(	NTU)	Suspende (mg		Total All		Coordinate	Coordinate	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	oth (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0	0.2	103 110	24.8	24.8	8.0	8.0	29.3	29.3	95.1 95.1	95.1	6.7 6.7		4.8 4.8		3		85 86				<0.2 <0.2	1.7
IM9	Sunny	Moderate	09:48	7.8	Middle	3.9	0.3	85	24.5	24.5	8.0	8.0	30.5	30.5	92.8	92.8	6.5	6.6	5.9	6.1	3	3	89	90	822108	808822	<0.2	1.7
livis	Suriny	Woderate	09.40	7.0	Middle	3.9	0.3	91	24.5	24.5	8.0	0.0	30.5	30.5	92.7	92.0	6.5		5.9	0.1	3	3	90	30	022100	000022	<0.2	1.6
					Bottom	6.8	0.3	73 75	24.3	24.3	8.0	8.0	31.7	31.7	91.6 91.6	91.6	6.4	6.4	7.6 7.6	ŀ	2		94				<0.2 <0.2	1.6
					Surface	1.0	0.4	111	24.8	24.8	8.0	8.0	29.5	29.5	95.3	95.3	6.7		4.9		4		85				<0.2	1.6
					Ourlace	1.0 3.6	0.4	113 106	24.8	24.0	8.0	0.0	29.5 31.1	25.5	95.3 89.1		6.7	6.5	4.9 7.1	ŀ	3		85 90				<0.2	1.6
IM10	Sunny	Moderate	09:38	7.1	Middle	3.6	0.4	108	24.4	24.4	8.0	8.0	31.1	31.1	89.0	89.1	6.2		7.1	6.2	3	3	90	90	822379	809801	<0.2 <0.2	2 1.7 1.6
					Bottom	6.1	0.2	106	24.4	24.4	7.9	7.9	31.9	31.9	85.0	85.0	5.9	5.9	6.6		2		93				<0.2	1.4
						6.1 1.0	0.2	108 106	24.4		7.9 8.0		31.9 29.5		85.0 95.5		5.9 6.7		6.6 4.6		3		94 85				<0.2 <0.2	1.5
					Surface	1.0	0.4	111	24.9	24.9	8.0	8.0	29.5	29.5	95.6	95.6	6.7	6.6	4.6	İ	3		85				<0.2	1.6
IM11	Sunny	Moderate	09:24	7.9	Middle	4.0	0.2	98 102	24.5 24.5	24.5	8.0	8.0	30.9	30.9	92.3 92.3	92.3	6.5 6.5		4.6 4.6	4.7	3 4	3	90	90	822055	811453	<0.2 <0.2	2 1.6 1.5
					Bottom	6.9	0.2	122	24.4	24.4	8.0	8.0	31.3	31.3	91.5	91.5	6.4	6.4	4.8	İ	3		94				<0.2	1.5
					Bottom	6.9	0.2	128	24.4	24.4	8.0	0.0	31.3	31.3	91.5	91.5	6.4	0.4	4.8		4		94 85				<0.2	1.4
					Surface	1.0	0.4	124 130	24.8 24.8	24.8	8.0	8.0	29.8	29.8	94.3	94.3	6.6		4.6 4.6	ŀ	5		89				<0.2	1.4
IM12	Sunny	Moderate	09:15	8.9	Middle	4.5	0.2	112	24.6	24.6	8.0	8.0	31.0	31.0	92.0	92.1	6.4	6.5	4.6	4.7	3	4	90	90	821459	812033	<0.2	1.5
	,					4.5 7.9	0.2	122 128	24.6		8.0		31.0		92.1 90.5		6.4		4.6 4.8	-	4		89 94				<0.2	1.4
					Bottom	7.9	0.2	128	24.5	24.5	8.0	8.0	31.3	31.3	90.6	90.6	6.3	6.3	4.8		3		93				<0.2	1.4
					Surface	1.0	-	-	24.5 24.5	24.5	7.9 7.9	7.9	30.8	30.8	85.7 85.8	85.8	6.0		4.5 4.5		3		-				-	-
SR1A	C	Moderate	08:41		Middle	2.8	-		-		-		-		-		-	6.0	-	5.1	-	4			819981	812655	-	-
SKIA	Sunny	Woderate	06.41	5.5	iviidale	2.8	-	-		-	-		-		-		-		-	5.1	-	4	-	-	019901	812000	- '	-
					Bottom	4.5 4.5	-		24.5 24.5	24.5	8.0	8.0	31.4	31.4	86.4 86.4	86.4	6.0	6.0	5.7 5.7	-	4 5		-				-	-
					Surface	1.0	0.1	4	24.4	24.4	8.0	8.0	31.3	31.3	92.1	92.1	6.4		4.3		5		85				<0.2	1.2
						1.0	0.2	-	24.4		8.0		31.3		92.1		6.4	6.4	4.3	-	4		85				<0.2	1.3
SR2	Sunny	Moderate	08:21	4.4	Middle	-	-	-	-	-	-	-		-	-	-	-		-	4.5	-	4	-	87	821476	814178	- <0.2	- 1.3
					Bottom	3.4	0.1	5	24.4	24.4	8.0	8.0	31.7	31.7	89.4 89.4	89.4	6.2	6.2	4.6 4.6	ļ	3		90 89				<0.2 <0.2	1.3
					0(	1.0	0.1	5 114	24.4	04.0	8.0	0.0	29.7	00.7	93.5	00.5	6.5		5.1		3		-				-	-
					Surface	1.0	0.1	114	24.9	24.9	8.0	8.0	29.7	29.7	93.4	93.5	6.5	6.4	5.1	[	3		-				-	-
SR3	Sunny	Moderate	10:03	8.7	Middle	4.4	0.1	184 188	24.5	24.5	8.0	8.0	31.0	31.0	90.6	90.6	6.3		6.3 6.3	6.7	3	3	-	-	822145	807547		-
					Bottom	7.7	0.1	64	24.2	24.2	8.0	8.0	32.2	32.2	92.6	92.6	6.5	6.5	8.6	į	4		-				-	-
						7.7 1.0	0.1 2.1	64 225	24.2 24.2		8.0 8.1		32.2 30.4		92.6 94.5		6.5 6.7	0.0	8.7 1.9		3		-				-	-
					Surface	1.0	2.2	234	24.2	24.2	8.1	8.1	30.4	30.4	94.4	94.5	6.7	6.6	1.8	İ	3		-				-	-
SR4A	Misty	Calm	09:17	9.4	Middle	4.7	2.1	229	24.1	24.1	8.1	8.1	30.5	30.5	92.9 92.8	92.9	6.6	0.0	2.6	2.8	3	3	-	-	817211	807814		<u> </u>
					5	8.4	2.2	251 227	24.1	04.4	8.1 8.0		30.6 30.6	00.0	92.8	00.5	6.5 6.5	0.5	4.1	-	3		-				-	-
					Bottom	8.4	2.2	248	24.1	24.1	8.0	8.0	30.6	30.6	92.5	92.5	6.5	6.5	4.0		2		-				-	-
					Surface	1.0	0.1	336 350	24.4	24.4	8.0	8.0	29.5 29.5	29.5	86.1 86.1	86.1	6.1 6.1		3.2	-	4		-				-	-
SR5A	Mistv	Calm	08:58	3.8	Middle	-	-		-		-		-		-	-		6.1	-	41	-	4	-		816584	810673		<u> </u>
011071	wiioty	Odiiii	00.00	0.0		2.8	0.1	331	24.3		8.0		29.6		87.0		6.2		- 5.1		4		-		010001	0.00.0	-	
					Bottom	2.8	0.1	358	24.3	24.3	8.0	8.0	29.6	29.6	87.2	87.1	6.2	6.2	5.1		3		-				-	-
					Surface	1.0	0.1	141 148	24.4	24.4	8.0	8.0	29.3	29.3	88.4 88.2	88.3	6.3		1.0		3		-				-	-
						1.0	0.1	148	24.4		8.0		29.4		88.2		6.2	6.3	1.0		-		-				-	-
SR6A	Misty	Calm	08:30	4.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	1.1	-	3	-	-	817968	814746	-	
					Bottom	3.0	0.0	148 150	24.4	24.4	8.0	8.0	29.4	29.4	87.4 87.5	87.5	6.2	6.2	1.3	ŀ	2		-				-	-
					Surface	1.0	0.1	275	24.0	24.0	8.0	8.0	33.0	33.0	87.7	87.7	6.1		4.1		4		-				-	-
						1.0 7.3	0.1	299	24.0 23.9		8.0		33.0		87.7		6.1 6.1	6.1	4.1 4.2	Į	4		-				-	-
SR7	Sunny	Moderate	07:19	14.6	Middle	7.3	0.1 0.1	102 111	23.9	23.9	8.0	8.0	33.4 33.4	33.4	88.1 88.1	88.1	6.1		4.2	4.2	3	4	-	-	823620	823726	-	-
					Bottom	13.6	0.1	72	23.9	23.9	8.0	8.0	33.5	33.5	87.5	87.5	6.1	6.1	4.4	ļ	3		-				-	-
						13.6	0.1	76	23.9		8.0		33.5		87.5 90.5		6.1		4.4 5.4		3 4		-			-	-	+
					Surface	1.0	-		24.9	24.9	8.0	8.0	31.3	31.3	90.6	90.6	6.3	6.3	5.5	Į	5		-				-	-
SR8	Sunny	Moderate	09:06	5.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-	5.5	-	5.6	-	5	-	-	820408	811614		
					Bottom	4.0	-		24.5	24.5	8.0	8.0	31.4	31.4	89.1	89.1	6.2	62	5.7	ŀ	6		-				-	
A: Denth-Aver					DUILUITI	4.0	-	-	24.5	24.5	8.0	0.0	31.4	31.4	89.1	09.1	6.2	6.2	5.7		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

Water Qua	lity Moni	toring Res	ults on		08 April 21 du	ring Mid-E		1																			
Monitoring	Weather	Sea	Sampling	Water	0		Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Dissolv Oxyge		Turbidity(N1	U) Sus	ended S (mg/L)	olids T	otal Alkalinity (ppm)	Coordinate	Coordinate	Chromium (µg/L)	Nickel (µg/L
Station	Condition	Condition	Time	Depth (m)	Sampling Depth (m	)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average \		DA	Value [	)A Va		DA 1	Value DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0	0.1	248 260	24.4 24.4	24.4	8.1 8.1	8.1	29.6 29.7	29.6	105.7 105.5		7.5 7.4		1.8		3	F	85 85			<0.2	0.8
C1	Misty	Calm	11:03	9.0	Middle	4.5	0.1	169	24.3	24.3	8.0	8.0	30.5	30.5	98.6 98.1	00.4	6.9	7.2	2.3	4	1	4	86	815628	804227	<0.2	0.6
					Bottom	4.5 8.0	0.1	178 203	24.3 24.2	24.2	8.0 8.0	8.0	30.6 30.9	30.9	96.9	06.0	6.8	6.8	3.5		1	L	87 89			<0.2	0.8
						1.0	0.1	203 175	24.2		8.0		30.9 27.6		96.9 101.7	-	7.2	0.0	3.1 3.4		3	+	89			<0.2	0.7 1.6
					Surface	1.0 5.6	0.6	190 164	24.7 24.4	24.7	8.0	8.0	27.7 29.8	27.7	101.5 96.7	101.6	7.2	7.0	3.5 4.3		3		83			<0.2	1.6
C2	Cloudy	Moderate	13:03	11.2	Middle	5.6	0.3	168	24.4	24.4	8.0	8.0	29.8	29.8	96.6	96.7	6.8		4.3	.3	3	3	86	825688	806955	<0.2	1.6
					Bottom	10.2 10.2	0.2	111 119	24.3 24.3	24.3	8.0	8.0	30.6 30.6	30.6	91.8 91.9	91.9	6.5	6.5	5.1 5.1		3		88 88			<0.2 <0.2	1.5 1.6
					Surface	1.0	0.2	17 17	24.1 24.1	24.1	8.1	8.1	31.2 31.2	31.2	98.8 98.8		7.0	6.8	1.7		2	-	84			<0.2	0.9
С3	Cloudy	Moderate	10:34	12.7	Middle	6.4 6.4	0.2	64 66	23.9 23.9	23.9	8.1 8.1	8.1	31.9 31.9	31.9	93.5 93.5		6.6	0.0	2.9	.4	2	2	87 87	822108	817806	<0.2	2 1.2 1.2
					Bottom	11.7	0.2	75 76	23.9	23.9	8.1	8.1	32.0 32.0	32.0	93.5 93.5	02.5	0.0	6.6	2.7		3	F	89 89			<0.2	1.3
					Surface	1.0	0.2	175	24.5	24.5	8.0	8.0	29.9	29.9	96.3	00.4	6.8		6.0		3		86			<0.2	0.8
IM1	Misty	Calm	11:25	5.0	Middle	1.0	0.1	186	24.5		8.0		29.9		95.9		6.7	6.8	6.0			4	87 - 88	817947	807133	<0.2 - <0.2	2 - 0.7
IIVI	iviisty	Cairii	11:25	5.0		4.0	0.1	- 155	24.4	-	8.0		30.0	-	95.0	-	6.7		7.1		-	" F	89	617947	607133	- <0.2	0.7
					Bottom	4.0	0.1	168 173	24.4	24.4	8.0	8.0	29.9	29.9	95.0 101.6	95.0	6.7 7.1	6.7	7.1		5		89 85			<0.2	0.6
					Surface	1.0	0.1	189	24.6	24.6	8.0	8.0	30.0		101.0	101.3	7.1	7.1	2.4		3	F	85			<0.2	0.7
IM2	Misty	Calm	11:32	6.8	Middle	3.4 3.4	0.1 0.1	117 126	24.5 24.5	24.5	8.0	8.0	30.1	30.1	99.2 98.9	99.1	7.0		3.4	.4	)		88 88	818156	806146	<0.2	0.6
					Bottom	5.8 5.8	0.1	107 117	24.5 24.5	24.5	8.0	8.0	30.2	30.2	97.9 98.0		6.9	6.9	4.5 4.3		3	-	90			<0.2	0.7
					Surface	1.0 1.0	0.1	189 205	24.6 24.6	24.6	8.1 8.1	8.1	29.9 29.9	29.9	100.3	100.2	7.0		2.0		1	-	86 86			<0.2 <0.2	0.5
IM3	Misty	Calm	11:39	7.0	Middle	3.5 3.5	0.1	163 178	24.5 24.5	24.5	8.0 8.0	8.0	30.0 30.1	30.0	98.5 98.2	00.4	6.9 6.9	7.0	2.2	4		5	88 88	818779	805601	<0.2	0.6
					Bottom	6.0	0.1	144	24.5	24.5	8.0	8.0	30.2	30.2	97.7 97.7	07.7	6.0	6.9	3.0		6		90			<0.2	0.7
					Surface	1.0	0.1	145 187	24.5 24.6	24.6	8.0	8.0	29.3	29.3	98.0	000	6.9		2.9		5		85			<0.2	0.6
IM4	Misty	Moderate	11:48	8.2	Middle	1.0 4.1	0.3	190 191	24.6 24.5	24.5	8.0	8.0	29.3 29.6	29.7	97.9 97.0		6.9 6.8	6.9	2.9 4.5		5	5	85 88 88	819733	804593	<0.2	0.6 2 0.6 0.6
IIVI	iviisty	Woderate	11.40	0.2		4.1 7.2	0.3	204 172	24.5 24.5		8.0		29.7 30.0		96.9 96.1		6.8		4.5		1		91	619733	804393	<0.2	0.6
					Bottom	7.2	0.2	172	24.5	24.5	8.0	8.0	30.0	30.0	96.1 99.9	96.1	6.8 7.1	6.8	3.9		1		91			<0.2	0.6
					Surface	1.0	0.3	212	24.6	24.6	8.0	8.0	29.0	29.0	99.8	99.9	7.0	6.9	1.4		2		86			<0.2	0.8
IM5	Misty	Moderate	11:58	7.6	Middle	3.8	0.4	180 187	24.5 24.5	24.5	8.0	8.0	30.0	30.0	97.5 97.4	97.5	6.8		3.8	.1	5	4	90 89	820723	804858	<0.2	0.7
					Bottom	6.6	0.2	176 193	24.4 24.3	24.4	8.0	8.0	30.2	30.2	97.4 97.5		6.9	6.9	4.0 4.1		1	-	91			<0.2	0.7
					Surface	1.0	0.2	211 218	24.6 24.6	24.6	8.0	8.0	28.9 29.1	29.0	99.1 98.9	99.0	7.0 7.0		1.7		2	-	85 86			<0.2	0.6
IM6	Misty	Moderate	12:06	7.2	Middle	3.6	0.3	183 190	24.5	24.5	8.0	8.0	29.9	29.9	97.7 97.4	07.6	6.9	7.0	2.7	7	1	3	87 87	821077	805819	<0.2	0.6
					Bottom	6.2	0.2	194	24.5	24.5	8.0	8.0	30.0	30.0	96.5	06.6	6.8	6.8	3.7		3	L	90			<0.2	0.7
					Surface	6.2 1.0	0.2	198 214	24.5 24.7	24.7	8.0	8.0	30.0 28.5	28.6	96.6 99.5	00.0	7.0		3.6 1.5		3		90 87			<0.2	0.7
			l			1.0 4.2	0.0	223 166	24.6 24.6		8.0		28.7 29.1		98.5 97.1		7.0 6.9	6.9	1.4 2.6		1	_	86			<0.2	0.6
IM7	Misty	Moderate	12:14	8.4	Middle	4.2 7.4	0.1	169 99	24.6	24.6	8.0	8.0	29.1	29.1	96.8 94.8	97.0	6.8		2.6	.6	3 3	3	89 90	821331	806830	<0.2 <0.2 <0.2	2 0.6 0.6 0.7
					Bottom	7.4	0.0	101	24.5	24.5	8.0	8.0	29.9	29.9	94.9	94.9	6.7	6.7	3.7		1	<u> </u>	90			<0.2	0.6
					Surface	1.0	0.1	132 135	24.6 24.6	24.6	8.1	8.1	28.6 28.6	28.6	102.5 102.5	102.5	7.2	7.2	2.9		1		84 84			<0.2	1.3
IM8	Cloudy	Moderate	12:32	7.1	Middle	3.6 3.6	0.2	90 94	24.5 24.5	24.5	8.1 8.1	8.1	29.3 29.3	29.3	100.2 100.3	100.3	7.1 7.1		3.6		1	3	87 86	821832	808136	<0.2	1.3
					Bottom	6.1 6.1	0.2	23 24	24.4 24.4	24.4	8.1 8.1	8.1	30.3	30.3	100.7	100.7	7.1	7.1	4.1 4.1		3	F	88			<0.2	1.3
DA: Depth-Ave					<u> </u>	Ų. I	U.Z	24	24.4		0.1	<u> </u>	30.3		100.7		1.1		4.1		, ,		00		l	_ \U.Z	11.0

DA: Depth-Averaged

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

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

Water Qua Nater Qua		toring Res	ults on		08 April 21	during Mid-		е																				
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	mperature (°C)		рН	Salir	ity (ppt)		aturation	Dissolv Oxyge		bidity(NTL	Suspend (m		Total A		Coordinate	Coordinate	Chrom		Nickel (µg/l
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	oth (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Ť		lue D	\ Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	Value		Value DA
					Surface	1.0	0.1	102 108	24.6	24.6	8.1 8.1	8.1	28.6	28.7	102.1 101.9	102.0	7.2		.1	4		84 84				<0.2	-	1.3
IM9	Cloudy	Moderate	12:26	6.7	Middle	3.4	0.1	99	24.5	24.5	8.1	8.1	29.6	29.6	99.7	99.7	7.0	7.1	.2	3	4	86	86	822076	808794	<0.2	<0.2	1.2
livio	Cloudy	Woderate	12.20	0.7	ivildale	3.4 5.7	0.1	107	24.5	24.3	8.1	0.1	29.6	29.0	99.7		7.0		.2	3	] "	86	00	022070	000754	<0.2	<0.2	1.3
					Bottom	5.7	0.1	76 82	24.4 24.4	24.4	8.1 8.1	8.1	30.3	30.3	100.1	100.1	7.0		.3	4	†	88 88	1			<0.2	H	1.2
					Surface	1.0	0.3	88 94	24.6 24.6	24.6	8.1 8.1	8.1	28.5 28.5	28.5	102.9 102.9	102.9	7.3		.8	5 4		84 85				<0.2	-	1.4
IM10	Claustin	Moderate	12:19	7.0	Middle	3.5	0.4	90	24.5	24.5	8.1	8.1	29.7	29.7	97.7	97.7	6.9		.8 3.	4	5	86	86	822372	809794	<0.2	<0.2	1.4
IIVITO	Cloudy	Woderate	12:19	7.0	ivildale	3.5	0.3	93	24.5 24.4	24.5	8.1 8.1	0.1	29.7	29.7	97.7	97.7	6.9		.8	5	] 3	86 88	00	022312	609794	<0.2	<0.2	1.4
					Bottom	6.0	0.2	96 101	24.4	24.4	8.1	8.1	30.2	30.2	97.9 98.0	98.0	6.9		.1	5 5		88				<0.2		1.3
					Surface	1.0	0.4	86 91	24.7	24.7	8.1 8.1	8.1	28.3 28.3	28.3	102.5 102.5	102.5	7.3		.8	5 4		84				<0.2	-	1.3
1844.4	Claudi	Madassa	42.00	0.5	8 AL-11-	4.3	0.4	63	24.7	24.4	8.1		29.6	20.0	95.9	95.9	6.8		.6 3.		4	84 86	00	000074	044446	<0.2	.0.0	1.4
IM11	Cloudy	Moderate	12:06	8.5	Middle	4.3	0.3	64	24.4	24.4	8.0	8.0	29.7	29.6	95.8	95.9	6.8	3	.6	4	] 4	86	86	822071	811446	<0.2		1.4
					Bottom	7.5 7.5	0.2	84 84	24.3	24.3	8.0	8.0	30.4	30.4	93.8 93.8	93.8	6.6		.1	3	+	88 87	1			<0.2	H	1.5
					Surface	1.0	0.5	111	24.6	24.6	8.1	8.1	28.8		100.9	100.9	7.1		.0	6		84				<0.2	一	1.2
						1.0 4.8	0.5	111	24.6 24.3		8.1 8.0		28.8 30.3		100.8 94.6		7.1 6.7		.0	5 6	+	83 87				<0.2		1.5
IM12	Cloudy	Moderate	11:55	9.6	Middle	4.8	0.3	111	24.3	24.3	8.0	8.0	30.3	30.3	94.4	94.5	6.7	2	.8	5	6	86	86	821446	812044	<0.2	<0.2	1.4
					Bottom	8.6 8.6	0.2	84 84	24.2	24.2	8.0	8.0	30.5	30.5	93.5 93.6	93.6	6.6		.9	7	+	89 88	1			<0.2	-	1.4
					Surface	1.0	-	-	24.3	24.3	8.0	8.0	30.3	30.3	96.7	96.7	6.8	3	.0	6		-				-	$\neg$	
						1.0 2.6	-	-	24.3		8.0		30.3		96.7		6.8		.0	6	+	-	ł			-	-	-
SR1A	Cloudy	Calm	11:17	5.1	Middle	2.6	-	-	-	-	-	-	-	-	1		-		3.	-	5	-		819980	812657	-		- '
					Bottom	4.1	-	-	24.3	24.3	8.0	8.0	30.3	30.3	97.3 97.4	97.4	6.9		.1 .1	4	+	-				-	+	
					Surface	1.0	0.2	76	24.3	24.3	8.1	8.1	30.3	30.3	98.8	98.8	7.0	2	.8	3		86				<0.2		1.0
						1.0	0.2	81	24.3	21.0	8.1	0.1	30.3	00.0	98.7	00.0	7.0		.8	. 4	4	85	1			<0.2	-	1.0
SR2	Cloudy	Moderate	10:59	4.9	Middle	-	-	-		-	-			-	1				- 2.		4	-	87	821441	814182	-	<0.2	- 1.
					Bottom	3.9	0.2	73 73	24.2	24.2	8.1 8.1	8.1	30.5	30.5	97.6 97.6	97.6	6.9		.3	5	4	88 88	ł			<0.2	-	1.1
					Surface	1.0	0.2	155	24.7	24.7	8.1	8.1	28.4		104.0	104.0	7.4	2	.8	6	j	-				-	=	-
					Odriace	1.0 4.3	0.2	168 147	24.7 24.5	24.7	8.1 8.1	0.1	28.4 29.2		103.9 99.6		7.4		.9	5 6	4	-				-	-	-
SR3	Cloudy	Moderate	12:39	8.6	Middle	4.3	0.3	161	24.5	24.5	8.1	8.1	29.2	29.2	99.6	99.6	7.0	3	.8	5	6		-	822161	807567	-	-	
					Bottom	7.6 7.6	0.1	181 185	24.4	24.4	8.1 8.1	8.1	30.5		101.6 101.6	101.6	7.1		.0	<u>6</u> 5	-	-				-	ŀ	-
					Surface	1.0	0.3	69	24.6	24.6	8.0	8.0	29.8	29.8	99.3	99.3	7.0	3	.2	4						-	-t	
						1.0 4.6	0.4	75 72	24.6 24.6		8.0		29.8		99.2 98.3		7.0 6.9		.4	4	4	-				-	-	-
SR4A	Misty	Calm	10:40	9.2	Middle	4.6	0.3	75	24.6	24.6	8.0	8.0	29.9	29.9	98.1	98.2	6.9	3	.4 3.	5	4		-	817171	807787			
					Bottom	8.2 8.2	0.3	65 65	24.5 24.5	24.5	8.0	8.0	29.9 29.9	29.9	97.5 97.5	97.5	6.9		.3	5	4	-				-	<b>-</b>	-
					Surface	1.0	0.1	347	24.6	24.6	7.9	7.9	29.6	29.6	93.2	93.2	6.6		.0	4						-	-t	
					Odriace	1.0	0.1	349	24.6	24.0	7.9	7.3	29.6	23.0	93.1	33.2	6.5	6.6	.0	4	4	-				-	-	-
SR5A	Misty	Calm	10:20	3.4	Middle		-	-	-	-	-	-		-			-		5.	1	5		-	816606	810692			-
					Bottom	2.4	0.1	354 326	24.6 24.5	24.6	7.9	7.9	29.6 29.5	29.6	92.9 92.8	92.9	6.5 6.5		.2	6	1	-				-	-	-
					Surface	1.0	0.1	233	24.5	24.2	7.9	7.9	29.7	29.7	89.5	89.4	6.3		.3	5		-				=	$\rightarrow$	-
					Surface	1.0	0.1	249	24.2	24.2	7.9	7.9	29.7	29.7	89.2	69.4	6.3	6.3	.4	6	1	-				-	-	-
SR6A	Misty	Calm	09:53	4.4	Middle	-	-	-	-	-	-	-	-	-	-	-	-		8.	1	5	-	-	817958	814732	-		-
					Bottom	3.4 3.4	0.0	335 344	24.2	24.2	7.9 7.9	7.9	29.7	29.7	88.7 88.6	88.7	6.3		.9	5	1	-				-	F	-
					0	1.0	0.0	264	24.2	20.0	8.0		32.2	00.0	91.8	04.0	6.3		.9	4		-				-	$\overline{}$	-
					Surface	1.0	0.1	289	23.9	23.9	8.0	8.0	32.2	32.2	91.9	91.9	6.5		.9	5	]	-				-	F	
SR7	Cloudy	Moderate	09:56	15.6	Middle	7.8 7.8	0.1	58 60	23.8	23.8	8.0	8.0	32.5 32.5	32.5	92.2 92.2	92.2	6.5		.7 .8	3 4 5	5	-	-	823649	823753	-		-
					Bottom	14.6	0.1	93	23.7	23.7	8.0	8.0	32.6	32.6	92.2	92.2	6.5	65 1	.8	4	1	-	1			-	ļ	-
			$\vdash$			14.6	0.1	97	23.7		8.0 8.1		32.6		92.2 99.2		6.5 7.0		.8	5 9	1	-				-	$\dashv$	-
					Surface	1.0	-	-	24.5	24.5	8.1	8.1	30.2	30.2	99.1	99.2	7.0		.0	9	1	-	1			-	ļ	
SR8	Cloudy	Moderate	11:47	4.8	Middle	-	-	-	-	-		-	-	-	-	-	-	·	4.	1 -	9	-	-	820393	811608	-		-
					Bottom	3.8	-	-	24.4	24.4	8.1	8.1	30.3	30.3	98.0	98.0	6.9		.2	8	1	-	1			-	ļ	-
· Denth-Ave					Dottom	3.8	-	-	24.4	2.67	8.1	3.1	30.3	55.5	98.0	55.0	6.9	0 4	.3	8	1	1 -				<u> </u>		

DA; Depth-Averaged

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

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

Water Quality Monitoring Results on during Mid-Flood Tide 08 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Value Value (Northing) (Easting) 24.7 0.3 Surface 24.7 8.1 30.1 114.3 1.0 0.3 42 24.7 30.1 114.2 8.0 1.8 5 85 <0.2 0.6 24.4 2.9 6 87 0.6 0.3 <0.2 C1 8.0 30.6 99.2 804232 16:06 8.2 Middle 24.4 815629 Mistv Calm 88 0.6 4.1 24.4 8.0 30.6 99.1 7.0 2.9 7 88 <0.2 0.7 0.3 3.9 4.0 7.2 0.3 52 24.4 8.0 30.6 98.4 6.9 7 90 <0.2 0.6 6.9 Bottom 24.5 8.0 30.6 98.5 98.5 6.9 0.7 24.5 30.6 7.2 0.3 8.0 8 90 < 0.2 1.0 0.4 24.9 2.1 83 1.5 1.6 1.6 1.7 < 0.2 8.1 Surface 24.9 8.1 27.0 114.7 24.9 8.1 8.1 2.1 3.4 84 1.0 0.4 208 185 114. 4 <0.2 24.5 5.7 0.2 8.1 29.6 6.9 4 87 97.3 C2 Cloudy Moderate 15:03 11.3 Middle 24.5 8.1 29.6 97.3 86 825701 806955 1.6 29.6 97.3 6.9 3.5 3 86 <0.2 5.7 0.2 193 24.5 8.1 10.3 0.2 348 24.4 8.1 7.0 3.6 4 89 <0.2 1.7 29.9 98.9 8.1 99.1 7.0 Bottom 24.4 29.9 10.3 0.2 320 24.4 8.1 29.9 99.2 3.6 4 89 <0.2 1.7 0.3 1.8 86 <0.2 1.0 Surface 24.3 8.1 30.9 102.3 1.0 0.3 269 24.3 8.1 30.9 102.: 7.2 1.8 4 86 <0.2 1.0 1.9 1.0 6.1 260 8.1 3 88 88 <0.2 0.4 24.0 31.8 93.0 6.5 C3 17:19 817822 Cloudy Moderate 12.1 Middle 24.0 8.1 31.8 93.0 88 822107 1.0 0.4 266 24.0 11.1 0.3 262 23.9 32.0 92.4 6.5 2.5 3 90 <0.2 Bottom 23.9 8.1 32.0 92.4 6.5 11.1 0.3 286 23.9 8.1 32.0 92.4 6.5 2.6 2 1.1 1.0 0.1 24.6 8.0 30.0 5.0 86 <0.2 0.7 Surface 24.6 8.0 30.0 94.4 1.0 19 24.6 8.0 30.1 94.2 6.6 5.0 6 86 <0.2 0.7 0.1 807108 IM1 Mistv Calm 15:45 5.0 Middle 817932 4 0 0.1 20 24.5 8.0 30.0 88.8 6.2 6.7 6 89 < 0.2 0.7 Bottom 24.5 8.0 30.0 87.0 20 4.0 0.1 24.5 8.0 30.0 85.1 6.0 6.6 5 89 <0.2 0.6 1.0 0.1 24.8 8.1 30.0 104.1 7.3 2.3 87 < 0.2 0.8 Surface 8.1 30.0 104.0 1.0 0.2 319 24.8 8.1 30.0 103.9 7.3 2.2 4 86 <0.2 0.6 0.6 0.7 0.7 4.5 3.4 0.2 24.8 8.1 30.0 7.2 5 88 <0.2 IM2 Misty Calm 15:38 6.8 Middle 8.1 30.0 103.1 818155 806167 <0.2 3.4 0.2 24.8 8.1 30.0 4.6 6 88 6 5.8 0.2 24.5 8.0 30.3 95.4 6.7 5.1 89 <0.2 8.0 30.3 95.4 6.7 6.7 5.0 5.8 0.2 8.0 30.2 95.4 6 ٩n <0.2 24.5 1.0 0.2 337 24.7 8.1 29.9 98.3 6.9 19 86 < 0.2 0.6 Surface 8.1 29.9 98.3 1.0 24.7 2.0 5 0.2 310 8.1 98.2 6.9 86 <0.2 29.9 2.8 2.7 3.5 0.6 24.7 6.9 5 100 87 90 3.4 0.2 8.1 29.9 97.9 <0.2 IM3 Misty Calm 15:30 6.8 Middle 24.7 8.1 29.9 97.6 90 818791 805603 0.6 6 5 0.2 24.6 24.5 6.8 0.6 3.4 8.1 29.9 97.3 <0.2 8.0 5.8 30.1 95.7 6.7 Rottom 24.5 8.0 30.1 95.6 6.7 5.8 0.3 24.5 8.0 30.1 95.5 6.7 3.5 6 90 <0.2 0.6 0.7 1.0 0.1 245 24.7 8.0 29.6 96.6 6.8 2.0 5 86 <0.2 Surface 24.7 8.0 29.6 96.5 0.1 268 24.7 29.6 2.1 6 87 <0.2 4.0 2.4 88 <0.2 1.0 282 24.6 6.7 6 0.1 8.0 29.8 95.2 IM4 15:21 8.0 Middle 24.6 8.0 29.8 95.2 819743 804605 Mistv Moderate 2.5 3.7 3.7 4.0 0.1 289 269 24.6 8.0 95.1 87 <0.2 29.9 5 0.2 5 87 0.7 24.6 8.0 29.9 95.0 6.7 6.7 Bottom 24 6 8.0 29.9 95.1 7.0 0.2 272 24.6 8.0 29.9 6.7 4 <0.2 0.7 0.6 1.0 0.2 274 24.9 8.0 1.1 86 <0.2 28.2 102.0 7.2 5 Surface 24.9 8.0 28.4 102.0 1.0 280 24.8 7.2 1.1 6 85 <0.2 0.2 3.7 0.1 282 24.6 3.5 5 87 <0.2 0.7 8.0 29.5 96.6 6.8 IM5 15:14 7.4 Middle 24.6 8.0 29.5 96.6 820734 804878 Misty Moderate 3.7 0.1 294 24.6 3.6 87 <0.2 4.0 0.8 6.4 0.1 279 24.6 8.0 29.6 96.0 95.9 6.8 89 <0.2 24.6 8.0 96.0 6.8 Bottom 29.6 8.0 6.4 0.1 285 24.6 29.6 6 < 0.2 1.0 0.3 268 24.8 8.0 28.1 1.7 5 86 <0.2 0.8 Surface 8.0 28.2 103.5 1.0 0.3 271 24.8 8.0 73 1.7 6 87 <0.2 0.6 3.5 0.3 268 24.6 8.0 6.8 2.5 4 87 <0.2 Misty Moderate 15:07 Middle 24.6 8.0 29.2 96.0 821036 805841 <0.2 3.5 0.3 289 24.6 8.0 29.3 95.8 6.8 2.6 5 90 6.6 2.9 0.6 6.0 0.2 274 24.6 8.0 94.1 4 88 <0.2 94.2 6.0 0.2 288 24.6 8.0 29.8 5 88 0.7 0.7 0.6 0.6 1.0 0.4 236 24.9 8.0 27.6 11 5 86 <0.2 Surface 102.8 6 5 1.0 0.5 242 24 9 8.0 27.6 102 ( 1.0 86 <0.2 4.0 248 2.2 88 <0.2 0.4 24.8 8.0 28.2 100.2 7.1 IM7 Moderate 15:00 Middle 8.0 28.5 100.0 821334 806831 Misty 89 4.0 0.4 262 24.7 8.0 28.8 99.8 7.0 2.1 5 7.0 0.2 268 24.6 8.0 29.7 94.0 6.6 3.0 5 90 <0.2 0.6 Bottom 24.6 8.0 29.7 94.1 6.6 7.0 0.2 270 24.6 8.0 29.6 3.1 4 <0.2 0.6 1.0 0.3 243 24.7 8.1 28.9 109.2 7.7 2.4 4 85 < 0.2 1.5 Surface 24.7 8.1 28.9 109.1 7.7 1.5 8.1 28.9 1.0 0.3 253 24.7 109. 2.4 3 84 < 0.2 8.1 7.5 2.7 3 86 <0.2 1.5 3.8 0.2 254 24.6 29.3 106.4 8.1 29.3 106.3 821846 808130 IM8 Cloudy Moderate 15:27 7.5 Middle 24.6 87 1.5 7.5 2.7 87 3.8 258 24.6 8.1 106. 4 0.2 3.8 4.0 88 1.6 6.5 0.2 262 24.5 8.1 30.1 7.1 7.1 5 <0.2 101 24.5 8.1 30.1 101.1 Rottom 7.1

DA: Depth-Average

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

Water Qua	lity Moni	toring Res	ults on		08 April 21	during Mid-		ide																			
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water T	emperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Dissol Oxyg		Turbidity(	NTU)	spended. mg/L)		Total Alkal (ppm)	Coord			Nickel (μg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling De	oth (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	r	DA	Value	DA	Value	DA	Value D	A (North		id "	A Value DA
					Surface	1.0	0.3	244	24.8	24.8	8.1	8.1	28.2	28.2	109.1	109.1	7.7		2.7		5		85			<0.2	1.4
					Surface	1.0 3.6	0.3	249 253	24.8	24.0	8.1	0.1	28.2	20.2	109.0	109.1	7.7	7.5	2.6 3.6		4		84			<0.2	1.6
IM9	Cloudy	Moderate	15:35	7.2	Middle	3.6	0.3	255	24.6 24.6	24.6	8.1 8.1	8.1	29.2	29.2	103.0	103.0	7.3		3.6	3.5	4	4	86 87	7 8220	89 8088	8 <0.2 <0	.2 1.5 1.5
					Bottom	6.2	0.3	254	24.5	24.5	8.1	8.1	29.3	29.3	102.2	102.3	7.2	7.2	4.2		4		89			< 0.2	1.5
						6.2 1.0	0.3	263 270	24.5		8.1 8.1		29.3		102.3		7.2		4.1 2.9		4		89 85			<0.2 <0.2	1.5
					Surface	1.0	0.3	292	24.7	24.7	8.1	8.1	28.9	28.9	103.9	103.9	7.3	7.3	2.9	Į	5		84			<0.2	1.6
IM10	Cloudy	Moderate	15:43	7.1	Middle	3.6	0.4	276 302	24.5 24.5	24.5	8.1 8.1	8.1	29.3	29.3	101.6	101.7	7.2		3.8	3.7	4	4	87 88	7 8223	73 80980	0.2 <0.2	.2 1.5 1.5
					Bottom	6.1	0.3	278	24.5	24.5	8.1	8.1	29.6	29.6	100.0	100.1	7.1	7.1	4.3		3		89			<0.2	1.5
						6.1 1.0	0.3	303 277	24.5 24.6		8.1 8.1		29.6 29.0		100.1		7.1		4.4 3.1		4		89 85			<0.2 <0.2	1.6 1.5
					Surface	1.0	0.3	300	24.6	24.6	8.1	8.1	29.0	29.0	102.1	102.3	7.2	7.1	3.1	ŀ	5		84			<0.2	1.3
IM11	Cloudy	Moderate	15:55	8.0	Middle	4.0	0.3	287 307	24.5	24.5	8.1 8.1	8.1	29.4	29.4	99.5 99.5	99.5	7.0	7	3.2	3.7	5	5	87 87	7 8220	68 81146	61 <0.2 <0	.2 1.3 1.4
					Bottom	7.0	0.3	303	24.5	24.4	8.1	8.1	29.4	29.9	95.9	96.0	6.8	6.8	4.7	-	5		89			<0.2	1.4
					BOILOTTI	7.0	0.3	309	24.4	24.4	8.1	0.1	29.9	29.9	96.0	96.0	6.8	0.0	4.8		6		89			<0.2	1.5
					Surface	1.0	0.2	279 305	24.6 24.6	24.6	8.1 8.1	8.1	29.0	29.0	103.0	103.0	7.3		2.8	ŀ	4		84 85			<0.2	1.4
IM12	Cloudy	Moderate	16:02	8.3	Middle	4.2	0.3	289	24.4	24.4	8.0	8.0	29.8	29.8	98.1	98.1	6.9	7.1	3.1	3.2	3	4	86	7 8214	56 81206	<0.2	2 1.4
	,				_	4.2 7.3	0.4	306 276	24.4		8.0		29.8		98.1 97.3		6.9		3.1 3.7	-	4		87			<0.2	1.3
					Bottom	7.3	0.3	280	24.3	24.3	8.0	8.0	30.1	30.1	97.4	97.4	6.9	6.9	3.7		3		89			<0.2	1.2
					Surface	1.0	-		24.7	24.7	8.1 8.1	8.1	29.1	29.1	107.9	107.9	7.6		2.6	-	5		-			-	-
SR1A	Cloudy	Calm	16:37	4.9	Middle	2.5	-	-	-		-		-		-	-	-	7.6	-	2.6	-	5	-	8199	74 81265		
	,					2.5 3.9	-	-	24.6		- 8.1		29.3		106.5		7.5		2.6		6		-			" <u>-</u>	-
					Bottom	3.9	-	-	24.6	24.6	8.1	8.1	29.4	29.3	106.4	106.5	7.5	7.5	2.6		5		-			-	-
					Surface	1.0	0.1 0.1	342 358	24.4	24.4	8.1 8.1	8.1	29.8	29.8	101.7	101.7	7.2		2.9	-	5		86 85			<0.2 <0.2	1.3
SR2	Cloudy	Moderate	16:55	4.7	Middle	-	-	-	-		-		-	_	-	_	-	7.2	-	3.0	-	5		6 8214	79 81418		.2 - 1.2
ONE	Cicacy	modorato	10.00			3.7	- 0.1	337	24.4		- 8.1		30.0		101.1		7.1		3.1	0.0	4	Ů	87	02.1		<0.2	1.2
					Bottom	3.7	0.1	344	24.4	24.4	8.1	8.1	30.0	30.0	101.1	101.1	7.1	7.1	3.1	ŀ	5		87			<0.2	1.1
					Surface	1.0	0.4	203 209	24.9 24.9	24.9	8.1 8.1	8.1	27.7	27.7	116.3 116.2	116.3	8.2		2.2	-	5		-			-	-
SR3	Cloudy	Moderate	15:22	8.8	Middle	4.4	0.4	215	24.5	24.5	8.1	8.1	29.2	29.2	101.4	101.3	7.2	7.7	3.1	3.2	3	4	-	8221	68 80758		. 🗀 .
SKS	Cloudy	Woderate	15.22	0.0	Middle	4.4 7.8	0.2	220 257	24.5 24.4	24.5	8.1 8.1	0.1	29.3 30.2		101.2 99.8		7.1		3.3 4.1	3.2	3	4	-	0221	00 00730	- '	-
					Bottom	7.8	0.2	268	24.4	24.4	8.1	8.1	30.2	30.2	99.8	99.8	7.0	7.0	4.1	H	4		-			-	-
					Surface	1.0	0.1 0.1	226 239	24.7	24.7	8.0	8.0	29.9	29.9	100.9	100.9	7.1		2.8	-	5		-			-	-
SR4A	Mat	Calm	10:07	8.4	Middle	4.2	0.1	233	24.7	04.7	8.0	8.0	29.9	29.9	99.1	98.9	7.0	7.0	2.6	2.9	5	6	-	8172	01 80778		-
SR4A	Misty	Caim	16:27	0.4	Middle	4.2 7.4	0.1	236	24.7 24.6	24.7	8.0	6.0	29.9 29.9	29.9	98.6	96.9	6.9		2.9	2.9	6 7	О	-	01/2	01   80776	-	
					Bottom	7.4	0.0	255 267	24.6	24.6	8.0	8.0	29.9	29.9	96.3 96.1	96.2	6.8	6.8	3.1	-	8		-			-	-
					Surface	1.0	0.1	286	24.7	24.7	8.0	8.0	29.7	29.7	96.8	96.8	6.8		3.8	-	5		-			-	-
0054		0.1	40.45			1.0	0.1	291	24.7		8.0		29.7		96.8		6.8	6.8	3.8		7	-	-	0400	45 04000		-
SR5A	Misty	Calm	16:45	4.4	Middle	3.4	0.1	-	24.7	-	-	-	-	-	-	-	-		- 4.1	3.9	4	5	-	8166	15 81069	-	
					Bottom	3.4	0.1	298 307	24.7	24.7	8.0	8.0	29.7	29.7	96.8 96.8	96.8	6.8	6.8	4.1	-	5		-			-	-
					Surface	1.0	0.0	293	24.7	24.7	8.0	8.0	29.6	29.6	96.9	96.9	6.8		2.4	Ì	4		-			-	-
						1.0	0.0	309	24.7		8.0		29.6		96.9		6.8	6.8	2.3	}	4	_	-				-
SR6A	Misty	Calm	17:18	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	2.8	-	6	-	8179	81 8147	8 -	
					Bottom	3.2	0.0	308 323	24.7	24.7	8.0	8.0	29.7	29.7	96.9 96.9	96.9	6.8	6.8	3.3	}	7		-			-	-
					Surface	1.0	0.1	334	24.0	24.0	8.1	8.1	31.9	31.9	96.6	96.6	6.8		1.7		3		-			-	-
			l l			1.0 7.7	0.1	343 63	24.0		8.1 8.1		31.9 32.0		96.6 96.5		6.8	6.8	1.7	}	3		-		_		-
SR7	Cloudy	Moderate	17:56	15.4	Middle	7.7	0.2	63	23.9	23.9	8.1	8.1	32.0	32.0	96.4	96.5	6.8		1.7	1.7	2	3	-	8236	30 82372	-	-
					Bottom	14.4 14.4	0.1 0.1	72 72	23.9	23.9	8.1 8.1	8.1	32.3	32.2	95.3 95.4	95.4	6.7	6.7	1.8	-	3		-			-	-
					Surface	1.0	-	-	24.9	24.9	8.1	8.1	28.6	28.6	111.0	111.0	7.8		2.7		6		-		i	-	-
						1.0	-	-	24.9		8.1	J.,	28.6	_3.0	110.9		7.8	7.8	2.8		5		-			-	-
SR8	Cloudy	Moderate	16:10	4.6	Middle	-	-	-	-			-	-	-	-	<u> </u>	-		-	2.9	-	6	-	8204	04 81162	-	-
					Bottom	3.6	-	- :	24.9	24.9	8.1 8.1	8.1	28.7	28.7	110.3	110.3	7.8	7.8	3.1		6		-			-	-
					l	3.0			24.9	1	0.1		40.1		1110.3		1.0		J.U		U		-		1		

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

Water Qua	lity Monit	toring Res	ults on		10 April 21 dur	ring Mid-E		•			,									1.0							
Monitoring	Weather	Sea	Sampling	Water	Complian Death (a)		Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Dissolv Oxyge		Turbidity(NT		ended Solie (mg/L)		Alkalinity ppm)	Coordinate	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L
Station	Condition	Condition	Time	Depth (m)	Sampling Depth (m)	,	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value D	A Val	e DA	Value	e DA	HK Grid (Northing)	(Easting)	Value DA	A Value DA
					Surface	1.0	0.2	225 240	23.7 23.7	23.7	8.1 8.1	8.1	32.4 32.5	32.4	99.1 98.7	98.9	7.0 6.9		3.0	</td <td></td> <td>87 88</td> <td></td> <td></td> <td></td> <td>&lt;0.2</td> <td>0.8</td>		87 88				<0.2	0.8
C1	Fine	Moderate	11:53	8.7	Middle	4.4	0.3	217	23.6	23.6	8.1	8.1	32.6	32.6	96.8		6.8	6.9	4.0	e <		91		815616	804247	<0.2	0.7
					Bottom	7.7	0.3	228 195	23.6 23.7	23.7	8.1 8.1	8.1	32.6 32.5	32.5	96.8 97.3	07.4	6.8	6.8	3.9	5		91 92				<0.2 <0.2	0.7
						7.7	0.2	196 135	23.7		8.1 8.0		32.5 30.9		97.4 93.2		6.8	0.0	3.9 4.7	4		92 83				<0.2 <0.2	0.7 1.2
					Surface	1.0	0.2	140	23.9	23.9	8.0	8.0	30.9	30.9	93.2	93.2	6.6	6.6	4.8	7		83				<0.2	1.1
C2	Fine	Moderate	10:54	13.0	Middle	6.5 6.5	0.5 0.5	154 166	23.8 23.8	23.8	8.1 8.1	8.1	31.0 31.0	31.0	93.3 93.3	93.3	6.6		5.2 5.2	5	۰	86 86	- 00	825687	806961	<0.2 <0.2	1.1
					Bottom	12.0 12.0	0.5	144 150	23.7	23.7	8.1 8.1	8.1	31.9	31.9	93.1 93.1		6.6	6.6	6.0 6.1	5 6		89 89				<0.2	1.1
					Surface	1.0	0.4	286 302	24.0 24.0	24.0	8.0	8.0	31.8 31.8	31.8	91.5 91.4	01.5	6.4		2.7	3		84 84				<0.2 <0.2	1.1
СЗ	Fine	Moderate	12:58	12.2	Middle	6.1	0.2	257	23.8	23.8	8.0	8.0	32.5	32.5	89.0	90.0	6.3	6.4	2.9	. 2		88	07	822100	817792	<0.2	2 1.0 1.0
					Bottom	6.1 11.2	0.2	259 120	23.8	23.7	8.0 8.1	8.1	32.5 33.0	33.0	89.0 88.8		6.3	6.2	2.9 3.0	3		88 90				<0.2	1.0
					Bottom	11.2 1.0	0.1	122 182	23.7 23.7		8.1 8.1		33.0 31.3		88.9 95.7	88.9	6.2	0.2	3.1 3.5	3		90 86				<0.2 <0.2	1.1 0.8
					Surface	1.0	0.1	191	23.7	23.7	8.1	8.1	31.3	31.3	95.6		6.8	6.8	3.7	9		86				<0.2	0.8
IM1	Fine	Moderate	11:35	5.4	Middle	-	-	-	-	-	-	-	-	-	-		-		-	.9 -	_ ′	-	88	817940	807150	- <0.2	-
					Bottom	4.4	0.1	151 159	23.7	23.7	8.1	8.1	31.3	31.3	95.4 95.5		6.8	6.8	4.3	5		89 90				<0.2	0.7
					Surface	1.0	0.1	217 219	23.8 23.8	23.8	8.1	8.1	31.3	31.3	95.6 95.6	05.6	6.8		4.5 4.5	8		85 85				<0.2	0.7
IM2	Fine	Moderate	11:27	7.1	Middle	3.6	0.1	142	23.7	23.7	8.1	8.1	31.6	31.7	95.8	95.8	6.8	6.8	4.4	8 7		89	88	818141	806151	<0.2	2 0.7
						3.6 6.1	0.1	148 92	23.7		8.1 8.1		31.7		95.8 96.1		6.8		4.5 5.5	3		90				<0.2	0.7
					Bottom	6.1 1.0	0.2	94 177	23.7	23.7	8.1 8.1	8.1	32.2 31.3	32.2	96.1 96.2		6.8	6.8	5.6 4.0	2		91 88				<0.2	0.7
					Surface	1.0	0.1	181	23.8	23.8	8.1	8.1	31.4	31.4	96.3	96.3	6.8	6.8	4.0	7		88				<0.2	0.7
IM3	Fine	Moderate	11:20	7.2	Middle	3.6	0.1	113 124	23.7	23.7	8.1 8.1	8.1	31.7	31.7	96.3 96.4		6.8		3.9 3.9	.6 9		90		818803	805598	<0.2 <0.2	0.7
					Bottom	6.2 6.2	0.2	86 93	23.7	23.7	8.1 8.1	8.1	32.2 32.2	32.2	96.5 96.5		6.8	6.8	6.0 5.9	10		91 91				<0.2	0.7
					Surface	1.0	0.1	221	23.7	23.7	8.1	8.1	31.7	31.7	96.8	06.0	6.8		4.1	9		86				<0.2	0.8
IM4	Fine	Moderate	11:10	8.6	Middle	1.0 4.3	0.1	222 109	23.7 23.7	23.7	8.1 8.1	8.1	31.9	31.9	96.7 96.6	06.6	6.8	6.8	4.0	, 9		87 89	_ 。	819710	804620	<0.2	0.6 2 0.5 0.6
11414	1 110	Woderate	11.10	0.0		4.3 7.6	0.0	111 253	23.7		8.1 8.1		31.9 32.0		96.5 96.8		6.8		4.1	10		89 90		013710	004020	<0.2	0.5
					Bottom	7.6 1.0	0.1	267 348	23.7 23.7	23.7	8.1 8.1	8.1	32.0 31.3	32.0	96.9 95.1	96.9	6.8	6.8	4.3 4.4	12		90 86				<0.2 <0.2	0.5 0.8
					Surface	1.0	0.1	320	23.7	23.7	8.1	8.1	31.3	31.3	95.1	95.1	6.7	6.7	4.5	2		86				<0.2	0.8
IM5	Fine	Moderate	11:04	8.1	Middle	4.1	0.0	96 102	23.7	23.7	8.0	8.0	31.6 31.6	31.6	94.9 94.9	94.9	6.7	-	5.2 5.2	.0 2		89 90		820746	804878	<0.2	2 0.4 0.6
					Bottom	7.1 7.1	0.1	80 86	23.6 23.5	23.6	8.0	8.0	31.7 31.8	31.8	95.6 95.8		6.8	6.8	5.4 5.4	11		90 91				<0.2 <0.2	0.5
					Surface	1.0	0.0	233	23.8	23.8	8.0	8.0	30.0	30.1	93.8	02.0	6.7		2.4	4		85				<0.2	0.5
IM6	Fine	Moderate	10:58	8.0	Middle	1.0 4.0	0.0	245 79	23.8 23.7	23.7	8.0 8.0	8.0	30.1 30.6	30.6	93.7 93.1	02.4	6.6	6.7	2.4 3.3	3 4	$\Box$ ,	87 89		821074	805851	<0.2 <0.2 <0.2	0.4 2 0.5 0.7
livio	1 110	Woderate	10.50	0.0		7.0	0.0	79 108	23.7		8.0		30.7		93.0 92.9		6.6		3.5 4.1	5		89 90		021074	003031	<0.2 <0.2	0.5
					Bottom	7.0 1.0	0.2	117 115	23.7 23.8	23.7	8.0	8.0	31.0	31.0	93.0 91.9	93.0	6.6	6.6	4.2 4.8	4		90				<0.2	1.0 0.5
					Surface	1.0	0.1	118	23.7	23.8	8.0	8.0	30.3	30.2	91.7	91.6	6.5	6.5	5.2	4		86				<0.2	0.5
IM7	Fine	Moderate	10:53	8.8	Middle	4.4	0.2	116 125	23.7	23.7	8.0	8.0	30.6	30.6	91.3		6.5	0.0	5.9 5.6	6 4		89 89		821330	806852	<0.2	2 0.4 0.6
					Bottom	7.8 7.8	0.1	81 85	23.6 23.6	23.6	8.0	8.0	30.7	30.7	91.5 91.7	916	CE	6.5	8.8 9.1	4		90 91				<0.2	0.8
					Surface	1.0	1.9	214	23.8	23.8	8.1	8.1	31.4	31.4	95.1	05.4	6.7		4.4	6		83				<0.2	1.2
IMO	Fin-	Madami	44.40	0.4		1.0 4.2	2.0	227 211	23.8		8.1 8.1		31.4 31.7		95.1 95.0		6.7	6.7	4.4 4.9	5		83 87	_	004040	000427	<0.2	1.2
IM8	Fine	Moderate	11:19	8.4	Middle	4.2 7.4	2.4	221 215	23.7	23.7	8.1	8.1	31.7	31.7	95.0 94.8	95.0	6.7	_	5.0 6.1	.1 5	_ °	87	_ 00	821812	808137	<0.2 <0.2 <0.2	2 1.2 1.2
DA: Depth-Aver					Bottom	7.4	2.5	235	23.6	23.6	8.1	8.1	32.4	32.4	94.8	94.8	6.7	6.7	6.1	4		89				<0.2	1.1

DA: Depth-Averaged

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

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

Water Qua		toring toring Res	ults on		10 April 21 d	luring Mid-l	Ebb Tide																				
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)		aturation (%)	Disso		Turbidity(	NTU)	Suspende (mg.		Total Alkalii (ppm)	Coordinat		Chromium (µg/L)	Nickel (µg/L
Station	Condition	Condition	Time	Depth (m)	Sampling Depth	(m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value D	HK Grid (Northing		Value DA	Value DA
					Surface	1.0 1.0	2.4	227 238	23.9 23.9	23.9	8.0	8.0	31.2 31.2	31.2	95.6 95.6	95.6	6.8		3.9 3.9		5 4		82 83			<0.2 <0.2	1.0
IM9	Fine	Moderate	11:24	7.9	Middle	4.0	2.4	225	23.7	23.7	8.0	8.0	31.5	31.5	94.4	94.4	6.7	6.7	5.1	5.2	4	. 5	86	822091	808791	<0.2	1.0
	1110	Moderate		7.0		4.0 6.9	2.6	238 229	23.7 23.6		8.0		31.5 32.4	-	94.4		6.7 6.7		5.3 6.4	0	5		86 89	022001	000101	<0.2	1.0
					Bottom	6.9 1.0	2.7 3.0	247 101	23.6 23.9	23.6	8.0	8.0	32.3	32.3	95.0 93.6	95.0	6.7	6.7	6.4 4.3		7		89			<0.2	1.1
					Surface	1.0	3.1	104	23.9	23.9	8.0	8.0	31.0	31.0	93.6	93.6	6.6	6.6	4.3	Ĺ	5		83 83			<0.2	1.0
IM10	Fine	Moderate	11:33	8.2	Middle	4.1 4.1	3.0	100	23.8	23.8	8.0	8.0	31.1	31.1	92.9 92.9	92.9	6.6	0.0	5.8 6.0	5.7	6 5	5	87 86	822403	809814	<0.2	2 1.1 1.1
					Bottom	7.2	3.1	102	23.6	23.6	8.1 8.1	8.1	31.9 31.9	31.9	92.8 92.8	92.8	6.6	6.6	6.7		5		89 89			<0.2	1.1
					Surface	7.2 1.0	3.1 2.6	109 98	23.6	24.0	8.0	8.0	30.8	30.8	93.4	93.3	6.6		6.8 2.9		5 4		84		1	<0.2	1.1
						1.0 4.5	2.7	106 97	24.0 23.8		8.0		30.8		93.2 90.7		6.6	6.5	2.9 3.3		3		84 87			<0.2	1.1
IM11	Fine	Moderate	11:43	9.0	Middle	4.5	2.6	102	23.8	23.8	8.0	8.0	31.2	31.2	90.5	90.6	6.4		3.3	3.8	3	3	87 °	7 822050	811446	<0.2	1.2
					Bottom	8.0 8.0	2.6	94 99	23.8 23.8	23.8	8.1 8.1	8.1	31.8 31.8	31.8	89.5 89.6	89.6	6.3	6.3	5.4 5.4		3		90 90			<0.2 <0.2	1.1
					Surface	1.0 1.0	2.6	94 102	23.9	23.9	8.0	8.0	31.5	31.5	91.3	91.3	6.4		3.7	-	4 5		84 83			<0.2	1.1
IM12	Fine	Moderate	11:49	9.2	Middle	4.6	2.7	96	23.8	23.8	8.0	8.0	31.5	31.5	90.2	90.2	6.4	6.4	3.8	4.0	5	5	88	7 821445	812045	<0.2	1.0
					Bottom	4.6 8.2	2.8	98 94	23.8 23.8	23.8	8.0	8.0	31.8	31.8	90.1 88.0	88.0	6.4	6.2	3.8 4.6	Ŀ	5		87 89			<0.2	1.0
						8.2 1.0	2.7	100	23.8		8.0		31.8		88.0 91.3		6.2	0.2	4.6 3.9		4		90		1	<0.2	0.9
					Surface	1.0	-	-	23.9	23.9	8.0	8.0	31.3	31.3	91.3	91.3	6.4	6.4	3.9	Ī	4		-			-	-
SR1A	Fine	Calm	12:24	5.1	Middle	2.6 2.6	-		-	-	-	-	-	-	-	-	-		-	4.4	-	4	-	819972	812659	<u> </u>	-
					Bottom	4.1 4.1	-	-	23.8	23.8	8.0	8.0	31.4	31.4	92.1	92.2	6.5	6.5	4.9 4.9	-	4 5		-			-	-
					Surface	1.0	0.5	57	23.9	23.9	8.0	8.0	31.5	31.5	93.0	93.0	6.5		3.2		4		85			<0.2	1.0
SR2	Fine	Moderate	12:39	4.6	Middle	1.0	0.5	- 60	23.9		8.0		31.5		92.9		6.5	6.5	3.2	3.6	3	4	- 86 - 8	7 821450	814182	- <0.2	2 - 1.0
OKZ	1 116	Woderate	12.00	4.0		3.6	0.5	- 53	23.9		8.0		31.8	-	91.6		6.4		4.1	3.0	4		- 88	021430	014102	<0.2	1.0
					Bottom	3.6	0.5	55	23.9	23.9	8.0	8.0	31.8	31.8	91.6	91.6	6.4	6.4	4.0	-	4		88			<0.2	1.0
					Surface	1.0	2.1	225 240	24.0 24.0	24.0	8.0	8.0	30.4	30.4	94.2 94.2	94.2	6.7	6.7	3.0	t	5 6		-			-	-
SR3	Fine	Moderate	11:13	9.3	Middle	4.7 4.7	2.3	225 225	23.7	23.7	8.1 8.1	8.1	31.3	31.3	93.1	93.2	6.6	0.7	4.6 4.7	4.3	5	5		822170	807552	-	
					Bottom	8.3	2.2	229	23.6	23.6	8.1	8.1	32.4	32.4	95.1	95.1	6.7	6.7	5.3	ļ	4		-			-	-
					Surface	8.3 1.0	0.2	230 73	23.6 23.9	23.9	8.1 8.1	8.1	32.4 31.2	31.2	95.1 97.6	97.6	6.7 6.9		5.2 3.4		2		-		+		-
						1.0 4.4	0.2	75 83	23.9		8.1 8.0		31.2		97.6 96.3		6.9 6.8	6.9	3.4 3.5	+	2		-			-	-
SR4A	Fine	Moderate	12:17	8.7	Middle	4.4	0.2	84	23.8	23.9	8.0	8.0	31.2	31.2	96.0	96.2	6.8		3.6	3.5	3	2	- '	817186	807832	-	-
					Bottom	7.7 7.7	0.2	60 65	23.8 23.8	23.8	8.0	8.0	31.2 31.2	31.2	95.7 95.9	95.8	6.8	6.8	3.7 3.7		2		-			-	-
					Surface	1.0 1.0	0.1	43 46	23.9 23.9	23.9	8.0	8.0	30.5 30.6	30.5	92.5 92.5	92.5	6.6		5.2 5.3		3		-			-	-
SR5A	Fine	Moderate	12:34	3.8	Middle	-	-	-	-		-		-		-	-	-	6.6	-	5.4	-	. 3	-	816587	810689		-
					Bottom	2.8	0.0	50	23.8	23.8	8.0	8.0	30.8	30.8	92.8	92.9	6.6	6.6	5.8		3		-				
						2.8 1.0	0.0	53 62	23.8		8.0		30.8 29.6		93.0		6.6	0.0	5.5 5.4		5		-		1	-	-
					Surface	1.0	0.1	67	24.3	24.3	8.0	8.0	29.6	29.6	91.2	91.2	6.5	6.5	5.4	Ī	5		-			-	-
SR6A	Fine	Moderate	13:09	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	5.4	-	5	-	817953	814716	-	-
					Bottom	3.2 3.2	0.1	74 78	24.3 24.3	24.3	8.0	8.0	29.6 29.6	29.6	92.1 92.3	92.2	6.5	6.5	5.6 5.4	F	5		-			-	-
					Surface	1.0	0.6	61	23.9	23.9	8.0	8.0	32.8	32.8	94.0	94.1	6.6		1.9		3		-				-
SR7	Fine	Moderate	13:26	15.6	Middle	1.0 7.8	0.7	64 14	23.9 23.7	23.7	8.0	8.0	32.8 33.1	33.1	94.2 90.3	90.3	6.6	6.5	1.9 2.0	1.9	2	. 2	-	823655	823729	-	-
387	rite	woderate	13:20	13.0		7.8 14.6	0.2	14 55	23.7 23.7		8.0 8.1		33.1 33.1		90.3 90.6		6.3		2.0 1.8	1.9	2 <2	. 2	= '	023055	023/29	= .	-
					Bottom	14.6	0.2	56	23.7	23.7	8.1	8.1	33.1	33.1	90.6	90.6	6.3	6.3	1.8		<2		-		<u> </u>	-	-
					Surface	1.0 1.0	-		24.0 24.0	24.0	8.1 8.1	8.1	31.3 31.3	31.3	93.9 93.9	93.9	6.6	6.6	5.6 5.6	ŀ	9					-	-
SR8	Fine	Moderate	11:57	4.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	5.4	-	10	Ξ.	820412	811639	-	
					Bottom	3.9	-	-	23.9	23.9	8.1	8.1	31.4	31.4	93.8	93.9	6.6	6.6	5.2	ļ	11					-	-
DA: Denth-Ave						3.9	-	-	23.9		8.1		31.4	L	93.9		6.6		5.2		10		-			-	

DA; Depth-Averaged

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

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

Water Quality Monitoring Results on during Mid-Flood Tide 10 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Value Value Average Value (Easting) 23.6 0.4 Surface 23.6 8.0 32.3 96.1 1.0 0.5 44 23.6 32.3 96.0 6.8 6.4 85 <0.2 0.7 43 12.5 88 0.8 0.5 23.6 5 <0.2 C1 8.0 324 95.8 804225 07:23 87 Middle 23.6 87 815626 Fine Moderate 0.7 8.0 32.4 95.7 6.7 13.0 4 88 <0.2 0.8 0.5 23.6 7.7 0.4 39 23.6 8.0 32.4 95.8 6.8 14.7 4 89 <0.2 0.6 6.8 Bottom 23.6 8.0 32.4 95.9 95.9 6.8 0.7 7.7 32.4 14.6 <0.2 0.4 23.6 8.0 5 89 39 1.0 0.3 1.2 1.2 1.2 23.8 6.9 82 < 0.2 8.0 Surface 23.8 8.0 30.8 92.2 6.9 8.3 92.2 6.5 82 86 1.0 0.3 324 23.8 8.0 30.8 <0.2 9 6.4 0.5 23.7 8.1 6.6 31.5 92.9 C2 Fine Moderate 07:58 12.7 Middle 23.7 8.1 31.5 92.9 86 825686 806938 1.2 31.5 92.9 6.6 8.2 9 86 <0.2 6.4 0.5 16 23.7 8.1 11.7 0.3 23.6 8.1 31.9 6.5 9.2 9 89 <0.2 1.2 92.7 8.1 92.7 6.5 Bottom 23.6 31.9 11.7 0.3 23.6 8.1 92.7 6.5 9.2 9 89 <0.2 1.0 0.3 23.6 8.0 2.1 84 <0.2 1.0 Surface 23.6 8.0 31.9 89.5 1.0 0.3 254 23.6 8.0 31.9 89.4 6.3 2.1 2 83 <0.2 1.0 3.2 3 87 87 0.9 6.0 23.7 <0.2 0.4 252 8.0 87.4 6.1 C3 817820 Cloudy Moderate 05:47 12.0 Middle 23.7 8.0 32.7 87.4 87 822089 0.9 0.4 23.7 11.0 0.4 266 23.7 8.0 32.8 6.1 4.3 <2 90 <0.2 0.9 Bottom 23.7 8.0 32.8 87.4 6.1 11.0 0.4 288 23.7 8.0 32.8 87.4 6.1 4.1 <2 0.9 1.0 0.1 23.5 8.0 31.3 3.4 84 <0.2 0.8 Surface 23.5 8.0 31.3 93.7 1.0 23.5 8.0 31.3 93.7 6.6 3.5 4 85 <0.2 0.7 0.1 807132 IM1 Fine Moderate 07:43 Middle 817951 44 0.1 356 23.5 8.0 31.3 93.6 6.7 5.6 9 88 < 0.2 0.8 Bottom 8.0 31.3 93.7 6.7 44 0.1 328 23.5 8.0 31.3 93.7 6.7 6.0 8 84 <0.2 0.8 1.0 0.3 23.7 8.0 31.1 94.7 6.7 6.4 86 < 0.2 1.0 Surface 8.0 31.1 94.7 1.0 0.3 12 23.7 8.0 31.1 94.6 6.7 6.5 8 85 <0.2 1.0 11.7 3.7 0.3 359 23.7 8.0 31.2 94.2 6.7 7 88 <0.2 1.1 IM2 Moderate 07:50 7.3 Middle 8.0 31.2 94.2 818145 806173 3.7 0.3 330 23.7 8.0 31.2 94.1 6.7 12.7 8 88 <0.2 1.0 63 23.7 13.5 8 7 1.1 0.2 327 8.0 31.3 94.0 6.7 89 <0.2 8.0 31.3 94.0 6.7 6.3 355 6.7 13.9 1.1 0.2 23.7 8.0 94 0 89 <0.2 31.3 1.0 0.3 358 23.7 8.1 31.3 94.5 6.7 7.5 10 85 < 0.2 11 Surface 8.1 31.3 94.5 1.1 1.0 7.6 10 85 0.4 329 23.7 8.1 94.5 6.7 <0.2 31.3 1.2 3.8 6.7 8.0 10 88 <0.2 0.3 337 23.7 8.1 31.4 94.4 IM3 Fine Moderate 07:56 7.6 Middle 23.7 8.1 31.4 94.4 88 818781 805608 6.7 8.1 9 89 90 3.8 0.3 348 23.7 8.1 31.4 94.4 <0.2 10.9 1.1 6.6 0.3 317 23.7 8.0 31.5 93.9 6.6 Rottom 23.7 8.0 31.5 93.9 6.6 6.6 0.3 344 23.7 8.0 31.5 93.9 6.6 11.0 8 90 1.2 <0.2 1.0 0.5 356 9.8 1.1 23.7 8.1 31.5 94.2 6.7 8 86 <0.2 Surface 23.7 8.1 31.5 94.2 0.5 328 23.7 10.1 9 86 <0.2 1.1 11.6 10 89 <0.2 1.2 4.2 0.4 23.7 8.0 31.5 94.0 6.7 IM4 Fine 08:05 8.3 Middle 23.7 8.0 31.5 94.0 819746 804589 Moderate 4.2 7.3 0.5 8.0 94.0 12.0 9 10 89 <0.2 23.6 0.4 15.2 89 1.2 23.6 8.0 93.8 6.6 Bottom 23.6 8.0 31.5 93.8 6.6 7.3 0.5 23.6 8.0 31.5 93.8 6.6 15.3 10 90 <0.2 1.1 1.2 1.0 0.7 23.7 8.1 31.1 94.4 8.4 4 84 <0.2 6.7 Surface 23.7 8.1 31.1 94.4 0.8 23.7 94.4 6.7 8.7 5 85 <0.2 4.1 0.7 23.7 10.6 5 88 <0.2 1.2 8.0 6.7 IM5 08:11 8.1 Middle 23.7 8.0 31.1 94.1 820750 804862 Fine Moderate 0.7 23.7 10.2 88 <0.2 5 1.1 0.5 23.7 8.0 94.1 6.7 11.0 11.4 89 <0.2 23.7 8.0 31.1 94.1 6.7 Bottom 8.0 31.1 7 1 0.5 17 23.7 89 < 0.2 1.0 0.1 23 23.8 8.0 29.7 92.8 6.6 2.5 7 86 <0.2 1.2 Surface 8.0 29.7 92.8 1.0 0.1 24 23.8 8.0 29.8 92.8 6.6 2.6 7 84 <0.2 1.1 3.9 0.1 43 23.6 8.0 30.5 6.6 4.1 6 88 <0.2 Fine Moderate 08:19 Middle 23.6 8.0 30.5 92.5 821080 805823 <0.2 3.9 0.1 46 23.6 8.0 30.6 92.5 6.6 4.3 5 88 6.6 5.0 5.0 1.2 6.8 0.1 50 23.5 8.0 30.8 92.9 9 89 <0.2 93.0 6.8 0.1 23.5 8.0 30.8 10 90 1.1 1.0 0.2 150 23.8 8.0 29.6 92.4 6.6 4.0 8 85 <0.2 Surface 92.4 1.0 0.2 152 23.8 8.0 29.7 92.3 6.6 4.4 86 <0.2 7 7.4 87 1.1 4.0 132 <0.2 0.2 23.6 8.0 30.4 91.7 6.5 IM7 Moderate 08:28 Middle 8.0 91.7 821359 806853 7.7 87 4.0 0.2 141 23.6 8.0 30.4 91.6 6.5 6 7.0 0.2 142 23.6 8.0 30.5 92.3 6.6 8.6 6 90 <0.2 1.1 Bottom 23.6 8.0 30.5 92.4 6.6 7.0 0.2 142 23.6 8.0 30.5 6.6 8.5 <0.2 1.1 1.0 0.2 341 23.9 8.0 30.6 92.9 6.6 3.1 9 82 < 0.2 1.2 Surface 23.9 8.0 30.6 92.9 30.6 92.9 1.2 8.0 <0.2 1.0 0.2 314 23.9 3.1 8 82 4.1 8.0 30.5 92.6 6.6 3.1 8 85 <0.2 1.2 0.2 351 23.9 8.0 30.5 92.6 821830 808163 IM8 Fine Moderate 07:32 8.2 Middle 23.9 85 1.2 92.5 85 6.6 3.2 7 4.1 357 23.9 8.0 30.5 0.2 88 1.2 7.2 0.1 40 23.8 8.1 30.8 91.3 4.8 <0.2 6.5 6 23.8 8.1 30.8 91.3 6.5 Rottom

DA: Depth-Average

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

Water Quality Monitoring Results on during Mid-Flood Tide 10 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Value Average Value (Northing) (Easting) 23.8 0.3 Surface 8.0 30.8 0.3 23.8 30.8 92.7 3.1 3.3 3.8 0.1 65 23.8 8.0 30.9 92.4 6.5 6 85 <0.2 1.2 07:27 808804 IM9 Fine Moderate 8.0 30.9 92.4 822113 3.8 0.2 69 23.8 8.0 30.9 92.4 6.5 3.4 7 86 <0.2 1.0 6.6 0.2 90 23.7 8.1 31.0 92.2 6.5 5.3 7 89 <0.2 1.2 Bottom 8.1 31.0 92.2 6.5 6.6 0.2 91 23.7 8.1 31.0 92.2 6.5 5.4 7 89 <0.2 1.1 297 1.0 0.6 23.7 8.0 31.4 90.2 6.4 5.3 11 82 < 0.2 1.0 Surface 8.0 31.4 90.2 1.0 0.6 324 23.7 8.0 31.4 90.2 6.4 5.4 10 82 <0.2 1.0 4.3 0.5 292 23.7 8.0 90.0 6.4 5.7 5.8 9 86 86 <0.2 1.0 IM10 Moderate 07:18 8.6 Middle 8.0 31.3 90.0 822384 809772 4.3 0.6 303 8.0 6.4 31.3 90.0 7.6 0.5 23.7 6.9 1.0 295 8.1 31.3 90.2 6.4 8 89 < 0.2 Bottom 8.1 31.3 90.3 6.4 1.0 9 7.6 0.5 305 23.7 8.1 31.3 90.3 6.4 6.8 89 **-**0 2 1.0 0.5 274 23.7 10 82 8.0 90.9 6.4 1.2 Surface 8.0 31.5 90.9 1.1 1.0 6.4 5.0 10 82 < 0.2 0.5 300 23.7 8.0 31.5 90.9 5.3 1.1 23.7 6.4 9 10 86 86 <0.2 4.6 0.4 283 299 8.0 90.1 IM11 Fine Moderate 07:08 9.1 Middle 8.0 31.5 90.1 86 822044 811479 4.6 23.7 0.4 8.0 1.1 8.1 0.4 275 23.8 8.0 32.0 88.7 6.2 5.3 8 89 <0.2 6.3 Bottom 23.8 8.0 32.0 88.8 8.1 0.5 275 23.8 8.0 32.0 88.9 6.3 5.3 9 90 <0.2 1.1 1.8 23.8 10 83 8.0 31.4 <0.2 90.3 6.4 Surface 23.8 8.0 31.4 90.3 1.0 1.9 55 23.8 8.0 31.4 90.3 6.4 6.1 11 83 <0.2 1.1 4.7 1.8 50 23.8 6.4 6.3 10 86 <0.2 1.1 8.0 31.4 90.2 812066 IM12 Fine Moderate 07:00 9.4 Middle 23.8 8.0 31.4 90.2 86 821444 4.7 8.0 6.4 6.3 11 86 <0.2 1.0 1.9 90.2 23.8 8.4 2.0 53 23.7 8.0 90.4 6.4 7.7 11 90 <0.2 23.7 8.0 31.4 90.4 6.4 Rottom 8.4 2.1 53 23.7 8.0 31.4 90.4 6.4 7.7 12 1.0 23.6 8.0 31.2 6.2 2.9 5 Surface 23.6 8.0 31.2 87.8 1.0 23.6 87.8 6.2 2.9 6 2.6 Cloudy Calm 06:24 5.2 Middle 819982 812655 2.6 4.2 23.5 7.9 31.2 89.5 6.4 3.6 3 Bottom 23.5 7.9 31.2 89.5 6.4 4.2 23.5 79 31.2 89.5 6.4 3.7 1.0 0.3 326 23.8 8.0 31.5 89.4 6.3 5.2 11 84 <0.2 1.1 Surface 23.8 8.0 31.5 89.4 1.0 0.3 332 23.8 8.0 31.5 89.4 6.3 5.2 12 85 < 0.2 1.0 SR2 Cloudy Moderate 06:07 5.1 Middle 821440 814161 41 327 6.1 10 87 0.2 23.8 8.1 89.9 6.4 <0.2 1.1 89.9 Bottom 89.9 41 355 8.1 31.5 6.1 10 1.0 0.2 23.8 88 r0 2 1.0 0.0 231 23.9 8.0 30.5 92.9 6.6 3.9 6 Surface 8.0 30.6 93.0 8.0 1.0 30.6 93.0 41 0.0 246 23.9 6 4.6 6.6 4.5 5 0.1 46 23.7 8.0 31.3 93.2 SR3 Moderate 07:38 Middle 23.7 93.2 822135 807563 4.5 4.6 47 23.7 8.0 93.2 0.1 31.3 6 8.1 0.2 53 23.5 8.1 32.1 32.1 93.3 93.3 6.6 5.4 5.3 Bottom 23.5 8.0 32.1 93.3 6.6 8.1 0.2 23.5 1.0 0.5 70 23.6 8.0 31.2 93.8 6.7 5.0 6 Surface 23.6 8.0 31.2 93.8 93.8 6.7 1.0 0.5 70 23.6 8.0 31.2 5.0 7 4.4 0.4 5.8 8 23.6 6.6 . 8.0 31.2 93.5 SR4A 07:00 8.0 31.2 93.5 817168 807815 Fine Moderate 8.8 Middle 23.6 4.4 0.4 8.0 31.2 93.5 6.6 5.8 8 23.6 6.7 7.8 0.3 23.6 23.5 8.0 10 80 31.3 93.3 93.3 93.3 6.6 6.6 23.6 8.0 31.3 Rottom 7.8 0.3 84 6.4 1.0 0.1 113 23.5 7.9 3.7 11 29.9 90.4 6.5 23.5 7.9 29.9 90.5 Surface 1.0 0.1 115 23.5 7.9 29.9 90.6 6.5 3.8 12 SR5A 06:40 3.8 Middle 816600 810692 Fine Moderate 2.8 0.1 114 23.4 29.9 91.3 6.6 4.0 15 Bottom 23.4 7.9 29.9 91.5 6.6 0.1 23.4 7.9 91.6 6.6 4.1 13 2.8 125 1.0 0.0 287 23.7 7.9 29.7 87.6 2.1 9 Surface 23.7 7.9 29.7 87.6 1.0 0.0 314 23.7 7.9 29.7 87.6 6.3 2.2 10 SR6A Fine Moderate 06:11 4.0 Middle 817963 814742 3.0 0.0 269 23.7 7.9 87.4 2.4 4 Bottom 7.9 29.8 87.4 6.2 3.0 0.0 283 23.7 7.0 29.8 87.3 2.5 10 1.0 0.0 116 23.7 8.0 32.2 87 1 6.1 2.1 87.1 Surface 32.2 1.0 0.0 123 23.7 8.0 32.2 87 1 6.1 2.1 4 8.0 0.1 184 23.6 8.0 32.9 87.7 6.2 2.0 5 5 SR7 Cloudy Moderate 05:18 15.9 Middle 8.0 32.9 87.7 823636 823736 87.7 8.0 0.1 186 23.6 8.0 32.9 6.2 2.0 14.9 0.1 76 23.6 8.0 33.1 87.9 6.2 2.9 5 Bottom 7.9 33.1 87.9 6.2 14.9 0.1 77 23.6 7.9 33.1 87.9 6.2 2.8 6 1.0 23.8 8.0 31.1 92.0 6.5 4.3 Surface 23.8 8.0 31.1 92.0 1.0 23.8 8.0 31.1 92.0 6.5 4.3 7 . . 820369 811644 SR8 Cloudy Moderate 06:51 5.0 Middle -4.0 23.7 5.9 6 8.0 31.6 90.2 6.4 Bottom 23.7 8.0 31.6 90.3 6.4

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.

Water Quality Monitoring Results on during Mid-Ebb Tide 13 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Value Value (Northing) (Easting) 24.3 0.4 8.1 31.7 1.0 0.4 236 24.3 4.1 7.9 4 0 0.5 224 24.2 8.1 32.5 98.2 6.8 5 92 <0.2 1.0 98.0 804232 C1 Sunny Moderate 13:24 8.1 32.6 815596 4.0 0.5 227 24.1 8.1 32.6 97.7 6.8 8.0 6 93 <0.2 0.9 7.0 0.4 219 24.0 8.1 32.8 97.1 6.8 9.4 7 93 <0.2 1.0 Bottom 8.1 32.8 97.1 6.8 7.0 0.4 236 24 በ 8.1 32.8 97 1 6.8 9.3 7 93 <0.2 1.0 1.0 0.6 180 24.8 8.2 28.8 102.3 7.2 1.9 4 88 < 0.2 1.1 Surface 8.2 28.8 102.1 <0.2 1.0 0.7 184 24.8 8.2 28.9 101.9 7.2 1.9 3 88 1.0 6.0 0.3 166 24.5 8.2 29.9 91.5 6.4 3.4 4 90 90 <0.2 1.0 C2 Misty Calm 12:11 12.0 Middle 8.2 29.9 91.4 825690 806922 6.0 175 24.4 8.2 6.4 0.3 30.0 91.3 0.2 115 24.4 8.3 4.6 5 93 1.0 11.0 30.1 90.7 6.4 < 0.2 Bottom 24.4 8.3 30.1 90.8 1.2 6.4 11.0 0.2 120 24.4 8.3 30.1 90.9 4.6 93 <0.2 1.0 2.5 341 24.8 3.4 85 8.2 99.9 7.0 < 0.2 1.2 Surface 24.8 8.2 29.7 99.9 3.3 4.1 4.1 1.3 1.0 2.7 354 99.8 7.0 85 <0.2 24.8 8.2 29.7 6 1.2 8.2 6.9 6 88 89 <0.2 6.0 2.5 342 315 24.7 98.3 97.8 29.8 C3 Mistv Calm 14:08 12.0 Middle 8.2 29.8 98.1 89 822098 817824 1.2 6.0 24.7 8.2 29.9 344 <0.2 1.2 11.0 2.8 24.4 8.2 30.3 91.7 6.5 6.7 6 93 8.2 Bottom 24.4 30.3 91.8 6.5 11.0 2.9 355 24.4 8.2 30.3 91.8 6.5 6.6 5 93 <0.2 1.2 0.1 25.3 5.4 8.1 112.1 7.7 6 <0.2 0.8 32.0 Surface 25.3 8.1 32.0 112.1 1.0 0.1 197 25.3 8.1 32.0 112.1 7.7 5.5 5 86 <0.2 0.9 807124 IM1 Moderate 13:02 5.0 Middle 88 817927 0.9 Sunny 4.0 0.1 213 24.8 8.0 32.1 7.1 7.8 4 90 <0.2 1.0 Bottom 24.8 8.0 32.1 102.3 7.1 4.0 0.1 233 24.8 8.0 32.1 7.8 1.0 0.2 167 25.3 8.1 31.8 4.4 3 85 <0.2 0.8 7.2 7.2 Surface 25.3 8.1 31.8 104.9 1.0 0.2 170 25.3 4.4 3 85 <0.2 3.5 0.2 170 24.6 5.4 4 89 <0.2 <0.2 <0.2 0.9 0.9 0.9 6.9 Sunnv Moderate 12:55 Middle 24.6 8.1 32.1 99.2 818139 806164 24.6 5.3 4 3.5 0.2 5.9 0.2 170 24.4 8.1 32.4 97.8 6.8 7.2 4 90 Bottom 24.4 8.1 32.4 97.8 6.8 5.9 0.2 180 24.4 8.1 32.4 97.7 6.8 7.1 4 91 <0.2 0.9 1.1 1.0 0.3 141 24.9 8.1 31.9 102.3 7.1 5.0 4 88 <0.2 Surface 8.1 31.9 102.3 1.0 0.3 152 24.8 8.1 31.9 7.1 5.0 4 87 <0.2 1.2 0.9 3.6 0.2 151 24.7 8.1 5.9 4 90 <0.2 IM3 Sunny Moderate 12:48 7.2 Middle 100.4 818793 805584 <0.2 3.6 0.2 163 24.7 5.9 5 91 7.6 5 91 1.0 6.2 0.1 124 24.4 8.0 32.4 98.3 6.8 98.7 7.5 0.1 24.4 8.0 32.3 4 <0.2 6.2 132 91 1.0 0.5 195 25.2 8.1 30.2 102.1 7.1 7.1 3.7 5 87 <0.2 0.9 Surface 8.1 30.2 102.0 3.7 87 8 1 101 6 1.0 0.6 200 25.1 30.3 < 0.2 5.2 4.3 178 5 0.9 0.4 24.6 8.0 31.7 98.6 6.9 89 90 <0.2 IM4 Sunny Moderate 12:40 Middle 8.0 31.7 98.7 819734 804591 98.7 6.9 4.3 179 8.0 31.7 0.4 24.6 3 0.9 7.5 7.5 0.2 169 24.4 24.4 8.0 32.3 96.8 96.8 6.7 6.6 6.5 91 91 <0.2 6.7 Rottom 24.4 8.0 32.3 96.8 184 0.2 < 0.2 0.8 1.0 0.4 87 210 25.2 8.1 30.2 105.7 7.3 2.6 3 <0.2 Surface 25.2 8.1 30.2 105.7 8.1 105.7 7.3 <0.2 1.0 1.0 0.4 214 25.2 30.2 2.7 3 86 0.9 4.1 187 4.2 3 90 <0.2 0.4 24.5 8.1 6.8 32.2 97.8 IM5 12:32 24.5 8.1 32.2 97.7 820741 804867 Sunny Moderate Middle 89 4.1 0.4 194 24.5 8.1 97.6 6.8 4.3 3 86 < 0.2 32.2 5.5 5.6 0.9 <0.2 7.1 0.3 184 24.4 8.0 96.9 97.6 6.7 3 91 8.0 32.3 97.3 6.8 Bottom 24.4 32.3 0.3 196 24.4 <0.2 0.8 0.8 0.8 1.0 0.2 233 25.0 8.0 30.9 7.0 7.0 4.5 2 89 <0.2 100.9 Surface 25.0 8.0 30.9 101.0 1.0 0.2 256 25.0 8.0 30.9 4.5 3 87 <0.2 3.8 0.2 212 24.7 8.0 6.8 5.8 2 89 <0.2 12:20 7.6 Middle 24.7 8.0 31.7 97.3 821054 805818 IM6 Sunny Moderate 3.8 0.2 228 24.7 8.0 31.7 97.3 6.8 5.9 3 89 <0.2 0.8 6.6 0.2 204 24.6 8.0 31.9 96.7 6.7 6.3 3 90 <0.2 Bottom 24.6 8.0 31.9 96.7 6.7 6.6 8.0 96.7 6.7 6.3 0.2 222 24.6 1.0 0.1 229 25.1 8.1 29.6 102.9 7.2 4.9 86 <0.2 1.1 Surface 25.1 8.1 29.6 102.7 1.0 0.1 242 25.1 8.1 29.6 102. 7.2 4.9 <2 87 <0.2 0.9 89 0.8 4.4 0.2 136 24.7 8.0 98.8 6.9 7.2 <2 <0.2 IM7 Sunny Moderate 12:11 Middle 8.0 31.6 98.8 821332 806843 4.4 0.2 149 24.7 8.0 31.6 98.7 6.9 7.2 <2 90 <0.2 7.8 0.1 139 24.7 8.0 31.9 97.9 6.8 7.2 2 91 <0.2 0.9 8.0 31.9 97.9 6.8 7.8 0.1 146 24.7 8.0 31.9 97.0 6.8 7.3 91 <0.2 1.0 1.0 2.4 284 24 9 8.1 28.3 7.3 1.4 85 < 0.2 Surface 8.1 28.5 102.6 1.3 1.0 2.4 310 24.8 8.1 28.8 102.1 7.2 1.5 3 86 <0.2 4 0 24 286 24.8 8.1 29.1 98.1 6.9 2.4 4 5 91 91 <0.2 1.3 1.3 IM8 Misty Calm 12:33 8.0 Middle 8.1 29.1 98.1 821817 808118 1.3 4.0 2.6 309 24.8 8.1 29.1 98.0 6.9 2.4 < 0.2 7.0 2.4 290 24.8 8.1 30.1 97.7 6.8 3.5 4 93 < 0.2 1.3 8.1 Bottom 24.8 30.1 97.8 6.8

DA: Depth-Averaged

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

Water Qua Water Qua		toring toring Resi	ults on		13 April 21 c	during Mid-	Ebb Tide																					
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)		рН	Salir	nity (ppt)		aturation (%)	Dissol		Turbidity(l	NTU)	Suspende (mg.		Total Alka (ppm)	, 100		Coordinate	Chromium (µg/L)	Nickel (µg/l
Station	Condition	Condition	Time	Depth (m)	Sampling Depth	(m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	- 1	DA	Value	DA	Value	DA	Value		HK Grid lorthing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0 1.0	2.7 3.0	201 216	24.9 24.9	24.9	8.2 8.2	8.2	28.7	28.8	106.2 105.8	106.0	7.5 7.4		4.0 4.0		3		87 87				<0.2 <0.2	1.4
IM9	Misty	Calm	12:41	7.4	Middle	3.7	2.8	201	24.8	24.8	8.2	8.2	29.4	29.4	98.2	98.1	6.9	7.2	4.5	4.8	4	4	90	90 8	322091	808794	<0.2	1.3
	,				Bottom	3.7 6.4	3.0 2.5	205 201	24.8 24.9	24.9	8.2 8.1	8.1	29.4 30.0	30.0	98.0 98.0	98.2	6.9	6.9	4.5 5.8	L	3		91 91				<0.2	1.4
						6.4 1.0	2.6	205 193	24.9 25.3		8.1 8.1		29.9	1	98.3		6.9 7.5	0.5	5.8 1.6		3		91 86				<0.2 <0.2	1.3
					Surface	1.0 3.9	2.9	196 195	25.2 24.7	25.3	8.1 8.1	8.1	28.5 29.5	28.4	107.0 96.9	107.2	7.5	7.2	1.5 3.6	Ĺ	4		87 91				<0.2	1.4
IM10	Misty	Calm	12:47	7.8	Middle	3.9	2.8	212	24.7	24.7	8.1	8.1	29.5	29.5	96.9	96.9	6.8		3.6	3.1	4	4	91	90 8	322364	809811	<0.2	1.4
					Bottom	6.8 6.8	2.7	195 198	24.8 24.8	24.8	8.1 8.1	8.1	29.7 29.7	29.7	95.5 95.5	95.5	6.7	6.7	4.2 4.1	-	5		92 92				<0.2 <0.2	1.4
					Surface	1.0 1.0	3.1 3.1	74 77	25.2 25.1	25.2	8.2	8.2	28.6	28.7	106.9 106.7	106.8	7.5 7.5		2.5	-	6 7		84 84				<0.2 <0.2	1.4
IM11	Misty	Calm	12:56	9.4	Middle	4.7	2.8	75 77	24.6	24.6	8.2	8.2	29.6	29.6	93.7	93.6	6.6	7.1	3.8	3.5	5	6	00	90 8	322044	811436	<0.2	1.4
					Bottom	8.4	3.2	77	24.6 24.6	24.6	8.2	8.2	29.7	29.7	92.6	92.7	6.5	6.5	4.1	t	6		93				<0.2	1.4
					Surface	8.4 1.0	3.4 2.5	83 70	24.6 25.0	25.0	8.2 8.1	8.1	29.7	28.7	92.8 104.3	104.1	6.5 7.3		4.2 3.0		5		97 86				<0.2	1.4
						1.0 4.8	2.7	70 68	24.9 24.8		8.1 8.1		28.8 29.2		103.9 96.7		7.3 6.8	7.1	2.9 3.4	F	6		86 87				<0.2	1.5
IM12	Misty	Calm	13:01	9.6	Middle	4.8	2.8	68	24.8	24.8	8.1	8.1	29.2	29.2	96.7	96.7	6.8		3.5	3.8	5	5	90	89 8	321462	812059	<0.2	1.3
					Bottom	8.6 8.6	2.7	59 62	24.8 24.8	24.8	8.1 8.1	8.1	29.2 29.2	29.2	96.4 96.4	96.4	6.8	6.8	5.0 5.1		4 5		92 92				<0.2 <0.2	1.3
					Surface -	1.0 1.0	-		25.3 25.3	25.3	8.1 8.1	8.1	28.3	28.3	107.7 107.6	107.7	7.5 7.5		1.5 1.5	-	11 12		-				-	-
SR1A	Misty	Calm	13:34	4.0	Middle	2.0 2.0	-	-	-	-	-	-	-	-		-	-	7.5	-	1.9	-	11	-	- 8	319971	812656	-	
					Bottom	3.0	-	-	25.1	25.1	8.1	8.1	29.0	29.0	102.6	102.6	7.2	7.2	2.4	Ė	10		-				-	
					Surface	3.0 1.0	0.4	88	25.1 25.0	25.0	8.1 8.2	8.2	29.0 29.1	29.2	102.5 100.1	99.9	7.2		2.4		9 10		90				<0.2	1.3
SR2		Calm	13:48	4.6	Middle	1.0	0.4	95	25.0		8.2	0.2	29.2	20.2	99.6	00.0	7.0	7.0	2.8		10	10	90	91 8	321459	814146	<0.2	1.3
SR2	Misty	Caim	13:48	4.6		3.6	0.4	- 83	25.0	-	8.1	-	29.2	-	98.8	-	6.9		3.6	3.2	- 10	10	92	91 8	321459	814146	<0.2	1.2
					Bottom	3.6	0.4	90	25.0	25.0	8.1	8.1	29.2	29.2	98.9	98.9	6.9	6.9	3.7		9		93				<0.2	1.2
					Surface	1.0	2.0	241 264	24.8 24.8	24.8	8.2	8.2	28.7	28.7	100.3	100.4	7.1	7.0	1.1	L	9		-				-	-
SR3	Misty	Calm	12:28	9.0	Middle	4.5 4.5	2.1	246 259	24.7 24.8	24.8	8.2	8.2	29.3	29.4	97.3 97.2	97.3	6.8	7.0	4.2 4.1	3.5	7	8	-	- 8	322132	807555		
					Bottom	8.0 8.0	1.9	243 247	24.8 24.8	24.8	8.2 8.2	8.2	29.7 29.6	29.6	97.5 97.7	97.6	C 0	6.9	5.3 5.3	F	6		-				-	-
					Surface	1.0	0.1	64	25.1	25.1	8.1	8.1	32.0	32.0	104.9	104.9	7.2		4.4		7						-	
SR4A	Sunnv	Moderate	13:45	9.5	Middle	1.0 4.8	0.1	69 201	25.1 24.7	24.7	8.1 8.1	8.1	32.0 32.2	32.2	104.8 100.1	100.0	7.2 6.9	7.1	4.4 4.8	4.8	8	7	-		317204	807827	-	-
SR4A	Suriny	Moderate	13:45	9.5		4.8 8.5	0.0	211 195	24.7 24.6		8.1 8.0		32.2 32.2		99.8 100.2		6.9 6.9		4.9 5.1	4.0	7	,	-	-   °	317204	00/02/	- '	
					Bottom	8.5	0.1	203	24.6	24.6	8.0	8.0	32.2	32.2	100.5	100.4	7.0	7.0	5.0		6		-				-	-
					Surface	1.0 1.0	0.1	23 23	26.1 26.1	26.1	8.1 8.1	8.1	32.1 32.1	32.1	108.8 108.8	108.8	7.4	7.4	5.3 5.3	L	15 13						-	-
SR5A	Sunny	Moderate	14:03	3.5	Middle	-	-		-	-	-	-	-	-	-	-	-		-	5.7	-	13	-	- 8	316614	810677	-	-
					Bottom	2.5 2.5	0.1	6	25.8 25.9	25.9	8.0	8.0	32.1	32.1	106.1 106.2	106.2	7.2	7.2	6.1 6.1	-	12 13		-				-	-
					Surface	1.0	0.1	33 33	25.3 25.3	25.3	8.1 8.1	8.1	31.0 31.0	31.0	119.0 118.9	119.0	8.2 8.2		3.4		8		-				-	-
SR6A	Sunny	Moderate	14:43	4.4	Middle	1.0	-	-	25.3	_	8.1		31.0		118.9		- 8.2	8.2	3.4	4.0	-	8	-	. 8	317953	814729		-
Ortor t	Cumy	modorato	11.10	***		3.4	0.1	36	25.1		8.1		31.2	04.0	108.0	400.0	7.5	7.5	4.5	-	9		-	ľ	,,,,,,,	011120	-	-
					Bottom	3.4	0.1	38 5	25.1 25.2	25.1	8.1 8.2	8.1	31.2 30.1	31.2	107.9 111.5	108.0	7.5 7.7	7.5	4.6 1.6		9		-				-	-
					Surface	1.0	4.0	5	25.2	25.2	8.2	8.2	30.1	30.1	110.9	111.2	7.7	7.3	1.6	þ	11		-				-	-
SR7	Misty	Calm	14:34	18.0	Middle	9.0 9.0	3.7 3.7	4	24.8 24.8	24.8	8.2 8.2	8.2	30.3	30.3	99.1 99.0	99.1	6.9		2.4 2.5	2.4	11 10	10	-	- 8	323617	823761	-	-
					Bottom	17.0 17.0	3.7 4.0	4	24.9 24.9	24.9	8.2 8.2	8.2	30.2	30.2	99.1 99.0	99.1	6.9 6.9	6.9	3.1 3.1	F	8		-				-	-
					Surface	1.0	-	-	25.4 25.4	25.4	8.2	8.2	28.8	28.8	104.3	104.0	7.3		3.9		9						-	-
SR8	Misty	Calm	13:09	5.2	Middle	-	-	-	-		-		-	-	-	_	-	7.3	-	4.2	-	9		- 8	320401	811615		-
	.,			-	Bottom	4.2	-		25.4	25.4	8.3		28.8	20.0	94.6	02.0	6.6	6 5	4.7	-	- 8		-					-
DA: Denth-Ave	لـــل				DUILOM	4.2	-	-	25.4	20.4	8.4	8.3	28.8	28.8	91.0	92.8	6.3	6.5	4.6		9		-				-	-

DA; Depth-Averaged

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

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

Water Quality Monitoring Results on during Mid-Flood Tide 13 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Value Value Average Value (Easting) 0.7 24.1 Surface 24.1 8.1 32.4 98.4 1.0 0.7 38 24.1 32.4 98.4 6.9 7.8 85 <0.2 0.9 0.7 24.0 8.4 88 1.2 <0.2 C1 8 1 32 9 96.8 804266 08:10 8.6 Middle 24 0 87 815619 Fine Moderate 24.0 8.1 32.9 96.9 6.8 8.3 11 88 <0.2 1.1 0.7 7.6 0.7 38 24.0 8.0 33.0 95.9 6.7 9.1 10 89 <0.2 1.3 6.7 Bottom 24 0 8.0 33.0 96.0 96.1 6.7 1.0 0.7 9.2 11 7.6 24.0 8.0 33.0 89 < 0.2 1.0 2.0 1.1 1.5 1.5 1.6 1.6 < 0.2 8.0 Surface 24.7 8.0 27.3 97.9 2.2 24.7 8.0 97.7 1.0 2.9 88 1.0 4 <0.2 4 6.0 24.6 8.0 27.8 94.8 6.7 90 C2 Mistv Calm 08:58 12 0 Middle 24.6 8.0 27.8 94.8 90 825685 806949 1.6 2.3 8.0 27.8 94.7 6.7 2.9 4 91 <0.2 6.0 88 24.6 11.0 2.0 91 24.6 8.0 94.9 6.7 3.2 3 93 <0.2 1.6 28.0 8.0 95.0 6.8 Bottom 24.6 28.0 11.0 2.1 99 24.6 8.0 28.0 95.1 6.8 3.1 4 93 <0.2 1.6 1.9 324 8.0 2.5 84 <0.2 1.4 Surface 24.3 8.0 30.0 94.9 1.0 1.9 339 24.3 8.0 30.1 94.7 6.7 2.5 6 85 <0.2 1.4 4.0 5 1.4 6.0 1.9 321 89 89 <0.2 24.2 8.0 30.5 89.1 6.3 C3 817811 Mistv Calm 07:02 12.0 Middle 24.2 8.0 30.5 89.1 88 822108 1.4 1.9 343 24.2 11.0 1.8 325 24.2 8.0 30.6 90.2 6.4 5.8 6 <0.2 1.4 Bottom 24.2 8.0 30.6 90.3 6.4 11.0 1.8 355 24.2 8.0 30.5 90.3 6.4 5.8 1.4 1.0 0.1 343 24.6 8.0 3.3 12 84 <0.2 1.0 Surface 24.6 8.0 32.0 99.5 1.0 0.1 316 24.6 8.0 32.0 99.5 6.9 3.3 3 85 <0.2 1.0 807129 IM1 Fine Moderate 08:29 Middle 817933 44 0.1 344 24.7 8.0 32.2 98.4 6.8 4.6 4 88 < 0.2 1.0 Bottom 24.7 8.0 32.2 98.6 6.8 44 0.1 316 24.7 8.0 32.2 98.7 6.8 4.5 8 85 <0.2 1.1 1.0 359 24.6 85 0.3 8.0 32.0 100.8 7.0 6.8 5 < 0.2 1.7 Surface 8.0 32.0 100.8 1.0 0.3 330 24.6 8.0 32.0 100.8 7.0 6.8 4 88 <0.2 1.3 3.7 0.3 354 24.6 8.0 7.0 6.9 4 89 <0.2 1.8 IM2 Moderate 08:37 7.3 Middle 8.0 32.0 100.4 818164 806188 <0.2 3.7 0.3 326 24.6 8.0 99.8 6.9 7.0 4 89 1.2 6.3 6 5 1.5 0.2 351 24.6 8.0 32.0 99.3 6.9 8.5 90 <0.2 8.0 32.0 99.4 6.9 6.3 99.4 0.3 323 8.0 32.0 6.9 8.5 85 <0.2 24.6 1.0 0.4 343 24.6 8.0 31 9 99.6 6.9 7.6 6 86 < 0.2 0.8 Surface 8.0 31.9 99.7 1.0 99.7 7.9 7 88 0.4 348 24.6 8.0 6.9 <0.2 31.9 9.2 9.2 10.0 3.7 0.4 341 6.9 7 89 <0.2 1.4 24.5 8.0 31.9 98.7 IM3 Fine Moderate 08:45 7.4 Middle 24.5 8.0 31.9 98.8 88 818776 805596 6 5 6 3.7 0.4 24.5 24.5 98.8 6.9 90 91 1.0 314 8.0 31.9 <0.2 6.4 345 8.0 31.9 97.9 6.8 Rottom 24.5 8.0 31.9 97.9 6.8 6.4 0.4 358 24.5 8.0 31.9 97.9 6.8 10.1 <0.2 2.0 86 1.0 16.5 0.6 350 24.5 1.3 8.0 31.9 98.7 6.9 6 86 <0.2 Surface 24.5 8.0 31.9 98.7 0.6 322 24.5 16.6 89 <0.2 0.9 4.3 16.9 7 89 <0.2 1.1 352 6.8 0.5 24.5 8.0 31.9 97.9 IM4 Fine Moderate 08:54 8.5 Middle 24.5 8.0 31.9 98.0 819728 804607 4.3 0.5 324 355 24.5 8.0 98.1 6.8 17.0 8 90 <0.2 31.9 0.5 24.5 18.3 8 90 1.0 8.0 97.3 6.8 97.2 Bottom 24.5 8.0 31.9 6.8 7.5 0.5 327 24.5 8.0 97.0 6.8 18.3 8 85 <0.2 1.0 0.8 1.0 0.8 24.5 8.0 31.8 98.6 15.9 5 85 <0.2 6.9 Surface 24.5 8.0 31.8 98.6 1.0 24.5 8.0 31.8 98.6 6.9 15.8 6 88 <0.2 0.9 4.1 0.8 12 24.5 16.8 5 4 89 <0.2 1.0 8.0 6.8 IM5 09:02 8.2 Middle 24.5 8.0 31.8 98.1 820741 804868 Fine Moderate 4.1 24.5 16.7 89 <0.2 0.8 17.3 4 5 0.8 0.7 24.5 8.0 31.8 97.4 6.8 90 <0.2 24.5 8.0 31.8 97.3 6.8 Bottom 8.0 7.2 0.7 24.5 97 1 85 < 0.2 1.0 0.0 63 24.8 8.0 29.4 3.5 5 85 <0.2 0.9 Surface 8.0 29.4 103.0 1.0 0.0 66 24.8 8.0 29.4 7.2 3.5 4 88 <0.2 4.5 0.9 3.8 0.2 65 24.7 8.0 30.1 4 88 <0.2 Fine Moderate 09:10 Middle 24.7 8.0 30.1 101.5 821077 805827 <0.2 3.8 0.2 71 24.7 8.0 30.0 7.1 4.6 5 88 0.9 6.5 0.4 67 24.7 8.0 31.6 6.9 6.7 3 89 <0.2 31.6 99.2 6.9 6.5 0.4 68 24.7 8.0 31.6 6.8 2 89 0.8 0.8 0.9 1.0 0.1 231 24.8 8.0 28.1 3.5 4 86 <0.2 Surface 103.1 3.6 6.2 5 3 1.0 0.1 240 24.8 8.0 28.0 103 86 <0.2 4.4 88 <0.2 0.3 83 24.7 8.0 30.2 98.7 6.9 IM7 Moderate 09:19 Middle 24.7 8.0 98.7 821340 806848 88 4.4 0.3 89 24.7 8.0 30.2 98.7 6.9 6.2 4 7.8 0.2 94 24.6 8.0 31.4 96.3 6.7 7.3 3 90 <0.2 0.9 Bottom 24.6 8.0 31.4 96.7 7.8 0.2 95 24.6 8.0 31.4 97.1 7.1 4 <0.2 0.9 1.0 2.8 114 24.7 8.1 26.8 103.9 7.4 2.6 3 87 < 0.2 1.7 Surface 24.7 8.1 26.8 103.8 26.8 7.4 1.6 119 8.1 1.0 3.0 24.7 103. 2.6 4 88 < 0.2 24.7 8.1 27.0 7.4 3.6 6 92 91 <0.2 1.6 4.0 2.8 112 103.2 24.7 8.1 27.0 103.2 821844 808157 IM8 Misty Calm 08:35 8.0 Middle 1.6 7.3 3.7 27.1 4.0 113 24.7 8.1 5 2.9 7.0 3.9 3.8 1.5 110 24.7 8.1 27.1 7.3 7.3 93 <0.2 2.8 103. 5 24.7 8.1 27.1 103.1 Rottom 7.3

DA: Depth-Average

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

Water Quality Monitoring Results on during Mid-Flood Tide 13 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Value DA Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Value (Northing) (Easting) 24.7 2.7 Surface 8.1 27.7 99.7 2.9 24.7 99.5 3.6 4.6 1.6 3.7 2.6 84 24.7 8.0 27.9 98.7 7.0 5 90 <0.2 98.6 808820 IM9 Mistv Calm 08:29 7.4 8.0 27.9 90 822098 3.7 2.7 86 24.7 8.0 28.0 98.4 7.0 4.6 4 91 <0.2 1.6 6.4 2.6 84 24.7 8.0 28.2 98.2 7.0 5.2 5 92 <0.2 1.6 Bottom 8.0 28.2 98.4 7.0 6.4 2.7 88 24.7 8.0 28.2 98.5 7.0 5.1 4 92 <0.2 1.6 1.0 1.5 56 24.7 8.1 28.7 99.1 7.0 1.7 < 0.2 1.6 Surface 8.1 28.7 98.9 1.0 1.6 57 24.7 8.1 28.8 98.7 7.0 1.7 7 87 <0.2 1.6 3.8 1.7 60 24.7 8.1 28.9 98.1 6.9 3.9 5 4 90 91 <0.2 1.6 IM10 Misty Calm 08:22 7.6 Middle 8.1 28.9 98.1 822364 809798 3.8 24.7 8.1 6.9 <0.2 1.9 61 28.9 98.1 6.6 1.8 24.7 8.1 1.7 64 28.9 97.4 6.9 4.9 4 93 < 0.2 Bottom 24.7 8.1 28.9 97.5 6.9 3 1.6 6.6 19 24.7 8.1 97.5 6.9 49 93 69 28 9 **-**0 2 1.7 1.6 1.0 24.6 8.0 96.7 6.8 1.5 Surface 8.0 29.2 96.7 1.6 1.0 96.7 6.8 1.6 5 85 <0.2 1.9 30 24.6 8.0 29.2 6.8 1.5 2.4 <0.2 6.8 7 89 89 4.0 24.6 8.0 96.3 96.3 IM11 Mistv Calm 08:13 8.0 Middle 8.0 29.3 96.3 88 822062 811461 4.0 24.6 1.9 32 8.0 29.3 <0.2 1.5 7.0 1.9 31 24.6 8.0 29.3 96.8 6.8 3.1 8 90 24.6 6.8 Bottom 8.0 29.3 96.9 7.0 1.9 31 24.6 8.0 29.3 97.0 6.8 3.1 8 90 <0.2 1.6 1.2 24.5 1.6 11 <0.2 8.0 95.6 Surface 24.5 8.0 95.6 29.5 1.0 1.3 24.5 8.0 29.5 95.5 1.6 12 85 <0.2 1.3 4.6 1.2 24.5 6.7 2.9 12 89 <0.2 1.3 8.0 29.5 95.1 821470 812055 IM12 Misty Calm 08:08 9.2 Middle 24.5 8.0 29.5 95.1 12 4.6 8.0 90 <0.2 1.3 1.3 24.5 8.2 1.2 24.5 8.0 29.6 6.7 3.9 91 <0.2 1.3 95.0 24.5 8.0 29.6 95.1 6.7 Rottom 8.2 1.2 80 24.5 8.0 29.6 4.0 10 1.4 24.6 8.1 29.1 98.0 6.9 1.3 6 Surface 24.6 8.0 97.9 29.2 1.0 24.6 6.9 1.3 5 2.1 Mistv Calm 07:37 Middle 819983 812666 2.1 3.2 24.6 8.0 29.4 97.2 6.8 3.0 5 Bottom 24.6 8.0 29.4 97.4 6.9 3.2 24.6 8.0 29.4 97.5 6.9 2.9 4 1.0 0.2 120 24.5 8.0 29.5 95.0 6.7 1.7 87 <0.2 1.2 Surface 24.5 8.0 29.5 95.0 1.0 0.2 131 24.5 8.0 29.5 95.0 6.7 1.7 8 88 < 0.2 1.2 SR2 Misty 07:22 3.6 Middle 821440 814168 2.6 110 3.6 7 89 0.2 24.5 8 1 29.5 95.1 95.2 6.7 <0.2 11 95.2 6.7 Bottom 3.6 2.6 120 24.5 8.1 29.5 12 0.2 90 r0 2 1.0 2.6 353 24.9 8.1 26.7 107.8 7.7 1.2 5 Surface 8.1 26.7 107.7 8 1 26.8 1.0 27 325 24.8 1.2 4 4.5 2.7 2.1 6 352 24.8 8.1 27.0 106.6 7.6 SR3 Misty Calm 08:40 Middle 8.1 106.5 822163 807568 356 8.1 106. 4.5 2.9 24.8 6 8.0 2.5 354 24.7 24.7 8.1 8.1 7.3 4.5 4.5 Bottom 24.7 8.1 27.2 102.5 7.3 8.0 2.6 326 1.0 0.2 13 80 24.6 8.0 32.2 98.6 6.8 4.4 Surface 24.6 8.0 32.2 98.6 98.5 6.8 4.4 1.0 0.2 81 24.6 8.0 32.2 12 4.8 69 4.5 15 0.2 24.6 6.7 . 8.0 32.3 SR4A 07:46 8.0 32.3 97.1 817174 807826 Fine Moderate 9.6 Middle 24.6 4.8 69 24.6 8.0 97.1 4.5 16 0.2 32.3 8.6 0.1 24.6 8.0 96.7 96.7 6.7 4.8 15 45 8.0 32.4 96.7 6.7 Rottom 24.6 32.4 8.6 0.2 24.6 8.0 6.7 4.8 1.0 0.1 285 24.5 8.0 31.9 96.4 6.7 4.2 15 Surface 24.5 8.0 31.9 96.5 1.0 0.1 288 24.5 8.0 96.5 6.7 4.3 14 SR5A 07:28 3.3 Middle 816572 810691 Fine Moderate 2.3 0.1 280 24.5 95.4 6.6 5.0 14 Bottom 24.5 7.9 31.9 95.5 6.6 0.1 280 24.5 7.9 31.9 95.6 6.6 5.0 15 1.0 0.1 261 24.4 8.0 31.3 94.5 4.2 9 Surface 24.4 8.0 31.3 94.5 1.0 0.1 273 24.4 8.0 31.3 94.5 6.6 4.2 8 SR6A Fine Moderate 06:50 Middle 817954 814749 3.0 0.1 335 24.3 7.9 6.5 4.3 7 7.9 31.4 93.7 6.6 3.0 0.1 347 24.3 7.0 31.4 93.9 6.6 4.3 8 1.0 2.4 312 24.4 8.0 29.8 95.1 6.7 1.4 9 95.1 Surface 29.8 1.0 2.6 330 24.4 8.0 29.8 95.1 6.7 1.4 8 9.0 2.6 312 24.2 8.0 30.5 89.3 6.3 2.1 9 SR7 Misty Calm 06:25 18.0 Middle 8.0 30.5 89.3 823629 823764 8 9.0 2.7 340 24.2 8.0 30.5 89.2 6.3 2.1 17.0 2.4 312 24.2 8.0 30.4 89.2 6.3 2.4 7 Bottom 8.0 30.4 89.2 6.3 2.6 314 24.2 8.0 30.5 89.1 6.3 2.3 7 1.0 24.7 8.1 28.7 98.2 6.9 2.7 8 Surface 24.7 8.1 28.6 97.9 97.6 2.7 1.0 24.7 8.1 28.6 6.9 8 . . . 820374 811623 SR8 Misty Calm 08:00 5.4 Middle -4.4 24.6 3.7 6 8.4 27.9 80.8 5.7 Bottom 24.6 8.4 27.9 80.2 5.7

DA: Depth-Averaged

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

Water Quality Monitoring Results on during Mid-Ebb Tide 15 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Depth (m) Value Value (Easting) 24.3 0.5 8.1 33.5 4.2 1.0 0.5 232 216 24.3 84 44 0.4 24.3 8.1 33.6 7.2 7 89 <0.2 0.9 103.6 804234 C1 Rainv Rough 14:18 8.1 33.6 815631 4.4 0.4 230 24.3 8.1 33.6 103.5 7.2 4.3 6 90 <0.2 0.9 7.8 0.2 209 24.3 8.1 34.2 103.4 7.1 5.3 7 91 <0.2 0.9 Bottom 8.1 34.2 103.3 7.8 0.2 213 24.3 8.1 34.2 103.2 7 1 5.4 6 92 <0.2 0.9 2.5 1.0 1.6 82 25.0 8.1 28.4 100.2 7.1 4 87 < 0.2 1.2 Surface 8.1 28.5 100.1 <0.2 1.0 1.7 84 24.9 8.1 28.6 99.9 7.0 2.5 4 88 1.1 6.0 1.7 84 24.7 8.1 29.8 92.9 6.5 4.8 4.7 4 90 91 <0.2 1.2 C2 Rainv Moderate 13:11 12.0 Middle 8.1 29.8 93.0 825695 806939 6.0 1.7 24.7 8.1 6.5 89 29.8 93.1 2.0 24.7 8.1 6.1 4 93 11.0 79 29.9 94.9 6.7 < 0.2 Bottom 24.7 8.1 29.9 95.2 6.7 1.1 11.0 2.0 24.7 8.1 95.4 6.2 93 <0.2 86 29 9 1.0 2.2 24.6 85 8.0 3.4 30.2 6.8 < 0.2 Surface 24.6 8.0 30.2 96.9 3.4 4.2 4.1 1.1 1.0 96.4 3 85 <0.2 2.3 59 24.6 8.0 30.3 6.8 6.6 1.0 4 5 88 89 <0.2 24.5 6.4 6.2 8.0 30.6 91.0 C3 Rainv Moderate 15:09 12.4 Middle 8.0 30.6 90.9 88 822128 817806 24.5 90.8 2.0 62 8.0 30.6 1.0 11.4 2.1 60 24.3 8.0 31.1 89.6 6.3 5.8 4 89 <0.2 8.0 6.3 Bottom 24.4 31.0 89.7 11.4 2.2 63 24.4 8.0 31.0 89.7 6.3 5.8 5 93 <0.2 1.1 0.1 24.3 98.4 11 8.0 6.2 <0.2 0.8 32.9 6.8 Surface 24.3 8.0 32.9 98.4 1.0 0.1 198 24.3 8.0 32.9 98.4 6.8 6.2 12 86 <0.2 0.8 6.8 807122 IM1 Rainy 13:58 5.3 Middle 88 817968 0.8 Rough 4.3 0.1 136 24.2 8.0 98.8 6.8 6.4 89 <0.2 0.8 Bottom 24.2 8.0 33.5 98.8 6.8 4.3 0.1 143 24.2 8.0 98.8 6.8 6.3 0.8 0.2 180 24.3 8.1 33.0 7.0 4.5 5 85 <0.2 0.9 Surface 24.3 8.1 33.0 100.5 1.0 0.2 180 24.3 4.5 6 85 <0.2 0.8 0.8 0.9 3.7 0.2 165 24.3 5.1 6 <0.2 <0.2 <0.2 89 806147 IM2 Rainv Rough 13:49 Middle 24.3 8.1 33.0 100.7 818171 3.7 24.3 5.1 0.2 24.2 6.3 0.2 120 8.0 99.5 6.9 6.1 8 90 Bottom 24.2 8.0 33.5 99.4 6.9 6.3 0.2 128 24.2 8.0 33 5 99.3 6.9 6.0 7 91 <0.2 1.0 0.9 1.0 1.0 0.2 204 24.4 8.1 32.8 4.0 6 85 <0.2 Surface 8.1 32.8 101.9 1.0 0.2 212 24.4 8.1 32.8 7.1 4.0 7 85 <0.2 1.0 3.8 0.2 157 24.4 8.1 4.6 6 88 <0.2 IM3 Rainy Rough 13:41 7.5 Middle 101.0 818807 805612 <0.2 3.8 0.2 162 24.4 8.1 4.6 128 24.2 5 89 1.0 6.5 0.2 8.0 33.5 99.3 99.4 6.9 5.8 99.4 5.8 0.2 8.0 33.5 - 5 6.5 138 24.2 90 **∠**0.2 1.0 0.4 196 24.5 8.0 32.3 99.6 6.9 3.5 4 85 <0.2 1.6 Surface 24.5 8.0 32.3 99.6 85 8.0 99.6 3.5 4 1.0 0.4 214 24.5 32 3 <0.2 4.5 180 4.4 4 88 1.3 0.2 24.4 8.1 32.7 100.3 7.0 <0.2 IM4 Rainy 13:32 Middle 24.4 8.1 32.7 100.2 819719 804602 Rough 4 88 32.7 4.4 185 8.1 100. 4.5 0.2 24.4 6.5 6.5 4 7.9 7.9 0.2 143 24.2 24.2 8.0 98.3 98.3 6.8 89 <0.2 1.2 6.8 Rottom 24.2 8.0 33.3 98.3 143 0.3 90 < 0.2 1.4 1.0 0.5 84 225 24.6 8.0 31.5 101.1 7.0 3.4 4 <0.2 Surface 24.6 8.0 31.5 101.1 1.0 31.5 7.0 4 <0.2 1.4 0.5 227 24.6 8.0 101.0 3.4 84 4.2 0.3 188 24.4 6.9 4.6 4 88 <0.2 1.4 8.0 32.7 99.2 IM5 13:23 8.0 32.6 99.3 820741 804871 Rainy Rough 8.3 Middle 24.4 4.2 204 24.4 8.0 99.4 4.6 3 88 < 0.2 1.6 0.3 32.6 6.5 1.2 89 <0.2 7.3 0.2 166 24.3 8.0 97.3 6.7 3 8.0 33.3 97.4 6.7 Bottom 24.3 33.3 0.2 176 24.3 <0.2 84 1.1 1.0 0.3 247 24.8 8.0 30.9 7.1 3.8 4 <0.2 101. Surface 24.8 8.0 30.9 101.8 1.0 0.3 247 24.8 8.0 30.9 101. 7.1 3.8 4 85 <0.2 4.0 0.2 186 24.4 8.0 32.6 97.4 6.8 4.3 4 88 <0.2 1.0 13:15 7.9 Middle 24.4 8.0 32.6 97.4 821048 805816 IM6 Rainv Rough 4.0 0.2 201 24.4 8.0 32.6 97.3 6.8 4.3 3 88 <0.2 1.1 1.0 6.9 0.2 182 24.3 8.0 33.2 95.6 6.6 5.9 4 89 <0.2 Bottom 24.3 8.0 33.2 95.6 6.6 184 8.0 6.6 5.9 0.2 24.3 1.0 0.2 250 24.9 8.0 30.5 4.0 84 <0.2 1.1 Surface 24.9 8.0 30.5 101.9 1.0 0.2 267 24.9 8.0 30.5 101.9 7.1 4.0 4 83 <0.2 1.0 5.6 5.7 88 1.2 4.6 0.0 189 24.6 31.8 98.3 6.8 4 <0.2 IM7 Rainy Rough 13:09 9.1 Middle 8.0 31.8 98.3 821347 806841 4.6 0.0 203 24.6 8.0 31.8 98.2 6.8 4 88 <0.2 8.1 0.2 125 24.4 8.0 32.8 96.7 6.7 6.4 4 89 <0.2 1.0 8.0 32.8 96.7 6.7 8.1 0.2 137 24.4 8.0 32.8 96.7 6.7 6.4 4 90 <0.2 0.9 1.0 1 4 15 24 9 8.1 29.0 98.4 6.9 3.2 6 85 < 0.2 1.0 98.2 Surface 8.1 29.1 1.0 1.0 1.4 15 24.8 8.1 29.1 98.0 6.9 3.3 5 86 <0.2 4 0 1.5 18 24.6 8.1 30.0 97.2 97.3 6.8 3.8 5 5 91 92 <0.2 1.1 IM8 Rainy Moderate 13:36 8.0 Middle 8.1 30.1 97.3 821834 808147 4.0 1.5 18 24.5 8.1 30.2 6.8 3.9 < 0.2 7.0 1.7 19 24.4 8.1 30.5 97.7 6.9 4.3 5 93 <0.2 1.1 8.1 Bottom 24.4 30.5 97.9 6.9 24.4

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Water Quality Monitoring Results on during Mid-Ebb Tide 15 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Average Value Average Value (Northing) (Easting) 24.8 Surface 8.1 29.2 98.2 1.0 2.1 24.8 98.0 4.3 5.2 4 0 2.0 31 24.6 8.1 30.1 97.3 6.8 4 90 <0.2 1.1 97.3 808792 IM9 Rainv Moderate 13:42 8.1 30.2 5.5 90 822100 4.0 2.1 34 24.5 8.1 30.2 97.3 6.8 5.2 4 91 <0.2 1.1 7.0 2.1 33 24.4 8.1 30.6 97.5 6.8 6.9 5 91 <0.2 1.2 Bottom 8.1 30.6 97.6 6.9 7.0 2.2 35 24.4 8.1 30.6 97.7 6.9 6.9 5 92 <0.2 1.0 1.0 1.9 45 24.8 8.0 29.5 93.5 6.6 4.3 4 < 0.2 0.9 Surface 8.0 29.6 93.4 1.0 1.9 48 24.8 8.0 29.6 93.3 6.5 4.2 4 87 <0.2 0.9 3.9 2.1 44 24.8 8.0 94.0 6.6 5.2 5.5 5 4 91 91 <0.2 0.9 IM10 Rainy Moderate 13:49 7.8 Middle 8.0 29.6 94.1 822379 809793 3.9 2.2 24.8 8.0 < 0.2 48 29.5 94.2 6.6 6.8 5 2.2 41 24.5 8.1 30.4 95.1 6.7 6.9 92 < 0.2 1.0 Bottom 8.1 30.4 95.2 6.7 5 6.7 1.0 6.8 24 8.1 30.4 95.3 6.9 92 43 24.5 **-**0 2 1.0 1.9 24.8 7.4 84 8.0 96.2 6.8 Surface 8.0 29.4 96.1 1.0 1.0 95.9 6.7 7.4 2.1 49 24.8 8.0 29.5 6 84 < 0.2 66 8.5 8.4 0.9 0.9 0.9 24.7 6.4 88 92 <0.2 4.5 49 8.0 29.8 91.4 IM11 Rainv Moderate 13:59 9.0 Middle 8.0 29.8 91.4 90 822050 811457 0.9 4.5 24.7 6 2.2 52 8.0 29.8 8.0 2.0 46 24.7 8.0 29.8 91.9 6.5 9.9 5 93 <0.2 24.7 6.5 Bottom 8.0 29.8 92.2 8.0 2.1 48 24.7 8.0 29.8 92.4 6.5 10.0 6 97 <0.2 0.9 2.1 24.8 8.0 6 <0.2 29.1 94.6 0.9 Surface 24.8 8.0 94.4 29.2 1.0 2.1 52 24.8 8.0 29.2 94.2 6.6 5.7 5 86 <0.2 0.9 5.0 43 24.8 6.6 6.1 6 87 <0.2 1.0 2.3 8.0 29.5 93.7 812066 IM12 14:05 9.9 Middle 24.8 8.0 29.5 93.7 821469 Rainv Moderate 5.0 8.0 6.1 5 90 <0.2 1.2 24.8 6.6 2.3 8.9 24.7 8.0 29.5 94.5 7.4 4 92 <0.2 6.6 24.7 8.0 29.5 94.7 6.7 Rottom 8.9 2.2 46 24.7 8.1 29.5 94.9 6.7 7.5 1.1 24.8 8.1 29.3 6.9 2.3 3 98.3 Surface 24.8 8.1 98.3 29.3 1.0 24.8 6.9 2.3 2 2.1 Rainv Moderate 14:35 Middle 819974 812666 2.1 3.2 24.8 8.1 29.4 98.7 6.9 2.5 4 Bottom 24.8 8.1 29.4 98.8 6.9 3.2 24.8 8.1 29.4 98.9 6.9 2.6 1.0 0.5 38 24.8 8.0 29.4 94.6 6.7 3.7 90 <0.2 0.8 Surface 24.8 8.0 29.4 94.7 1.0 0.5 40 24.7 8.0 29.5 94.7 6.7 3.7 2 91 < 0.2 1.0 SR2 Moderate 14:49 5.0 Middle 821467 814158 4 0 95.6 95.7 49 92 0.9 0.3 40 24.7 8.0 29.5 6.7 2 <0.2 95.7 6.7 Bottom 49 4 0 42 24.7 3 1.0 0.3 8.0 29.5 92 r0 2 1.0 13 32 24.9 8.1 28.9 97.7 6.9 3.1 4 Surface 8.1 28.9 97.7 97.6 8 1 3.1 1.0 14 34 24 9 28 9 4 5.0 3.7 6 5 1.3 31 24.7 8.1 29.8 97.2 6.8 SR3 Moderate 13:30 10.0 Middle 24.7 8.1 97.2 822155 807563 6.8 3.7 97.1 5.0 1.4 8.1 33 24.6 30.1 5 6 9.0 1.5 30 24.4 24.5 8.1 8.1 30.8 97.2 6.8 4.9 4.8 Bottom 24.5 8.1 30.8 97.3 6.8 30.8 9.0 1.0 0.0 83 24.4 8.1 33.3 100.4 6.9 4.8 6 Surface 24.4 8.1 33.3 100.4 33.3 6.9 1.0 0.0 90 24.4 8.1 100.4 4.8 6 4.6 68 24.2 6.2 6 0.1 8.1 6.7 . 33.6 SR4A 8.1 33.6 97.5 817177 807828 Rainy Calm 14:43 9.2 Middle 24.2 4.6 8.1 97.5 6.8 6.2 5 0.1 71 24.2 6.7 8.2 0.1 60 24.2 24.2 8.0 96.7 96.7 6.7 33.6 6.7 6 24.2 8.0 33.6 96.7 Rottom 0.1 65 8.0 6.6 1.0 0.0 112 24.9 8.0 31.7 7.1 3.6 5 102.3 24.9 8.0 31.7 102.3 Surface 1.0 0.0 112 24.9 8.0 31.7 7.1 3.7 6 SR5A 4.1 Middle 816601 810703 Rainv Calm 15:00 3.1 0.0 119 24.7 32.3 100.9 7.0 4.0 3 Bottom 24.7 8.0 32.3 101.0 7.0 24.7 8.0 7.0 4.0 3.1 0.0 128 1.0 0.1 23 24.8 8.1 30.6 8.0 Surface 24.8 8.1 30.6 105.1 1.0 0.1 23 24.8 8.1 30.6 105.0 7.3 7.8 5 SR6A Rainy Calm 15:44 4.3 Middle 817963 814757 3.3 0.1 20 24.8 8.0 30.6 7.2 7.6 5 Bottom 8.0 30.6 103.5 7.2 3.3 0.1 21 24.8 8.0 30.6 7.9 4 1.0 0.9 178 24.5 8.0 30.5 95.8 6.7 1.3 4 96.2 Surface 30.6 1.0 1.0 191 24.5 8.0 30.6 96.5 6.8 1.3 5 9.0 0.8 174 24.4 8.0 31.0 92.5 6.5 2.2 5 SR7 Rainy Moderate 15:36 18.0 Middle 8.0 31.0 92.5 823618 823755 9.0 0.8 179 24.4 8.0 31.0 92.5 6.5 4 17.0 0.9 194 24.4 8.1 31.0 94.2 6.6 3.8 5 Bottom 8.1 31.0 94.4 6.6 1.0 195 24.4 8.1 31.0 94.6 6.6 3.8 5 1.0 25.3 8.1 29.4 94.0 6.5 6.3 6 Surface 25.3 8.1 29.4 93.9 93.7 1.0 25.2 8.1 29.4 6.5 6.2 6 . . 811635 820378 SR8 Rainy Moderate 14:13 5.4 Middle -4.4 24.8 6.6 5 8.1 29.3 74.9 5.3 4.7 24.8 8.1 29.3 70.6 5.0

DA: Depth-Average

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

Water Quality Monitoring Results on during Mid-Flood Tide 15 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Depth (m) Value Value Average Value (Northing) (Easting) 0.4 24.2 Surface 24.2 8.1 33.6 99.0 1.0 0.4 38 24.2 33.6 99.0 6.9 11.2 11 85 <0.2 0.6 0.4 24.2 11.7 11 88 0.6 <0.2 8 1 33.6 98.8 804223 C1 08:40 87 Middle 24.2 815620 Cloudy Rough 88 0.6 24.2 8.1 33.6 98.8 6.8 11.8 11 88 <0.2 0.6 0.5 36 7.7 0.4 36 24.2 8.0 33.6 98.1 6.8 12.7 3 90 <0.2 0.7 6.8 Bottom 24.2 8.0 33.6 98.2 98.3 6.8 0.5 7.7 24.2 12.6 0.4 8.0 33.6 4 91 < 0.2 1.0 1.9 4.5 0.9 0.9 1.1 1.1 < 0.2 8.0 Surface 25.0 8.0 28.6 97.2 25.0 24.9 8.0 97.1 6.8 19 88 1.0 2.0 28.6 4.4 <0.2 6.3 5.3 14 8.0 6.8 90 28.7 96.5 C2 Rainv Calm 09:49 12.6 Middle 24.9 8.0 28.7 96.5 90 825679 806958 2.1 8.0 28.7 96.4 6.8 5.3 16 91 <0.2 6.3 18 24.9 11.6 2.0 15 24.9 8.0 6.8 6.3 13 93 <0.2 1.2 28.7 96.3 8.0 96.3 6.8 Bottom 24.9 28.6 11.6 2.2 24.9 8.0 28.6 96.3 6.8 6.3 12 93 <0.2 1.2 1.0 24.7 8.0 2.0 <0.2 1.0 29.9 Surface 24.7 8.0 30.0 95.6 1.0 1.1 343 24.6 8.0 30.1 95.5 6.7 1.9 6 85 <0.2 1.1 1.0 6.0 1.2 343 3.6 3.7 6 7 89 89 <0.2 24.5 8.0 30.8 90.5 6.3 C3 817818 Rainy Calm 07:39 12.0 Middle 24.5 8.0 30.8 90.5 88 822108 1.3 316 24.5 11.0 1.2 329 24.5 8.0 30.8 91.0 6.4 4.3 6 91 <0.2 1.0 Bottom 24.5 8.0 30.8 91.1 6.4 11.0 1.2 334 24.5 8.0 30.8 91.2 6.4 4.2 1.0 0.1 319 24.3 8.0 6.4 19 85 <0.2 0.8 Surface 24.3 8.0 32.7 96.8 1.0 0.1 346 24.3 8.0 32.7 96.8 6.7 6.4 20 86 <0.2 0.8 807139 IM1 Cloudy Rough 09:01 5.6 Middle 817939 46 0.1 33 24.3 8.0 32.7 96.5 6.7 7.6 12 89 < 0.2 0.8 Bottom 24.3 8.0 32.7 96.5 6.7 36 357 4.6 0.1 24.3 8.0 32.7 96.5 6.7 7.5 14 88 <0.2 0.8 7.5 16 84 1.0 0.2 24.3 8.1 33.1 99.4 6.9 < 0.2 0.6 Surface 8.1 33.1 99.4 1.0 0.2 328 24.3 8.1 33.1 99.4 6.9 7.4 15 84 <0.2 0.7 0.6 0.7 0.7 8.7 3.8 0.3 24.3 8.0 33.1 98.6 6.8 14 87 <0.2 IM2 Cloudy Rough 09:12 7.5 Middle 8.0 33.1 98.7 818163 806149 8.7 <0.2 3.8 0.3 24.3 8.0 98.7 6.8 16 87 10.2 10.3 14 6.5 0.2 24.3 8.0 33.2 98.6 6.8 89 <0.2 8.0 33.2 98.6 6.8 6.5 98.6 12 0.2 8.0 33.2 6.8 ٩n <0.2 24.3 1.0 0.4 340 24.3 8.1 33.2 99.3 6.9 8.8 12 84 < 0.2 0.7 Surface 8.1 33.2 99.4 1.0 99.4 8.6 10.1 13 0.4 313 24.3 8.1 33.2 6.9 83 <0.2 0.7 0.6 0.8 3.9 6.8 14 <0.2 0.3 348 24.3 8.1 33.2 98.2 86 87 IM3 Cloudy Rough 09:19 7.8 Middle 24.3 8.1 33.2 98.3 87 818768 805585 10.1 13 13 3.9 0.3 320 24.3 8.1 98.3 6.8 <0.2 11.4 89 6.8 0.2 350 24.3 8.1 33.2 97.7 6.8 Rottom 24.3 8.1 33.2 97.7 6.8 6.8 0.2 352 24.3 8.1 33.2 97.7 6.8 11.3 15 <0.2 0.7 90 0.7 1.0 0.6 349 16 84 24.3 8.1 33.2 99.3 6.9 12.3 <0.2 Surface 24.3 8.1 33.2 99.3 0.6 321 24.3 12.1 18 84 <0.2 0.6 0.6 0.7 0.7 4.5 13.2 <0.2 355 24.3 6.9 21 86 0.5 8.1 33.2 98.8 IM4 09:28 9.0 Middle 24.3 8.1 33.2 98.6 20 819701 804604 Cloudy Rough 4.5 0.6 327 24.3 8.1 98.4 6.8 13.3 20 22 87 <0.2 8.0 0.5 356 24.3 14.4 89 8.1 98.3 6.8 8.1 Bottom 24.3 33.2 98.3 6.8 8.0 0.5 328 24.3 8.1 6.8 14.4 20 89 <0.2 0.6 1.0 0.7 24.4 8.1 32.7 7.3 18 83 <0.2 99.3 6.9 Surface 24.4 8.1 32.7 99.3 1.0 24.4 8.1 32.7 6.9 7.3 20 84 <0.2 0.8 4.2 0.7 24.4 8.1 21 86 <0.2 0.7 8.1 6.9 IM5 09:36 8.3 Middle 24.4 8.1 32.7 99.3 820715 804848 Cloudy Rough 20 4.2 0.8 24.4 8.1 19 <0.2 0.6 0.6 24.4 8.0 32.7 98.4 98.4 6.8 10.4 21 89 <0.2 24.4 8.0 32.7 98.4 6.8 Bottom 8.0 7.3 0.6 15 24.4 10.4 20 88 < 0.2 1.0 0.1 359 24.8 8.0 30.7 99.6 6.9 3.0 16 83 <0.2 1.1 Surface 8.0 30.7 99.6 1.0 0.1 336 24.8 8.0 30.7 99.6 6.9 3.0 14 83 <0.2 1.0 4.2 0.3 24.7 8.0 31.0 98.3 6.9 4.0 6 86 <0.2 Cloudy Rough 09:44 Middle 8.0 31.0 98.4 821049 805808 <0.2 4.2 0.3 33 24.7 8.0 31.0 98.4 6.9 3.9 5 86 5.4 5.2 1.1 7.4 0.3 56 24.5 8.0 95.5 95.4 6.6 5 88 <0.2 95.5 7 4 0.3 61 24.5 8.0 6 88 1.2 1.0 0.1 80 24.9 8.0 30.2 7.1 7.1 3.2 6 84 <0.2 Surface 24.9 101.1 1.0 0.1 84 24 9 8.0 30.2 101 3.3 7 84 <0.2 6 4.4 1.2 4.6 0.2 77 86 <0.2 24.8 8.0 30.5 99.5 6.9 IM7 09:55 9.2 Middle 8.0 99.5 821370 806828 Cloudy Rough 7 86 4.6 0.2 79 24.8 8.0 30.5 99.4 6.9 4.4 8.2 0.2 84 24.5 8.0 32.3 97.7 6.8 5.2 7 89 <0.2 1.2 Bottom 24.5 8.0 32.3 97.8 6.8 8.2 0.2 84 24.5 8.0 97.8 5.0 <0.2 1.2 1.0 2.3 52 24.9 8.0 28.7 95.5 6.7 3.5 12 87 < 0.2 1.1 Surface 24.9 8.0 28.7 95.5 28.7 95.5 1.2 8.0 1.0 2.3 56 24.9 3.4 11 88 < 0.2 4.1 8.0 28.7 95.2 95.2 6.7 3.8 6 92 91 <0.2 1.2 2.2 51 24.9 8.0 28.7 95.2 821809 808127 IM8 Rainy Calm 09:21 8.2 Middle 24.9 1.2 3.9 6.7 7 4.1 55 24.9 8.0 28.7 2.4 1.1 7.2 2.4 24.9 8.1 28.7 95.3 95.4 6.7 4.8 93 <0.2 53 6 24.9 8.1 28.7 95.4 6.7 Rottom

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

Water Quality Monitoring Results on during Mid-Flood Tide 15 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Value Average Value (Northing) (Easting) Surface 8.0 28.7 94.2 1.6 25.0 94.2 6.6 4.9 4 0 19 51 25.0 8.0 28.7 94.1 6.6 5.0 4 91 <0.2 1.2 09:15 94.1 808813 IM9 Rainv Calm 8.0 28.7 5.0 90 822086 4.0 1.9 55 24.9 8.0 28.7 94.0 6.6 5.0 5 91 <0.2 1.2 7.0 2.0 50 24.9 8.0 28.7 94.1 6.6 5.1 12 92 <0.2 1.1 Bottom 24.9 8.0 28.7 94.1 6.6 7.0 2.1 50 24 9 8.0 28.7 94.1 6.6 5.1 11 92 <0.2 1.1 1.0 1.5 25.0 8.0 29.1 91.9 6.4 7.1 < 0.2 1.1 Surface 8.0 29.1 91.9 1.0 1.5 25.0 8.0 29.1 91.8 6.4 7.0 6 87 <0.2 1.2 3.6 1.5 24.9 8.0 91.7 6.4 8.1 10 10 90 91 <0.2 1.2 IM10 Calm 09:09 7.2 Middle 8.0 29.1 91.7 822372 809779 3.6 8.0 6.4 8.2 < 0.2 1.6 24.9 29.1 91.7 6.2 1.5 8.0 10 1.2 24.9 29.2 92.3 6.5 9.4 93 < 0.2 Bottom 8.0 29.2 92.4 6.5 6.5 1.2 6.2 1.6 24 9 8.0 92.4 9.5 11 93 29.2 **-**0 2 1.0 1.1 24.9 8.0 6.6 Surface 8.0 29.0 93.4 1.1 1.0 6.6 7.9 6 85 < 0.2 1.1 26 24.9 8.0 29.1 93.3 6.6 8.7 8.8 1.2 6 5 1.1 24.9 6.5 6.5 89 89 <0.2 4.4 8.0 29.1 92.4 92.3 IM11 Rainv Calm 09:00 8.8 Middle 8.0 29.1 92.4 88 822050 811479 24.9 4.4 1.1 25 8.0 29.2 7 1.2 7.8 1.1 20 24.8 8.0 29.2 92.5 6.5 6.5 10.8 90 <0.2 24.8 Bottom 8.0 29.2 92.6 7.8 1.2 21 24.8 8.0 29.2 92.6 6.5 10.8 6 90 <0.2 1.1 0.5 24.8 1.8 4 <0.2 8.0 29.6 Surface 24.8 8.0 29.6 93.2 1.0 0.5 24.8 8.0 29.6 93.1 6.5 1.9 5 85 <0.2 1.0 6.5 4.9 0.5 24.8 6.5 3.7 5 89 <0.2 1.1 8.0 29.6 93.0 812037 IM12 Rainy Calm 08:54 9.8 Middle 24.8 8.0 29.6 93.0 821460 4.9 8.0 3.9 4 90 <0.2 1.1 0.5 24.8 6.5 29.6 8.8 0.5 24.8 8.0 29.6 6.5 4.1 5 91 <0.2 92.9 24.8 8.0 29.6 92.9 6.5 Rottom 8.8 0.5 15 24.8 8.0 29.6 92.8 6.5 4.2 6 1.1 25.0 8.1 29.0 1.2 11 96.1 6.7 Surface 25.0 8.1 96.0 29.0 1.0 25.0 95.9 6.7 1.2 10 2.0 Rainv Calm 08:17 Middle 819975 812661 2.0 3.0 25.0 8.1 29.0 95.2 6.7 1.5 10 Bottom 25.0 8.1 29.0 95.2 6.7 6.7 3.0 25.0 8.1 29.0 95.1 1.4 11 1.0 0.3 102 24.8 8.0 29.2 94.3 6.6 4.7 10 88 <0.2 1.0 Surface 24.8 8.0 29.2 94.3 1.0 0.3 105 24.8 8.0 29.3 94.3 6.6 4.6 10 88 < 0.2 1.2 6.6 SR2 Rainy 08:00 5.0 Middle 821448 814150 4 0 5.7 12 89 0.2 83 24.6 8.1 29.5 94.2 6.6 <0.2 11 94.2 Bottom 94.2 5.8 4 0 87 8.1 29.5 13 11 0.3 24.6 90 r0 2 1.0 21 39 24.9 8.0 28.6 95.0 94.9 6.7 6.7 3.6 22 Surface 8.0 28.6 95.0 8.0 3.7 25 1.0 21 39 24 9 28.6 4.8 6.6 4.6 4.6 24 22 2.3 41 24.9 8.0 28.7 94.4 SR3 Rainy Calm 09:29 Middle 28.7 94.3 22 822138 807554 94.2 4.8 43 8.0 28.7 2.3 24.9 5.9 5.9 22 16 8.6 2.3 44 24.9 24.9 8.0 28.7 93.3 93.0 6.6 Bottom 24.9 8.0 28.7 93.2 6.6 44 8.6 2.5 1.0 0.1 81 24.8 8.0 31.7 96.7 6.7 4.8 8 Surface 24.8 8.0 31.7 96.7 84 31.7 96.7 6.7 7 1.0 0.1 24.8 8.0 4.8 4.8 0.3 6.7 5.9 6 24.6 . 8.0 32.1 96.2 SR4A 08:16 8.0 32.1 96.3 817168 807790 Cloudy Calm 9.5 Middle 24.6 4.8 24.6 8.0 96.3 5.9 7 0.3 32.1 6.7 8.5 0.3 24.3 8.0 32.6 95.3 95.2 6.6 6 5 66 6.6 Bottom 24.3 8.0 32.6 95.3 8.5 0.3 24.3 8.0 6.6 1.0 0.1 282 25.0 8.0 31.1 6.9 3.2 7 99.6 Surface 25.0 8.0 31.1 99.6 1.0 0.1 286 25.0 8.0 31.1 99.6 6.9 3.2 7 SR5A 07:57 3.6 Middle 816612 810676 Cloudy Calm 2.6 0.1 287 25.0 99.3 6.9 3.6 16 Bottom 25.0 8.0 31.1 99.4 6.9 0.1 295 25.0 8.0 31.1 99.4 6.9 3.6 17 2.6 1.0 0.1 292 24.8 8.0 30.6 98.5 6.9 3.9 11 Surface 24.8 8.0 30.6 98.5 1.0 0.1 313 24.8 8.0 30.6 98.4 6.9 4.0 10 SR6A Cloudy Calm 07:31 4.1 Middle 817984 814756 3.1 0.1 249 24.9 8.0 30.7 97.5 6.8 4.0 10 Bottom 8.0 30.7 97.4 6.8 3.1 0.1 249 24.9 8.0 30.7 97.3 6.8 4.0 9 1.0 2.8 19 24.6 8.0 30.0 93.8 6.6 11 9 93.5 Surface 30.0 1.0 3.0 20 24.6 8.0 30.0 93.2 6.5 1.0 10 7.5 3.0 15 24.6 8.0 30.4 90.7 6.4 2.2 10 SR7 Rainy Calm 06:55 15.0 Middle 8.0 30.4 90.7 823658 823757 7.5 3.3 15 24.5 8.0 30.5 90.6 6.3 11 14.0 2.8 19 24.5 8.0 30.8 89.5 6.3 3.5 10 Bottom 8.0 30.8 89.5 6.3 14.0 3.0 19 24.5 8.0 30.8 89.4 6.3 3.5 11 1.0 25.0 8.0 28.9 94.7 6.6 2.9 11 Surface 25.0 8.0 28.9 94.7 94.7 12 1.0 25.0 8.0 28.9 6.6 2.9 . . 811603 SR8 Rainy Calm 08:43 5.4 Middle 11 820398 -4.4 25.0 3.0 11 8.1 28.9 95.1 6.7 Bottom 25.0 8.1 28.9 95.2 6.7

DA: Depth-Averaged

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

Water Quality Monitoring Results on during Mid-Ebb Tide 17 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Depth (m) Value Value (Easting) 24.4 0.3 8.1 31.9 1.0 0.3 221 24.4 104. 2.1 2.5 4 1.0 4 0 0.4 222 24.5 8.1 33.0 7.0 2 87 <0.2 101.3 804224 C1 Rainv Calm 15:23 8.1 33.0 815606 4.0 0.4 229 24.5 8.1 33.0 101.2 7.0 2.4 3 88 <0.2 0.9 7.0 0.3 217 24.4 8.1 33.4 100.7 7.0 3.6 3 90 <0.2 0.9 Bottom 8.1 33.4 100.9 7.0 7.0 0.4 231 24.4 8.1 33.4 101 1 7.0 3.5 2 90 <0.2 0.9 24.8 1.0 0.2 135 8.1 28.0 99.1 7.0 4.0 4 88 < 0.2 1.3 Surface 8.1 28.1 99.0 <0.2 1.0 0.2 143 24.8 8.1 28.1 98.9 7.0 4.1 3 87 1.4 5.8 0.5 154 24.7 8.1 91.8 6.5 5.4 5.5 3 89 90 <0.2 1.4 C2 Rainv Moderate 14:16 11.5 Middle 8.1 29.2 91.8 825674 806933 5.8 0.5 163 24.7 8.1 6.5 29.2 91.8 10.5 0.5 144 24.5 8.0 5.5 2 93 1.5 30.3 88.2 6.2 < 0.2 Bottom 8.0 30.3 88.3 6.2 5.5 1.4 10.5 0.5 149 24.5 8.0 88.3 6.2 92 <0.2 30.3 1.0 0.4 286 24.6 8.1 86 1.4 29.9 6.4 < 0.2 Surface 8.1 29.9 91.7 3.8 4.2 4.2 1.4 1.0 311 91.7 6.4 3 86 <0.2 0.4 24.6 8.1 29.9 1.3 3 <0.2 257 266 24.6 6.4 88 87 5.4 8.1 29.9 91.5 C3 Rainv Moderate 16:17 10.7 Middle 8.1 29.9 91.5 88 822105 817782 24.6 0.2 8.1 29.9 1.4 9.7 0.1 120 24.5 8.1 30.0 91.0 6.4 4.4 4 90 <0.2 8.1 6.4 Bottom 24.5 30.0 91.1 9.7 0.1 128 24.5 8.1 30.0 91.1 6.4 4.4 5 91 <0.2 1.4 0.1 134 24.6 3.3 86 8.1 104.5 7.3 <0.2 32.0 1.1 Surface 24.6 8.1 32.0 104.4 1.0 0.1 138 24.6 8.1 32.0 104.3 7.2 3.4 3 86 <0.2 1.2 7.3 807113 IM1 Rainy Calm 15:02 5.0 Middle 88 817951 4.0 0.1 311 24.5 8.1 99.4 6.9 5.2 3 89 <0.2 Bottom 24 5 8.0 32.4 99.5 6.9 4.0 0.1 336 24.5 8.0 32.3 99.5 6.9 5.6 1.1 0.2 175 24.5 8.1 32.2 7.0 3.2 4 87 <0.2 1.3 Surface 24.5 8.1 32.2 101.3 1.0 0.2 188 24.5 3.2 3 86 <0.2 3.4 0.1 166 24.5 4.0 4 88 <0.2 <0.2 <0.2 1.3 1.3 806160 IM2 Rainv Calm 14:55 Middle 24.5 8.1 32.4 100.8 818145 0.1 24.5 4.2 5.7 3 3.4 24.5 5.8 0.2 120 8.1 99.8 6.9 89 Bottom 24.5 8.1 33.0 99.8 6.9 5.7 5.8 0.2 127 24.5 8.1 33 ( 99.7 6.9 3 90 <0.2 1.2 1.0 0.3 153 24.5 8.1 31.9 97.2 6.8 2.6 86 <0.2 1.2 Surface 8.1 31.9 97.5 1.0 0.3 160 24.5 8.1 97.7 6.8 2.7 3 86 < 0.2 1.2 1.2 3.5 0.2 155 24.6 8.1 6.9 3.1 3 100 <0.2 IM3 Rainy 14:49 7.0 Middle 99.0 818782 805578 87 87 <0.2 3.5 0.2 165 24.6 99.1 3.3 99.2 98.7 3.9 4 1.2 6.0 0.1 119 24.5 8.1 32 9 6.9 3.6 0.1 24.5 8.1 32.8 4 6.0 121 90 **∠**0.2 1.0 0.5 183 24.5 8.1 32.3 98.4 6.8 5.4 7 86 <0.2 1.5 Surface 24.5 8.1 32.3 98.5 98.5 87 8 1 32 3 5.8 6 1.0 0.5 190 24.5 <0.2 7.5 7.7 4.2 184 6 88 87 1.4 0.5 24.5 8.1 32.4 98.0 6.8 <0.2 IM4 Rainy Calm 14:41 Middle 24.5 8.1 32.4 98.0 819741 804620 6.8 4.2 191 8.1 32.4 98.0 0.5 24.5 9.9 9.5 5 4 7.4 0.4 177 24.5 24.5 8.1 8.1 32.5 32.5 97.5 97.5 6.8 87 <0.2 1.5 Rottom 24.5 8.1 32.5 97.5 6.8 91 191 < 0.2 1.4 1.0 0.4 207 24.6 8.1 31.9 99.3 6.9 4.2 3 86 <0.2 Surface 24.6 8.1 31.9 99.1 1.0 8.1 98.9 6.9 85 <0.2 1.3 0.4 212 24.6 31.9 4.5 4 4.0 189 6.7 6.1 4 87 <0.2 1.5 0.4 24.5 8.1 97.4 32.7 IM5 14:31 24.5 8.1 32.7 97.5 820722 804880 Rainy Calm 8.0 Middle 4.0 0.4 205 24.5 8.1 97.5 6.8 6.2 3 87 < 0.2 1.5 32.7 1.4 6.6 6.6 89 <0.2 7.0 0.3 191 24.5 24.5 8.1 32.8 96.6 96.6 6.7 4 8.1 96.6 6.7 Bottom 24.5 32.8 0.3 206 <0.2 1.4 1.4 1.5 1.0 0.2 209 24.7 8.1 31.0 7.0 3.4 3 90 <0.2 100.4 Surface 24.7 8.1 31.0 100.4 1.0 0.2 217 24.7 8.1 100.4 7.0 3.4 3 87 <0.2 3.8 0.2 200 24.6 8.1 31.9 98.5 6.8 4.1 87 <0.2 14:25 7.6 Middle 24.6 8.1 31.9 98.5 821052 805841 IM6 Rainv Calm 3.8 0.2 201 24.6 8.1 31.9 98.4 6.8 4.2 2 90 <0.2 1.4 6.6 0.2 201 24.5 8.0 32.2 98.1 6.8 4.9 2 88 <0.2 1.4 Bottom 24.5 8.0 32.2 98.3 6.8 6.6 0.2 211 8.0 98.4 6.8 5.0 1.4 24.5 1.0 0.1 221 24.8 8.1 30.4 100.2 7.0 2.1 86 <0.2 1.5 Surface 24.8 8.1 30.4 100.1 1.0 0.1 228 24.8 8.1 30.4 100.0 7.0 2.2 3 86 <0.2 1.4 4.5 0.1 136 24.6 31.9 97.7 6.8 3.2 <2 88 <0.2 1.5 IM7 Rainy Calm 14:17 9.0 Middle 24.6 8.0 31.9 97.6 821344 806850 1.4 4.5 0.1 136 24.6 8.0 31.9 97.5 6.8 3.4 <2 89 <0.2 8.0 0.1 128 24.6 8.0 32.1 97.1 6.7 4.6 <2 90 <0.2 1.4 8.0 32.1 97.1 6.7 8.0 0.1 137 24.6 8.0 32.1 97.1 6.7 4.7 <2 90 <0.2 1.3 1.0 23 324 24 9 8.1 28.5 95.1 6.7 3.7 4 84 < 0.2 1.4 95.1 Surface 8.1 28.5 1.2 1.0 2.4 355 24.9 8.1 28.6 95.0 6.7 3.7 3 84 <0.2 42 24 324 24.7 8.1 29.2 94.3 6.6 5.4 5.5 2 86 86 <0.2 1.2 IM8 Rainy Moderate 14:42 8.3 Middle 24.7 8.1 29.2 94.3 821807 808142 1.3 4.2 2.5 344 24.7 8.1 29.2 94.3 6.6 < 0.2 7.3 2.5 325 24.6 8.1 30.0 96.4 6.8 5.5 <2 88 <0.2 1.2 8.1 Bottom 24.6 30.0 96.4 6.8 339

DA: Depth-Averaged

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

Water Qua	lity Moni	toring Res	ults on		17 April 21	during Mid-		)					,							1			I	1	,	,		
Monitoring	Weather	Sea	Sampling	Water	0	4. ()	Current Speed	Current	Water Te	emperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Disso Oxy		Turbidity(	NTU)	Suspende (mg.		Total All (ppr		Coordinate HK Grid	Coordinate	Chromium (µg/L)	Nickel (µg/L
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	otn (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0	2.9 3.0	243 260	24.9	24.9	8.1 8.1	8.1	28.2	28.2	98.8 98.7	98.8	7.0		2.9 2.9		<2		85 85				<0.2	1.3
						4.0	2.8	245	24.9		8.1		29.2		94.9		6.7	6.9	5.0		<2 <2	_	87				<0.2	1.2
IM9	Rainy	Moderate	14:48	7.9	Middle	4.0	2.8	260	24.7	24.7	8.1	8.1	29.2	29.2	94.9	94.9	6.7		5.0	5.0	<2	<2	88	87	822094	808831	<0.2	1.4
					Bottom	6.9	2.9 3.1	248 255	24.5 24.5	24.5	8.1 8.1	8.1	30.1	30.1	95.0 95.0	95.0	6.7	6.7	7.2 7.1	}	<2 <2		89 89				<0.2	1.2
					Surface	1.0	0.7	100	24.7	24.7	8.1	8.1	28.3	28.3	104.1	104.0	7.4		3.1		3		86				<0.2	1.3
					Surface	1.0	0.7	100	24.7	24.1	8.1	0.1	28.3	20.3	103.9	104.0	7.4	7.1	3.0		3		86				<0.2	1.2
IM10	Rainy	Moderate	14:57	8.1	Middle	4.1 4.1	0.7	108 112	24.7	24.7	8.1 8.1	8.1	29.2	29.2	95.3 95.2	95.3	6.7		5.3 5.3	5.2	3	4	87 88	88	822364	809814	<0.2	1.3
					Bottom	7.1	0.4	99	24.6	24.6	8.1	8.1	29.5	29.5	93.7	93.7	6.6	6.6	7.3	İ	5		89				<0.2	1.2
					Dottom	7.1	0.4 1.9	102	24.6	24.0	8.1	0.1	29.5	23.5	93.6		6.6	0.0	7.5		5		89				<0.2	1.3
					Surface	1.0	1.9	261 283	24.8	24.8	8.1 8.1	8.1	28.4	28.4	101.8	101.8	7.2		3.1	ŀ	5		85 85				<0.2	1.3
IM11	Rainy	Moderate	15:07	8.7	Middle	4.4	1.9	264	24.8	24.8	8.1	8.1	28.7	28.7	95.4	95.4	6.7	7.0	3.8	6.2	4	5	87	87	822050	811453	<0.2	1.3
	rtuiny	Moderate	10.01	0.1	midalo	4.4 7.7	1.9	275 268	24.8		8.1		28.7		95.3		6.7		3.8	0.2	5 4		87 89	0,	OLLOGO	011100	<0.2	1.2
					Bottom	7.7	2.2	268	24.6 24.6	24.6	8.0	8.0	29.8	29.8	87.2 87.3	87.3	6.1	6.1	11.8 11.6	-	4		89				<0.2	1.3
					Surface	1.0	0.5	95	24.8	24.8	8.1	8.1	28.5	28.5	97.0	96.9	6.8		3.8		8		85				<0.2	1.3
						1.0 4.2	0.5	97 116	24.8	21.0	8.1 8.1		28.5		96.7 89.2		6.8	6.6	3.9 10.2		9		84 86				<0.2	1.2
IM12	Rainy	Moderate	15:13	8.3	Middle	4.2	0.4	125	24.7	24.7	8.1	8.1	29.6 29.6	29.6	89.3	89.3	6.3		10.2	9.0	4	6	87	87	821475	812052	<0.2 <0.2	1.3
					Bottom	7.3	0.2	92	24.7	24.7	8.0	8.0	29.7	29.7	88.2	88.2	6.2	6.2	12.8		3		89				<0.2	1.3
						7.3	0.2	92	24.7		8.0 8.1		29.7		88.2 93.8		6.2		12.8 4.1		5		90				<0.2	1.3
					Surface	1.0	-		24.8	24.8	8.1	8.1	28.7	28.7	93.8	93.8	6.6	6.6	4.1		6		-				-	-
SR1A	Rainy	Moderate	15:44	5.6	Middle	2.8	-		-		-	-	-	-	-	-	-	0.0	-	3.8	-	6	-	-	819978	812658		
						2.8 4.6			24.8		8.1		28.9		93.4		6.6		3.6	-	5		-				-	-
					Bottom	4.6	-	-	24.8	24.8	8.1	8.1	28.9	28.9	93.5	93.5	6.6	6.6	3.5		6		-				-	-
					Surface	1.0	0.5 0.5	86 90	24.7	24.7	8.0	8.0	29.4 29.4	29.4	89.7 89.6	89.7	6.3		6.2	-	4 5		85 84				<0.2 <0.2	1.2
SR2	D.::-	Moderate	15:57	3.9	Middle	-	-	-	-		-		- 25.4		- 09.0		-	6.3	-	7.1	-	4	-		821461	814152	- <0.2	
SRZ	Rainy	Moderate	15:57	3.9	Middle	-			-	-	-	-	-	-	-	-	-		-	7.1		4	-	85	821461	814152	- 10	- 1.3
					Bottom	2.9	0.3	78 80	24.7	24.7	8.0	8.0	29.5 29.5	29.5	88.9 89.0	89.0	6.3	6.3	8.0 7.9	-	3		85 86				<0.2	1.4
					Surface	1.0	1.7	20	25.0	25.0	8.1	8.1	28.0	28.0	98.6	98.6	7.0		2.4		3		-				-	-
					Surface	1.0	1.8	21	25.0	23.0	8.1	0.1	28.0	26.0	98.5	90.0	7.0	6.8	2.4		3		-				-	-
SR3	Rainy	Moderate	14:36	9.8	Middle	4.9	1.8	19 19	24.8	24.8	8.1	8.1	29.1	29.1	93.6	93.5	6.6		5.3 5.4	5.4	4 5	4	-	-	822128	807576		-
					Bottom	8.8	1.7	14	24.6	24.6	8.1	8.1	30.3	30.3	96.0	96.0	6.7	6.7	8.4		5		-				-	-
					Dottom	8.8	1.8	15	24.6	24.0	8.1	0.1	30.3		96.0		6.7	0.7	8.4		4		-				-	-
					Surface	1.0	0.0	83 90	24.6 24.6	24.6	8.1 8.1	8.1	32.1 32.1	32.1	99.2	99.2	6.9		3.7	-	6		-				-	-
SR4A	Rainy	Calm	15:47	9.2	Middle	4.6	-	264	24.6	24.6	8.1	8.1	32.3	32.3	95.7	95.6	6.6	6.8	4.4	4.3	7	7	-		817201	807804		-
OI (II)	rtuiny	Odini	10.11	U.L	midalo	4.6 8.2	0.0	280 246	24.6 24.6	21.0	8.1 8.1	0.1	32.3 32.3	02.0	95.5 94.9	00.0	6.6		4.5 4.7		6 8		-		017201	007001	-	-
					Bottom	8.2	0.0	265	24.6	24.6	8.1	8.1	32.3	32.3	95.0	95.0	6.6	6.6	4.7		9		-				<del></del>	-
					Surface	1.0	0.0	297	24.6	24.6	8.0	8.0	31.6	31.6	95.9	96.0	6.7		4.1		8		-				-	-
						1.0	0.0	319	24.6		8.0		31.6		96.0		6.7	6.7	4.1	1	7		-				-	-
SR5A	Rainy	Calm	16:04	4.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	4.5		7	-	-	816581	810706	-	-
					Bottom	3.0	0.1	311	24.6	24.6	8.0	8.0	32.1	32.0	96.6 96.3	96.5	6.7	6.7	5.0 4.9		5		- 1				-	-
					0.1	3.0 1.0	0.1	337 310	24.6	0:-	8.0		32.0 30.4	05 :	96.3	05 -	6.7		4.9		9		-				-	+
					Surface	1.0	0.0	335	24.6	24.6	8.1	8.1	30.4	30.4	96.6	96.7	6.8	6.8	4.3		8		-				-	-
SR6A	Rainy	Calm	16:33	3.8	Middle	- :	-	-	-	-	-	-	1	-	-	-	-		-	4.6	-	8	-	-	817974	814717	<del>                                     </del>	
					Bottom	2.8	0.0	301	24.6	24.6	8.1	0.4	30.6	30.5	95.6	95.7	6.7	6.7	4.9		7		-					-
					MODIDO	2.8	0.0	324	24.6	24.6	8.1	8.1	30.5	30.5	95.8	95./	6.7	0.7	5.0		8		-				-	-
					Surface	1.0	0.1	221 236	24.6 24.6	24.6	8.1 8.1	8.1	29.6 29.6	29.6	95.6 95.6	95.6	6.7		2.7	}	5		<del></del>				-	-
SR7	Rainy	Moderate	16:45	14.6	Middle	7.3	0.1	136	24.5	24.5	8.1	8.1	30.3	30.3	91.0	91.0	6.4	6.6	3.1	3.1	5	6	-		823634	823765		
JN1	Rally	Wouteralt	10.40	14.0	Middle	7.3	0.1	144	24.5	24.0	8.1	0.1	30.3		90.9		6.4		3.1	3.1	4	U	-	-	023034	023705	<u>⊢</u> ⊒ .	
					Bottom	13.6 13.6	0.1	128 134	24.4	24.4	8.1	8.1	30.5	30.5	90.3	90.3	6.3	6.3	3.6	}	10 9		-				<del></del>	-
			i i		Surface	1.0	-	-	24.9	24.9	8.1	8.1	28.8	28.8	93.9	93.9	6.6		6.4		7		-				-	
					Carlade	1.0	-	-	24.9	27.0	8.1	J. 1	28.8	20.0	93.9	55.5	6.6	6.6	6.5		8		-				-	-
SR8	Rainy	Moderate	15:21	4.3	Middle		-		+ -	-	-	-	-	-		-	-		-	7.2	-	7	-	-	820386	811611	-	-
					Bottom	3.3	-	-	24.8	24.8	8.1	8.1	28.9	28.9	93.9	94.0	6.6	6.6	7.8		6		-				-	-
DA: Denth-Aver			1			3.3	-	-	24.8		8.1		28.9		94.0		6.6		8.0		5		- 1		l	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 boiled and underlined

Water Quality Monitoring Results on 17 April 21 during Mid-Flood Tide Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Value Value Average Value (Easting) 24.5 0.7 Surface 24.5 8.1 32.6 101.7 1.0 0.7 41 24.5 32.6 101. 7.0 4.2 8 85 <0.2 0.9 24.5 7.0 6.8 86 1.0 0.5 <0.2 C1 8 1 33.2 100.8 804229 09:30 8.6 Middle 24.5 87 815631 Rainv Calm 6.3 0.9 24.5 8.1 33.2 100.7 7.0 6.7 8 87 <0.2 1.0 0.5 7.6 0.4 37 24.4 8.1 33.4 100.0 6.9 8.0 6 89 <0.2 0.8 8.1 6.9 Bottom 24.4 33.4 100.0 6.9 7.8 0.9 99.9 7.6 0.5 24.4 8.1 33.3 6 89 < 0.2 1.0 0.3 2.1 88 < 0.2 8.1 1.2 Surface 25.3 8.1 27.4 105.3 25.3 24.9 8.1 7.4 2.1 3.3 89 1.0 0.3 351 4 <0.2 6 1.2 6.1 0.4 8.1 6.8 90 28.2 97.0 C2 Cloudy Moderate 10:30 122 Middle 24.9 8.1 28.2 97.0 91 825697 806942 1.3 28.2 97.0 6.8 3.3 5 91 <0.2 6.1 0.4 29 24.9 8.1 11.2 0.4 346 24.8 8.1 97.0 6.8 5.7 9 93 <0.2 1.3 28.5 8.1 97.1 Bottom 24.8 28.5 6.8 11.2 0.4 348 24.8 8.1 28.5 97.1 6.8 5.6 9 92 <0.2 1.3 0.3 241 24.7 2.8 4 <0.2 1.6 6.8 Surface 24.7 8.1 29.0 95.8 1.0 0.3 253 24.7 8.1 29.0 95.8 6.7 2.7 5 86 <0.2 1.5 2.8 4 1.4 5.6 8.0 91 91 <0.2 0.4 252 24.5 30.3 89.0 6.2 C3 08:30 817788 Rainv Moderate Middle 24.5 8.0 30.3 89.0 90 822115 1.4 5.6 0.4 24.5 10.1 0.4 266 24.4 8.0 85.9 6.0 14.7 3 92 <0.2 1.4 Bottom 24.4 8.0 31.1 86.0 6.0 10.1 0.4 269 24.4 8.0 31.1 86.0 6.0 14.8 4 92 1.3 1.0 0.1 24.6 32.2 5.9 <0.2 1.2 Surface 24.6 8.1 32.2 98.8 1.0 24.6 8.1 32.2 98.9 6.9 5.4 6 87 <0.2 1.2 0.1 807142 IM1 Rainv Calm 09:49 5.6 Middle 817935 46 0.1 20 24.6 8.0 32.3 98.2 6.8 6.8 6 89 < 0.2 1.2 Bottom 24.6 8.0 32.3 98.2 6.8 4.6 0.1 21 24.6 8.0 32.3 98.1 6.8 6.7 7 89 <0.2 1.1 1.0 0.3 24.5 8.1 31.7 100.2 7.0 5.5 6 85 < 0.2 1.2 Surface 8.1 31.8 100.2 1.0 0.3 10 24.5 8.1 31.8 100.1 7.0 5.1 7 85 <0.2 1.2 3.7 0.2 350 24.6 8.1 32.3 99.4 6.9 8.2 6 88 <0.2 1.3 IM2 Calm 09:57 7.4 Middle 8.1 32.3 99.3 818186 806159 1.2 <0.2 3.7 0.2 322 24.6 8.1 99.1 6.9 8.1 5 88 1.3 6.4 24.6 5 1.1 0.2 344 8 1 32 3 99.1 6.9 8.5 90 <0.2 8.1 32.3 99.2 6.9 99.2 1.2 6.4 0.2 316 8 1 32.3 6.9 8.4 6 ٩n <0.2 24.6 1.0 0.4 344 24.5 8.1 32.0 99.0 6.9 6.7 4 89 < 0.2 1.2 Surface 8.1 32.1 98.9 6.2 7.8 7.8 1.2 1.0 98.8 87 0.4 316 24.6 8.1 32.2 6.9 4 <0.2 4 1.2 1.2 1.2 3.8 0.3 6.8 88 <0.2 336 24.6 8.1 32.3 98.4 IM3 Rainy Calm 10:04 7.6 Middle 24.6 8.1 32.3 98.4 89 818774 805614 5 5 5 98.4 6.8 89 90 3.8 0.3 345 24.6 8.1 <0.2 8.5 6.6 0.3 324 24.6 8.1 32.4 98.3 6.8 Rottom 24.6 8.1 32.4 98.4 6.8 6.6 0.3 340 24.6 8.1 32.4 98.4 6.8 8.6 91 <0.2 1.3 1.0 0.6 329 24.6 7.4 1.3 8.1 32.1 99.1 6.9 5 85 <0.2 Surface 24.6 8.1 32.1 99.1 0.6 338 24.6 6.9 7.0 85 <0.2 1.2 4.3 346 8.8 88 <0.2 1.2 6.8 6 0.5 24.6 8.1 32.2 98.6 IM4 Calm 10:13 8.6 Middle 24.6 8.1 32.2 98.6 819730 804589 Rainv 4.3 0.5 318 24.6 8.1 98.6 6.8 8.6 88 <0.2 5 0.4 24.5 9.8 6 91 1.2 98.6 6.8 8.1 Bottom 24.5 32.3 98.5 6.8 7.6 0.4 328 24.5 8.1 98.3 6.8 9.9 5 <0.2 1.1 1.2 1.0 0.8 352 24.6 8.1 32.1 98.6 5.1 85 <0.2 6.8 3 Surface 24.6 8.1 32.1 98.5 1.0 324 24.6 8.1 6.8 5.1 4 85 <0.2 0.9 4.0 0.7 358 24.6 6.3 3 89 <0.2 1.4 8.1 6.8 IM5 10:19 8.0 Middle 24.6 8.1 32.2 98.1 820714 804881 Rainy Calm 4.0 0.7 24.6 6.5 <0.2 329 7.1 7.4 1.4 0.6 24.6 8.1 8.1 32.2 98.0 6.8 3 91 <0.2 24.6 8.1 32.2 98.0 6.8 Bottom 7.0 0.6 24.6 32.2 90 < 0.2 1.0 0.1 211 24.8 8.1 30.1 2.2 5 85 <0.2 1.3 Surface 8.1 30.2 101.5 1.0 0.1 213 24.8 8 1 30.2 7 1 2.3 5 86 <0.2 1.4 3.9 0.2 24.7 8.1 31.1 2.6 4 87 <0.2 Rainy Calm 10:27 Middle 8.1 31.0 100.1 821073 805834 <0.2 3.9 0.2 62 24.7 8.1 30.9 99.7 7.0 2.7 5 87 3.1 1.5 6.8 0.2 50 24.6 8.1 31.8 6.9 5 90 <0.2 31.8 98.7 6.8 0.2 24.6 8 1 31.8 4 90 1.3 1.0 0.0 0 24.9 8.1 29.1 2.7 5 87 <0.2 Surface 103.3 72 3.0 7.3 1.0 0.0 24 9 8 1 29 1 103 4 86 <0.2 5 134 1.5 1.5 4.5 0.2 24.7 8.1 88 <0.2 30.5 98.4 6.9 IM7 Calm 10:35 9.0 Middle 24.7 8.1 98.1 821348 806858 Rainy 89 4.5 0.2 146 24.7 8.1 30.5 97.8 6.8 7.2 4 8.0 0.2 135 24.5 8.1 31.9 96.1 6.7 8.2 6 90 <0.2 1.5 Bottom 24.5 8.1 31.9 96.2 6.7 8.0 0.3 142 24.5 8.1 31.9 96.3 8.1 <0.2 1.5 1.0 2.2 182 25.0 8.1 27.6 102.0 7.2 7.2 2.7 13 86 < 0.2 1.9 Surface 25.0 8.1 27.6 101.9 27.6 1.8 8.1 14 1.0 2.4 191 25.0 101. 2.8 87 < 0.2 4.1 2.5 8.1 28.1 6.8 3.4 11 89 90 <0.2 1.4 179 24.9 96.9 8.1 28.1 96.9 821812 808154 IM8 Cloudy Moderate 10:05 8.2 Middle 24.9 12 90 1.7 96.9 1.3 6.8 3.4 12 4.1 185 24.9 8.1 28.1 2.6 1.8 7.2 2.6 174 24.8 8.1 28.9 93.9 3.4 12 92 <0.2 6.6 24.8 8.0 28.9 93.8 6.6 Rottom

DA: Depth-Average

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

	Weather	Sea	Sampling	Water		-	Current	ide	Water Te	emperature (°C)		pН	Salin	ity (ppt)			Dissolved	Turbidity	(LITIA)	Suspende				Coordinate	Coordinate	Chromium	Nickel (µg/L
Monitoring Station					Sampling De	pth (m)	Speed	Current Direction	-		1 1		+	· · · · ·			Oxygen	<u> </u>		(mg		(ppr		HK Grid	HK Grid	(µg/L)	+
Cidion	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average		Average	Value		lue DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0	2.4	69 71	24.9 24.9	24.9	8.1 8.1	8.1	28.1	28.1	96.6 96.5		.8	5.0		9 10		86 85				<0.2	1.6
IM9	Cloudy	Moderate	09:59	7.7	Middle	3.9	2.5	69	24.9	24.9	8.1	8.1	28.2	28.2	95.7	oe o 6	.8	7.0	7.0	10	10	89	89	822082	808807	<0.2	1.5
	Oloddy	moderate	00.00	•••	Mildulo	3.9	2.5	71	24.9	21.0	8.1	0	28.2	EU.E	95.8	ь		6.6		10		89	00	OLLOGE	000001	<0.2	1.6
					Bottom	6.7	2.5	71 72	24.9	24.9	8.1 8.1	8.1	28.3	28.3	95.3 95.3		6.7	8.9 9.5		10 11		92 92				<0.2	1.6
					Surface	1.0	2.0	24	24.9	24.9	8.1	8.1	27.9	27.9	104.0	104.0	.3	2.5		4		85				<0.2	1.5
					Guilace	1.0	2.0	24	24.9	24.3	8.1	0.1	27.9	27.3	103.9	/	.3 7.1	2.5		5		83				<0.2	1.4
IM10	Cloudy	Moderate	09:52	8.5	Middle	4.3	2.3	28 30	24.9 24.9	24.9	8.1 8.1	8.1	28.4	28.4	97.1 97.0	97.1	.8	4.0	4.7	5 6	5	84 85	88	822377	809811	<0.2 <0.2	1.4
					Bottom	7.5	2.2	34	24.9	24.9	8.0	8.0	28.8	28.8	91.9	01.0	.5 6.5	7.4		5		95				<0.2	1.3
						7.5 1.0	2.3	36 292	24.9 24.9		8.0 8.1		28.8		91.8 96.9	6	.5	7.6		6 7		95 85				<0.2	1.4
					Surface	1.0	2.8	318	24.9	24.9	8.1	8.1	28.6	28.6	97.2	97.1	0	3.5		8		84				<0.2	2.0
IM11	Cloudy	Moderate	09:42	8.3	Middle	4.2	2.6	294	24.8	24.8	8.0	8.0	29.1	29.1	91.0	01.0	.4	11.2	9.4	7	6	89	88	822033	811446	<0.2	1.9
	Oloddy	moderate	00.12	0.0	Middle	7.3	2.8	318	24.8		8.0		29.1		91.0	ь	.4	11.0 13.6		6		89 92	00	OLLOGO	011110	<0.2	1.9
					Bottom	7.3	2.8	291 304	24.7	24.7	8.0	8.0	29.4	29.4	89.3 89.3		.3 6.3	13.5		5		91				<0.2	1.4
					Surface	1.0	2.1	245	24.7	24.7	8.1	8.1	29.4	29.4	92.1	02.1	.5	4.5		4		87				<0.2	1.3
					Guildoo	1.0 4.6	2.2	267 244	24.7	2	8.1	0.1	29.4	20.1	92.1	6	.5 6.5	4.6		5		87				<0.2	1.4
IM12	Cloudy	Moderate	09:35	9.2	Middle	4.6	2.2	244	24.7	24.7	8.1 8.1	8.1	29.5 29.5	29.5	90.9		.4	6.5	7.0	3	4	91 92	91	821466	812028	<0.2 <0.2	1.4 1.5
					Bottom	8.2	2.2	242	24.7	24.7	8.1	8.1	29.5	29.5	91.0	01.1	.4	10.1		4		94				<0.2	1.8
						8.2 1.0	2.3	243	24.7		8.1 8.1		29.5		91.1	6	.4	10.0		3 6		94				<0.2	1.9
					Surface	1.0	-	-	24.9	24.9	8.1	8.1	28.2	28.2	99.5		0	2.8		5		-				<del></del>	-
SR1A	Rainv	Moderate	09:04	5.1	Middle	2.6	-	-	-		-		-	-	-		7.0	-	3.5	-	6	-		819976	812660	<u> </u>	
******	,			***		2.6 4.1	-	-	24.7		8.1		28.8		92.5		.5	4.2		- 6		-				-	-
					Bottom	4.1	-	-	24.7	24.7	8.1	8.1	28.8	28.8	92.5		.5 6.5	4.2		7		-				<del></del>	-
					Surface	1.0	0.2	89	24.8	24.8	8.1	8.1	28.7	28.7	95.2		.7	3.0		3		87				<0.2	1.5
						1.0	0.2	95	24.8		8.1		28.7		95.2	6	6.7	3.0		4		87				<0.2	1.5
SR2	Rainy	Moderate	08:50	4.7	Middle	-	-	-	-	-		-	H	-	-				4.7	-	3	-	88	821448	814145	- <0.2	1.4
					Bottom	3.7	0.1	85	24.7	24.7	8.0	8.0	29.5	29.5	90.2	90.2	.3 6.3	6.3		2		90				<0.2	1.3
						3.7 1.0	0.1 2.5	93 234	24.7 25.0		8.0 8.1		29.5 27.5		90.2	7	.3	6.4 2.4		3 11		89				<0.2	1.4
					Surface	1.0	2.6	246	25.0	25.0	8.1	8.1	27.5	27.5	103.8		2	2.4		10		-				-	-
SR3	Cloudy	Moderate	10:11	9.7	Middle	4.9	2.5	234	25.0	25.0	8.1	8.1	27.9	27.9	99.5		.0 7.2	2.6	2.7	9	10	-		822125	807552	<u> </u>	
	,					4.9 8.7	2.7	244 233	25.0 24.9		8.1 8.1		27.9 28.3		99.5 97.6	/	.0	2.6		10 9		-				-	
					Bottom	8.7	2.6	237	24.9	24.9	8.1	8.1	28.3	28.3	97.9		.8 6.9	2.9		9		-				-	-
					Surface	1.0	0.1	238	24.6	24.6	8.1	8.1	31.5	31.6	96.6		.7	2.8		5		-				-	-
						1.0 4.7	0.1	261 61	24.6 24.6		8.1 8.1		31.6 32.1		96.4 96.2		.7 .7 6.7	2.9		6 5		-				<del></del>	-
SR4A	Rainy	Calm	09:05	9.4	Middle	4.7	0.1	66	24.6	24.6	8.1	8.1	32.1	32.1	96.2		.7	2.9	3.4	6	5	-	-	817186	807793	-	-
					Bottom	8.4 8.4	0.1	74 77	24.6 24.6	24.6	8.0	8.0	32.2	32.2	93.2 93.5	93.4	.5 6.5	4.4		5 4		-				-	-
						1.0	0.1	293	24.6		8.0		31.4		94.6		.6	3.5		6		-					-
					Surface	1.0	0.1	314	24.6	24.6	8.0	8.0	31.4	31.4	94.6	94.0	.6	3.5		5		-				-	-
SR5A	Rainy	Calm	08:47	3.4	Middle	-	-	-		-	-	-	-	-	-		-	-	3.6	-	6	-	-	816581	810699		
					D	2.4	0.1	294	24.6	04.0	8.0		31.4		94.4	-	6	3.6		7		-				<del></del>	-
					Bottom	2.4	0.1	316	24.6	24.6	8.0	8.0	31.4	31.4	94.3	94.4	.6	3.8		6		-				-	-
					Surface	1.0	0.1	291 303	24.7	24.7	8.0	8.0	30.2	30.2	96.7 96.5		.8	2.6		6 7		-				-	-
						1.0	-	-	24.7		- 0.0		- 30.3		90.5		6.8	- 2.1		-	_	-				<del></del>	-
SR6A	Rainy	Calm	08:19	4.0	Middle	-	-	-	-		-		-	-	-		-	-	2.9	-	/	-	-	817950	814743		-
					Bottom	3.0	0.1	338 311	24.6 24.6	24.6	8.0	8.0	30.7	30.7	95.3 94.4	94.9		3.1		6		-				-	-
						1.0	0.0	116	24.5		8.0		29.9		91.7		.5	2.8		7		-					-
ı					Surface	1.0	0.0	125	24.5	24.5	8.0	8.0	29.9	29.9	91.6	91.7	.4 6.4	2.8		6		-				-	-
SR7	Rainy	Moderate	07:58	14.5	Middle	7.3 7.3	0.1	184 192	24.5 24.5	24.5	8.0	8.0	30.3	30.3	89.7 89.7	89.7	.3	3.1	3.3	5	5	-	-	823615	823727	-	-
					Datte-	13.5	0.1	76	24.5	24.4	8.0	0.0	30.9	20.0	87.3		1	3.9		3		-				<del>-</del>	-
					Bottom	13.5	0.1	80	24.4	24.4	8.0	8.0	30.9	30.9	87.3	67.3	.1	3.9		3							-
	. 7		ı T		Surface	1.0	-	-	24.9	24.9	8.1	8.1	28.1	28.1	98.8		.0	3.4		3		-	Ī	_			-
					Odilace	1.0																					
CDO	Claust	Madagati	00.07	5.0		1.0	-	-	24.9		8.1		28.1		98.8		7.0	3.4	4.0	4	-	-		000005	044600	-	
SR8	Cloudy	Moderate	09:27	5.2	Middle	1.0 - - 4.2	-	-	24.9	-	8.1 - - 8.1	-	28.1	-	98.8	-	.0 7.0 	3.4 - - 4.9	4.2	- - 6	5	-	-	820385	811623	-	-

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 during Mid-Ebb Tide 20 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Depth (m) Value Value (Easting) 23.7 0.3 8.1 1.0 217 23.7 2.7 0.6 4.2 0.2 200 23.5 8.1 33.8 98.4 6.9 3.4 8 92 <0.2 98.4 804227 C1 Fine Calm 18:09 8.1 33.8 815619 4.2 0.2 212 23.5 8.1 33.8 98.4 6.9 3.4 8 92 <0.2 0.7 7.4 0.2 185 23.5 8.1 34.0 98.5 6.9 3.8 10 93 <0.2 0.6 Bottom 8.1 34.0 98.6 6.9 7.4 0.2 195 23.5 8.1 34.0 98.6 6.9 3.8 9 93 <0.2 0.7 1.0 0.3 180 24.1 8.1 28.0 94.4 6.8 0.3 85 < 0.2 1.1 Surface 8.1 28.0 94.2 <0.2 1.0 0.3 181 24.1 8.1 28.1 94.0 6.7 0.3 6 86 1.2 5.8 0.9 164 24.2 8.1 28.4 91.9 6.6 2.2 6 5 88 89 <0.2 0.9 C2 Fine Moderate 16:57 11.5 Middle 8.0 28.3 92.0 825665 806927 5.8 176 1.0 8.0 28.3 92.0 6.6 10.5 8.0 3.1 5 6 0.9 0.3 199 24.2 30.1 84.3 6.0 90 < 0.2 Bottom 24.2 8.0 30.1 84.5 6.0 3.1 10.5 0.3 218 24.2 8.0 30.1 84.7 6.0 90 <0.2 1.0 0.4 23.9 85 8.1 6 88.0 6.2 < 0.2 Surface 8.1 31.7 88.0 0.9 1.0 0.9 1.0 87.9 0.8 6 85 <0.2 0.4 46 23.9 8.1 31.7 6.2 6.0 5.8 2.9 3.0 5 6 88 89 <0.2 23.8 6.3 8.0 82.0 81.9 C3 Fine Moderate 18:54 12.6 Middle 8.0 32.1 82.0 88 822122 817795 1.0 0.2 8.0 <0.2 11.6 0.1 60 23.7 8.0 32.1 83.6 5.9 4.4 4 90 23.7 8.0 5.9 Bottom 32.1 83.9 11.6 0.1 63 23.7 8.0 32.1 84.1 5.9 4.5 5 90 <0.2 1.0 0.1 181 23.9 11 8.1 33.8 <0.2 0.7 100.5 7.0 Surface 23.9 8.1 33.8 100.4 1.0 0.1 194 23.9 8.1 33.8 100.2 7.0 3.7 12 88 <0.2 0.7 7.0 807143 IM1 Fine Calm 17:48 5.0 Middle 89 817968 4.0 0.1 217 23.9 8.1 7.0 7.0 4.6 8 90 <0.2 0.8 Bottom 23.9 8.1 33.9 100.5 7.0 4.0 0.1 221 23.9 8.1 33.9 4.5 0.7 0.2 175 23.8 8.1 33.6 4.1 10 87 <0.2 0.8 Surface 23.8 8.1 33.6 102.5 1.0 0.2 181 23.8 4.2 9 87 <0.2 0.6 0.7 0.7 3.5 0.2 121 23.8 4.7 9 91 <0.2 <0.2 <0.2 6.9 806152 Fine Calm 17:40 Middle 8.1 33.6 99.4 818168 23.8 4.8 10 3.5 0.2 130 92 92 6.0 0.2 143 23.7 8.1 33.9 98.2 6.9 5.7 9 Bottom 23.7 8.1 33.9 98.3 6.9 6.0 0.2 150 23.7 8.1 33.0 98.3 6.9 5.8 8 93 <0.2 0.7 0.8 1.0 0.2 216 23.7 8.1 33.3 102.8 2.9 10 89 <0.2 7.2 Surface 8.1 33.3 102.8 1.0 0.2 234 23.7 8.1 7.2 2.9 11 89 <0.2 0.6 3.6 0.1 198 23.7 8.1 3.5 8 92 <0.2 IM3 Moderate 17:32 7.2 Middle 100.1 818784 805603 92 93 <0.2 3.6 0.1 208 23.7 3.6 9 125 23.7 49 9 0.7 6.2 0.3 8.1 33.8 99.6 6.9 7.1 100.4 4.6 0.3 131 23.7 8.1 33.8 101 8 <0.2 6.2 93 1.0 0.4 235 23.7 8.1 33.3 7.2 7.2 3.5 10 88 <0.2 0.6 Surface 23.7 8.1 33.3 102.4 1.0 23.7 8 1 102 3.5 89 <0.2 0.4 243 33.3 q 9 9 7 7 4.2 3.9 4.0 91 91 0.6 0.2 161 23.7 8.1 33.4 99.6 7.0 <0.2 IM4 Moderate 17:22 Middle 23.7 8.1 33.4 99.5 819704 804621 4.2 174 23.7 8.1 33.5 99.4 0.2 0.6 7.4 0.2 142 143 23.7 8.1 8.1 33.6 99.7 99.7 7.0 4.1 4.1 92 93 <0.2 Rottom 23.7 8.1 33.6 99.7 7.0 0.2 23.7 < 0.2 0.7 1.0 0.3 4.2 91 212 23.7 8.1 33.3 101.2 7.1 5 <0.2 Surface 23.7 8.1 33.3 101.2 1.0 8.1 <0.2 0.7 0.3 218 23.7 101. 4.2 6 91 4.0 174 23.7 7.0 4.4 6 91 <0.2 0.6 0.2 8.1 33.3 100.3 IM5 17:14 8.1 33.3 100.3 820735 804862 Fine Moderate Middle 23.7 92 4.0 190 23.7 8.1 4.5 5 91 < 0.2 0.6 0.2 33.3 5.0 4.8 0.6 7.0 <0.2 7.0 0.2 166 23.7 8.1 92 93 8.1 33.3 100.1 99.9 100.0 7.0 5 Bottom 23.7 33.3 0.2 175 23.7 6 <0.2 0.5 0.6 0.6 0.6 87 1.0 0.2 289 24.0 8.1 30.9 7.0 7.0 2.5 5 <0.2 99.1 Surface 24.0 8.1 30.9 99.2 1.0 0.2 301 24.0 8.1 30.9 99.3 2.6 6 88 <0.2 3.8 0.1 243 23.9 31.8 6.9 4.2 5 <0.2 98.2 17:06 7.6 Middle 23.9 8.1 31.6 98.1 821064 805815 IM6 Fine Moderate 3.8 0.1 250 23.9 8.1 31.5 97.9 6.9 4.1 5 90 <0.2 0.6 6.6 0.2 190 23.7 96.9 6.8 5.3 4 91 <0.2 Bottom 23.7 8.0 33.1 97.2 6.8 6.6 194 23.7 8.0 97.5 6.8 5.2 0.2 1.0 0.1 265 24.1 8.0 30.3 96.7 3.3 87 <0.2 0.6 Surface 24.1 8.0 30.3 96.7 1.0 0.1 286 24.1 8.0 30.3 96.6 6.8 3.2 8 88 <0.2 0.6 0.6 4.5 0.0 67 23.8 6.5 3.6 8 90 <0.2 32.4 92.8 IM7 Fine Moderate 16:59 Middle 8.0 32.5 92.6 821366 806836 <0.2 4.5 0.0 69 23.8 8.0 32.6 6.5 3.8 7 90 8.0 0.1 132 23.7 8.0 33.2 91.6 6.4 5.4 8 92 <0.2 0.6 8.0 33.2 91.9 6.5 8.0 0.1 138 23.7 8.0 33.2 92.2 6.5 5.9 8 92 <0.2 0.6 1.0 0.1 160 24 0 8.1 29.8 90.4 6.4 2.0 87 < 0.2 0.9 Surface 8.1 29.9 90.3 1.0 0.1 168 24.0 8.1 29.9 90.2 6.4 1.8 4 87 <0.2 0.9 3.8 0.2 121 23.9 8.1 30.4 89.9 6.4 2.2 5 6 89 89 <0.2 1.0 1.1 IM8 Fine Moderate 17:23 7.6 Middle 8.1 30.5 90.0 89 821835 808134 3.8 0.2 124 23.9 8.1 30.5 90.0 6.4 < 0.2 6.6 0.2 78 23.7 8.1 31.3 90.8 6.4 2.5 6 89 <0.2 0.9 8.1 Bottom 23.7 31.3 90.9 6.4

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

Water Quality Monitoring Results on during Mid-Ebb Tide 20 April 21 DO Saturation Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Average Value Average Value (Northing) (Easting) 23.9 0.2 Surface 8.1 29.9 91.0 117 23.9 91.0 1.9 0.9 1.0 2.3 3.8 0.2 89 23.8 8.1 30.3 90.8 6.5 7 89 <0.2 IM9 Fine Moderate 17:28 7.5 23.8 8.1 30.3 90.8 822085 808806 0.9 3.8 0.2 97 23.8 8.1 30.4 90.7 6.4 2.5 6 89 <0.2 1.0 6.5 0.2 76 23.7 8.1 30.8 91.2 6.5 4.8 6 91 <0.2 0.9 Bottom 8.1 30.8 91.3 6.5 6.5 0.3 80 23.7 8.1 30.8 91.4 6.5 4.5 5 91 <0.2 0.9 1.0 0.5 100 23.9 8.0 29.8 92.7 6.6 1.5 86 < 0.2 0.9 Surface 8.0 29.8 92.6 1.0 0.5 109 23.9 8.0 29.8 92.5 6.6 1.6 6 87 <0.2 0.9 3.9 0.5 117 23.8 8.0 30.2 85.4 6.1 2.1 6 7 88 88 <0.2 0.9 IM10 Moderate 17:35 7.7 Middle 8.0 30.2 85.2 822386 809780 3.9 23.9 8.0 85.0 < 0.2 0.6 122 30.2 6.0 6.7 0.4 8.0 7 0.8 98 23.9 30.4 84.6 6.0 2.9 91 < 0.2 Bottom 8.0 30.4 84.8 6.0 0.8 6.7 0.4 ٩R 23.9 8.0 30.4 84 9 6.0 29 8 91 **-**0 2 1.0 0.8 23.9 8.1 1.3 8 92.8 6.6 0.9 Surface 8.1 30.1 92.8 0.9 1.0 92.7 1.3 86 < 0.2 0.8 112 23.9 8.1 30.1 6.6 8 66 0.9 0.9 0.9 1.3 <u>6</u> 7 87 87 119 6.5 <0.2 4.1 23.8 8.0 30.2 91.5 IM11 Fine Moderate 17:45 8.1 Middle 8.0 30.2 91.5 88 822063 811463 0.9 4.1 23.8 91.4 0.6 126 8.0 30.2 5 7.1 0.3 70 23.9 8.0 31.0 87.3 6.2 2.8 90 <0.2 Bottom 23.9 8.0 30.9 87.5 6.2 7.1 0.3 76 23.9 8.0 30.9 87.6 6.2 2.8 6 91 <0.2 1.0 0.6 23.9 1.6 8.0 30.4 4 <0.2 6.3 Surface 23.9 8.0 88.9 30.4 1.0 0.6 118 23.9 8.0 30.4 88.8 6.3 1.6 4 86 <0.2 1.0 4.7 0.5 102 23.9 87.5 1.9 5 89 <0.2 0.9 8.0 30.6 6.2 812037 IM12 Fine Moderate 17:52 9.4 Middle 23.9 8.0 30.6 87.5 821464 <0.2 4.7 8.0 2.0 6 90 0.5 104 23.9 30.6 8.4 0.3 23.9 8.0 88.5 3.3 5 91 <0.2 0.9 6.3 23.9 8.0 88.6 6.3 Rottom 30.9 8.4 0.3 88 23.9 8.0 30.8 88.7 6.3 3.1 0.9 23.7 8.1 30.0 89.4 6.4 2.4 6 Surface 23.7 8.1 89.5 30.0 1.0 23.7 89.5 6.4 2.4 7 2.6 Fine Moderate 18:19 Middle 819975 812657 2.6 4.2 23.7 8.1 30.1 91.3 6.5 4.0 6 Bottom 23.7 8.1 30.1 91.6 6.6 4.2 23.6 8 1 30.1 91.8 6.6 41 5 1.0 0.5 23.9 8.0 30.9 89.3 6.3 2.1 6 84 <0.2 0.9 Surface 23.9 8.0 30.9 89.3 1.0 0.5 77 23.9 8.0 30.9 89.2 6.3 2.1 7 85 < 0.2 0.9 SR2 Moderate 18:33 4.6 Middle 821479 814157 3.6 89 0.3 81 23.9 8 1 90.0 6.4 2.1 6 <0.2 0.9 90.2 Bottom 2.0 82 8.1 5 nα 3.6 0.4 23.9 31.0 89 r0 2 1.0 0.2 204 24.0 8.1 29.1 95.5 95.2 6.8 14 7 Surface 8.1 29.2 95.4 8 1 1 4 1.0 0.2 215 24 0 29.3 5.0 195 2.5 2.8 6 5 0.3 24.0 8.1 30.0 89.9 6.4 SR3 Moderate 17:19 Middle 8.1 30.0 90.0 822147 807590 6.4 5.0 198 8.1 30.1 90.0 0.3 23.9 8.9 0.1 180 23.7 8.1 8.1 31.3 90.1 6.4 4.1 4.2 4 Bottom 23.7 8.1 31.3 90.2 6.4 8.9 0.1 196 23.7 1.0 0.2 67 23.9 8.1 33.7 104.3 7.3 3.3 5 Surface 23.9 8.1 33.7 104.3 68 33.7 7.3 1.0 0.2 23.9 8.1 104. 3.4 9 4.6 54 4.6 7 0.1 23.9 8.1 7.0 . 33.8 SR4A 18:30 8.1 33.8 101.2 817212 807824 Fine Calm 9.2 Middle 23.8 4.6 8.1 4.5 5 0.1 58 23.8 4.7 8.2 0.1 8.1 7.0 7.1 23.8 8.1 33.8 101.3 7 1 6 23.8 33.8 Rottom 0.1 23.8 4.9 1.0 0.0 90 23.6 8.0 32.3 7.1 3.0 6 100.6 23.6 8.0 32.3 100.5 Surface 1.0 0.0 98 8.0 7.1 3.1 5 23.6 SR5A 18:47 3.6 Middle 816591 810705 Fine Calm 2.6 0.1 115 23.6 32.5 99.7 7.0 4.6 Bottom 23.6 8.0 32.4 99.6 7.0 0.1 23.6 8.0 99.5 7.0 4.8 2.6 122 1.0 0.0 89 23.9 8.0 31.8 95.1 3.9 Surface 23.9 8.0 31.8 95.0 1.0 0.0 89 23.9 8.0 31.8 94.9 6.7 3.7 5 SR6A Fine Calm 19:16 4.0 Middle 817948 814731 3.0 0.1 77 23.8 8.0 94.5 6.7 5.5 6 Bottom 8.0 31.8 94.5 6.7 3.0 0.1 81 23.8 8.0 31.8 94.5 5.4 6 1.0 0.6 78 23.7 8.1 32.2 83.5 5.9 1.0 8.1 83.5 Surface 32.2 1.0 0.6 81 23.7 8.1 32.2 83.5 5.9 1.0 6 10.2 0.3 43 23.7 8.1 32.3 83.4 5.9 1.4 7 SR7 Moderate 19:26 20.4 Middle 8.1 32.3 83.4 823649 823734 Fine 6 10.2 0.3 45 23.7 8.1 32.3 83.4 5.9 1.4 19.4 0.4 36 23.7 8.0 32.4 83.6 5.9 1.9 8 Bottom 8.0 32.4 83.7 19.4 0.4 23.7 8.0 32.4 83.7 5.9 1.7 7 1.0 23.9 8.0 30.3 89.2 6.3 3.3 4 Surface 23.9 8.0 30.3 89.3 1.0 23.9 8.0 30.3 89.3 6.3 3.3 4 6.3 . . 820381 811643 SR8 Fine Moderate 18:00 5.2 Middle -4.2 23.9 3.5 3 8.0 30.4 90.2 6.4 23.9 8.0 30.4 90.3 6.4

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

Water Quality Monitoring Results on during Mid-Flood Tide 20 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Depth (m) Value Value (Easting) 23.8 0.7 Surface 23.8 8.1 32.9 101.7 1.0 0.8 58 23.8 32.9 101. 7.1 2.8 86 <0.2 0.6 23.5 6.9 3.1 5 0.5 0.8 89 <0.2 C1 8 1 33.7 97.9 804225 05:29 8.6 Middle 23.5 88 815630 Fine Calm 0.6 33.7 97.7 6.8 3.2 4 89 <0.2 0.6 0.9 23.5 8.1 7.6 0.6 54 23.6 8.1 33.9 97.6 6.8 3.6 3.5 5 90 <0.2 0.6 8.1 6.9 Bottom 23.6 33.9 98.0 6.9 0.5 98.3 7.6 0.6 56 23.6 8.1 4 90 < 0.2 1.0 0.5 24.1 86 0.3 < 0.2 8.1 Surface 24.1 8.1 28.2 93.1 1.2 6.7 24.1 8.1 0.3 1.0 87 1.0 0.5 335 28.2 <0.2 322 24.2 6 5.6 0.4 8.0 6.5 91 28.9 91.7 C2 Fine Moderate 07:01 11.1 Middle 24.2 8.0 29.0 91.5 90 825683 806926 1.2 349 29.1 91.3 6.5 1.1 5 91 <0.2 5.6 0.4 24.2 8.0 10.1 0.3 317 24.2 8.0 84.5 6.0 1.9 7 93 <0.2 1.1 29.9 8.0 84.7 6.0 Bottom 24.2 29.9 10.1 0.3 323 24.2 8.0 30.0 84.8 6.0 1.9 7 93 <0.2 1.0 0.5 23.8 8.0 0.5 <0.2 0.8 Surface 23.8 8.0 31.3 87.3 1.0 0.5 314 23.8 8.0 31.3 87.3 6.2 0.5 3 86 <0.2 0.7 0.8 0.8 5.9 0.5 278 3 89 89 <0.2 23.8 8.0 31.5 86.1 6.1 C3 817795 Fine Moderate 05:02 11.8 Middle 23.8 8.0 31.5 86.1 89 822096 0.8 0.6 278 23.8 0.9 10.8 0.5 288 23.8 8.0 5.9 4.4 5 91 <0.2 Bottom 23.8 8.0 31.9 84.2 5.9 10.8 0.5 315 23.8 8.0 31.9 84 3 5.9 4.8 5 1.0 0.1 23.8 33.6 4.4 85 <0.2 0.6 Surface 23.8 8.1 33.6 98.7 1.0 0.1 23.8 8.1 33.6 98.7 6.9 4.4 4 85 <0.2 0.6 25 807135 IM1 Fine Moderate 05:51 5.2 Middle 817940 4.2 0.2 38 23.8 8.0 33.7 95.3 6.6 6.6 5 89 < 0.2 0.6 Bottom 23.8 8.0 33.7 95.4 6.7 4.2 0.2 40 23.8 8.0 33.7 95.4 6.7 6.5 5 86 <0.2 0.7 1.0 0.3 24 23.7 8.1 7.1 2.6 86 < 0.2 0.6 Surface 8.1 33.3 101.3 1.0 0.3 24 23.7 8.1 33.3 101.3 7.1 2.6 3 85 <0.2 0.6 0.7 0.7 0.7 0.7 3.6 3.6 0.5 39 23.7 8.1 7.0 4 89 <0.2 IM2 Moderate 05:58 7.2 Middle 8.1 33.3 100.5 89 818179 806142 <0.2 3.6 0.5 23.7 8.1 7.0 4 90 7.8 6 5 6.2 0.2 11 23.8 8 1 33.0 97.2 6.8 91 <0.2 8.0 33.9 97.4 6.8 6.2 97.6 7.2 0.2 11 8.0 6.8 91 <0.2 23.8 33.9 1.0 0.3 23.7 8.1 33.2 7 1 3.6 87 < 0.2 0.7 Surface 8.1 33.2 100.9 3.9 5.1 5.2 7.2 1.0 100. 7.1 89 0.3 23.7 8.1 33.2 6 <0.2 7 0.7 0.6 0.8 3.7 23.7 7.0 90 <0.2 0.3 12 8.1 33.3 99.6 IM3 Fine Moderate 06:04 7.4 Middle 23.7 8.1 33.3 99.5 89 818796 805594 6 6 7 3.7 7.0 91 91 <0.2 0.3 13 23.7 8.1 99.3 6.4 0.3 23.8 8.1 33.7 97.5 6.8 Rottom 23.8 8.1 33.7 97.9 6.8 6.4 0.3 8.1 33.7 98.2 6.8 7.1 87 <0.2 0.7 23.8 1.0 0.6 0.6 3.2 322 23.7 8.1 33.4 103.7 7.2 6 88 <0.2 Surface 23.7 8.1 33.4 103.7 0.6 341 23.7 3.2 5 90 <0.2 4.3 3.6 <0.2 0.7 335 23.7 5 91 0.5 8.1 33.4 7.1 IM4 Fine Moderate 06:13 8.6 Middle 23.7 8.1 33.4 101.2 819713 804614 4.3 0.5 359 23.7 8.1 3.6 4.3 91 <0.2 6 0.5 354 23.8 6 0.6 8.1 6.8 8.1 97.3 Bottom 23.8 33.5 6.8 7.6 0.5 356 23.8 33.5 4.3 86 <0.2 0.8 1.0 0.8 342 23.7 8.1 33.3 4.2 86 <0.2 100.6 7.0 Surface 23.7 8.1 33.3 100.7 1.0 356 23.7 7.0 4.2 6 87 <0.2 0.9 4.0 0.7 350 23.7 4.4 7 90 <0.2 0.7 8.1 6.9 06:21 IM5 8.0 Middle 23.7 8.1 33.3 99.1 820738 804887 Fine Moderate 4.0 0.7 23.7 4.5 91 <0.2 5.1 4 5 0.7 0.6 23.7 8.1 8.1 99.2 6.9 91 <0.2 23.7 8.1 99.2 6.9 Bottom 33.3 7.0 0.6 23.7 33 3 99.2 86 < 0.2 1.0 0.1 213 24.1 8.1 30.7 98.7 7.0 2.4 7 86 <0.2 0.9 Surface 8.1 30.8 98.8 2.5 3.2 1.0 0.1 225 24.0 8.1 30.8 98.9 7.0 6 89 <0.2 1.1 3.9 0.2 65 23.9 8.1 31.6 6.8 5 89 <0.2 Fine Moderate 06:29 Middle 23.9 8.1 31.5 97.2 821077 805807 <0.2 3.9 0.2 65 23.9 8.1 31.5 97.1 6.8 3.3 4 89 95.6 95.9 4.4 4.8 1.0 6.8 0.2 54 23.7 8.0 33.2 6.7 4 91 <0.2 6.7 6.8 0.2 58 23.7 8.0 5 91 0.7 1.0 0.0 24.1 8.0 30.3 96.9 6.9 2.0 4 88 <0.2 Surface 6.8 3 1.0 0.0 24.1 8.0 30.3 96.3 2.1 88 <0.2 3.5 1.1 4.5 0.2 123 89 <0.2 23.9 8.0 32.1 93.9 6.6 IM7 Moderate 06:37 9.0 Middle 8.0 32.1 93.8 821343 806840 90 4.5 0.2 131 23.9 8.0 32.1 93.6 6.6 3.5 2 8.0 0.2 139 23.8 8.0 33.2 91.9 6.4 4.1 2 91 <0.2 1.0 Bottom 23.8 8.0 33.2 91.9 8.0 0.2 148 23.8 91.9 4.1 <0.2 1.1 1.0 0.1 111 24.0 8.1 28.5 97.7 7.0 2.4 4 85 < 0.2 1.1 Surface 24.0 8.1 28.5 97.8 28.5 97.8 1.1 8.1 1.0 0.1 116 24.0 2.5 5 86 < 0.2 8.1 90.0 6.4 2.2 5 87 <0.2 1.1 4.0 0.1 126 23.9 29.9 23.9 8.1 29.9 90.1 821810 808157 IM8 Fine Moderate 06:29 7.9 Middle 88 90.1 6.4 87 1.1 4.0 0.1 134 23.9 8.1 4 3.7 92 1.3 6.9 0.1 23.7 8.1 31.3 90.2 5 <0.2 80 6.4 23.7 8.1 31.3 90.2 6.4 Rottom

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 during Mid-Flood Tide 20 April 21 DO Saturation Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Condition Depth (m) Value Value Average Value (Easting) 24.0 0.0 Surface 8.1 29.4 91.3 0.0 264 24.0 91.2 2.2 3.5 0.0 78 23.8 8.1 30.4 91.1 6.5 3 89 <0.2 1.1 91.2 808805 IM9 Fine Moderate 06:25 8.1 30.5 822099 3.5 0.0 83 23.8 8.1 30.6 91.3 6.5 2.7 4 89 <0.2 1.2 6.0 0.0 104 23.7 8.1 30.9 92.5 6.6 2.8 6 90 <0.2 1.1 Bottom 8.1 30.9 92.6 6.6 6.0 0.0 111 23.7 8.1 30.9 92.7 6.6 2.9 5 91 <0.2 1.0 1.0 0.8 276 23.9 8.0 29.7 86.8 6.2 2.1 <2 85 < 0.2 1.1 Surface 8.0 29.7 86.6 1.0 0.8 299 23.9 8.0 29.8 86.4 6.1 2.0 <2 85 <0.2 1.2 3.9 0.6 288 23.9 8.0 30.0 85.1 6.1 2.2 2 89 89 <0.2 1.2 IM10 Moderate 06:19 7.7 Middle 8.0 29.9 85.1 822396 809774 3.9 0.6 23.9 8.0 85.1 6.1 <0.2 297 29.9 6.7 0.5 8.0 2 261 23.9 30.3 77.8 5.5 4.4 90 < 0.2 Bottom 8.0 30.3 77.9 5.5 77.9 5.5 1.1 6.7 0.5 261 23.9 8.0 4.4 90 30.3 **-**0 2 1.0 0.8 294 23.7 1.4 8.1 <2 1.2 91.8 6.6 Surface 8.0 30.0 91.7 1.2 1.0 308 1.4 <2 87 < 0.2 0.8 23.7 8.0 30.0 91.6 6.5 6.5 1.8 1.1 1.2 1.0 2 281 303 23.7 6.4 89 89 <0.2 4.0 8.0 90.2 89.9 IM11 Fine Moderate 06:09 8.0 Middle 8.0 30.3 90.1 89 822061 811436 4.0 23.7 0.6 8.0 30.3 2 <0.2 7.0 0.4 290 23.7 8.0 30.4 89.6 6.4 2.9 90 23.7 6.4 Bottom 8.0 30.4 89.7 7.0 0.4 303 23.7 8.0 30.4 89.7 6.4 3.0 3 90 <0.2 0.9 23.7 1.6 <0.2 8.1 91.9 <2 6.6 0.9 Surface 23.7 8.0 30.0 91.9 1.0 0.7 282 23.7 8.0 30.0 91.8 6.5 1.6 <2 85 <0.2 0.9 2 3 2 4.8 0.7 273 23.7 90.1 6.4 3.2 89 <0.2 1.1 8.0 30.2 821481 812027 IM12 Fine Moderate 06:04 9.5 Middle 23.7 8.0 30.2 90.0 4.8 0.7 23.7 8.0 89.9 6.4 3.3 89 <0.2 275 8.5 0.5 270 23.8 8.0 90.4 6.4 3.2 90 <0.2 1.0 23.8 8.0 90.7 6.5 Rottom 30.5 8.5 0.6 288 23.7 8.0 30.5 91.0 6.5 3.3 1.0 23.6 8.0 29.8 87.6 6.3 0.9 2 Surface 23.6 8.0 87.5 29.9 1.0 23.6 29.9 87.4 6.2 1.0 2 2.8 Fine Calm 05:37 5.6 Middle 819980 812665 2.8 4.6 23.7 8.0 30.2 87.6 6.2 1.2 3 Bottom 23.7 8.0 30.2 87.7 6.3 4.6 23.7 8.0 30.2 87.7 63 1.2 1.0 0.1 23.7 8.0 30.3 90.0 6.4 1.6 88 <0.2 0.9 Surface 23.7 8.0 30.3 90.0 1.0 0.1 22 23.7 8.0 30.3 90.0 6.4 1.7 3 87 < 0.2 0.9 SR2 05:23 4.7 Middle 821486 814165 3.7 126 3.2 89 0.1 23.7 8.0 30.4 90.9 6.5 3 <0.2 8.0 91.0 Bottom 3.7 91.0 135 23.7 30.4 2 0.8 0.1 8.0 89 r0 2 1.0 0.1 312 24.0 8.1 29.2 94.7 6.7 6.7 15 4 Surface 8.1 29.3 94.5 94.3 1.0 8 1 1.6 3 0.1 330 24 0 29.4 4.7 346 2.3 3 0.1 24.0 8.1 30.0 87.7 6.2 SR3 Moderate 06:43 9.3 Middle 8.1 87.8 822162 807551 4.7 87.9 355 8.1 30.0 0.1 24.0 8.3 0.1 83 23.7 8.1 8.1 31.2 89.3 89.4 6.3 3.5 3.4 2 Bottom 23.7 8.1 31.2 89.4 6.3 8.3 0.1 86 23.7 1.0 0.0 74 23.6 8.1 33.2 98.3 6.9 4.1 2 Surface 23.6 8.1 33.2 98.4 79 8.1 98.4 6.9 1.0 0.0 23.6 33.2 4.3 2 90 5.5 3 0.1 23.8 8.1 6.7 . 33.7 96.1 SR4A 05:07 8.1 33.7 96.0 817188 807833 Fine Calm 9.4 Middle 23.8 4.7 8.1 95.8 6.7 5.4 2 0.1 94 23.8 33.7 5.8 5.8 96.2 96.3 8.4 0.1 8.0 6.7 <2 <2 34 23.8 8.0 33.8 6.7 Rottom 23.8 33.8 96.3 8.4 0.1 23.8 6.7 1.0 0.2 319 23.5 8.0 32.6 6.7 3.6 2 95.7 Surface 23.5 8.0 32.6 95.7 1.0 0.2 325 23.5 8.0 32.6 95.7 6.7 3.5 2 SR5A 04:50 3.6 Middle 816598 810693 Fine Calm 2.6 0.2 320 23.5 32.8 96.3 6.8 4.7 3 Bottom 23.4 8.0 32.8 96.6 6.8 23.4 7.9 96.9 6.8 4.6 2.6 0.2 343 1.0 0.1 225 23.6 8.0 31.8 93.4 2.6 Surface 23.6 8.0 31.8 93.4 1.0 0.1 245 23.6 8.0 31.8 93.3 6.6 2.5 3 SR6A Fine Calm 04:23 4.2 Middle 817950 814740 3.2 0.0 236 23.6 7.9 6.6 3.1 2 Bottom 7.9 31.8 94.0 6.7 3.2 0.0 240 23.6 7.0 31.8 94.6 3.4 1.0 0.1 226 23.7 8.0 31.8 84.7 6.0 0.7 <2 31.8 84.7 Surface 1.0 0.1 226 23.7 8.0 31.8 84.6 6.0 0.7 <2 99 0.3 193 23.8 8.0 31.9 83.2 5.9 0.8 <2 SR7 Fine Calm 04:31 19.7 Middle 8.0 31.9 83.2 823648 823722 <2 9.9 0.3 201 23.8 8.0 31.9 83.1 5.9 0.9 18.7 0.2 89 23.7 8.0 31.9 81.5 5.7 1.7 3 Bottom 8.0 31.9 81.6 18.7 0.2 89 23.7 8.0 31.9 81.6 5.8 1.7 1.0 23.9 8.0 30.0 91.1 6.5 4.3 2 Surface 23.9 8.0 30.0 91.1 4.7 1.0 23.9 8.0 30.0 91.1 6.5 3 . . 811629 820368 SR8 Fine Calm 05:57 4.3 Middle -3.3 23.8 6.8 3 8.1 30.1 92.0 6.5 Bottom 23.8 8.1 30.1 92.1 6.6

DA: Depth-Averaged

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

Water Quality Monitoring Results on during Mid-Ebb Tide 22 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time (m/s) Average Value Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Depth (m) Value Value (Easting) 24.5 0.1 131.4 1.0 0.1 24.2 3.4 43 0.1 80 23.7 8.0 32.2 112.0 7.9 5.8 3 88 <0.2 0.4 111.8 804239 C1 Fine Calm 10:25 8.0 32.3 815640 0.5 4.3 0.1 87 23.7 8.0 32.3 111 7.9 5.8 2 90 <0.2 0.5 7.6 0.1 231 23.7 8.0 32.4 108.0 7.6 7.1 3 87 <0.2 0.5 Bottom 8.0 32.4 108.3 7.6 7.6 0.1 234 23.7 8.0 32.4 108.6 7.6 7.0 3 89 <0.2 0.6 1.0 2.5 25.1 8.4 24.6 107. 1.0 4 92 < 0.2 2.3 Surface 8.4 24.6 107.2 <0.2 2.5 1.0 2.6 71 25.1 8.4 24.6 107. 7.7 1.0 3 90 2.1 2.3 2.2 2.1 6.3 2.3 68 24.2 8.4 30.0 89.2 6.3 2.6 2 85 86 <0.2 C2 Cloudy Moderate 11:27 12.5 Middle 8.4 30.0 89.3 825661 806933 2.5 24.2 6.3 68 8.4 30.1 89.3 11.5 2.4 8.4 5.5 2 67 24.1 30.8 86.8 6.1 99 < 0.2 Bottom 24.1 8.4 30.8 86.9 6.1 11.5 2.6 67 24 1 8.4 30.8 87 N 5.4 94 <0.2 3.7 24.1 1.0 8.1 1.0 82 0.9 30.3 95.5 6.8 < 0.2 Surface 24.1 8.1 30.3 95.5 0.9 1.0 95.4 6.7 1.0 88 <0.2 4.0 24.1 8.1 30.3 3 0.9 0.9 0.9 23.9 23.9 2.1 2.1 <0.2 6.1 3 84 83 6.3 3.4 8.1 31.8 86.4 C3 Cloudy Moderate 08:55 12.6 Middle 8.1 31.8 86.4 85 822131 817797 0.9 3.5 86.4 8.1 <0.2 11.6 3.3 23.8 8.1 31.9 86.4 6.1 5.7 3 85 8.1 6.1 Bottom 23.8 31.9 86.4 11.6 3.5 23.8 8.1 31.9 86.4 6.1 5.5 2 90 <0.2 0.9 0.0 24.7 3.0 81 8.2 134.6 <0.2 28.9 9.5 0.5 Surface 24.7 8.2 29.0 134.4 1.0 0.0 185 24.6 8.2 29.1 134.1 9.5 3.0 2 84 <0.2 0.5 9.5 807155 IM1 Fine Calm 10:46 5.2 Middle 817946 4.2 0.1 112 24.5 8.1 30.1 8.7 6.4 4 82 <0.2 0.5 Bottom 24.5 8.1 30.1 123.7 8.7 4.2 0.1 120 24.5 8.1 30.1 123. 8.7 6.4 88 0.5 0.1 215 24.5 8.2 28.7 9.6 9.6 3.1 2 86 <0.2 0.6 Surface 24.5 8.1 28.8 135.4 1.0 0.1 218 24.5 3.0 2 86 <0.2 0.4 0.5 0.5 3.5 0.1 126 24.2 8.8 5.2 4 88 <0.2 <0.2 <0.2 124.6 806184 IM2 Fine Calm 10:55 Middle 24.2 8.1 30.2 818183 0.1 131 24.1 5.2 4 3.5 6.0 0.1 98 24.1 8.1 30.6 7.9 6.0 4 89 Bottom 24.2 8.1 30.5 112.6 8.0 8.0 6.0 0.1 100 24.2 8.1 30.3 112 5.9 4 92 <0.2 0.5 0.5 1.0 0.1 254 24.5 8.2 29.3 136. 9.6 3.5 3 87 <0.2 Surface 8.1 29.4 135.6 1.0 0.1 276 24.4 8.1 29.5 9.5 3.4 3 85 <0.2 0.5 0.5 3.6 0.0 157 24.2 8.1 30.2 8.8 4.1 3 92 <0.2 IM3 11:01 7.2 Middle 124.7 818787 805573 97 97 <0.2 3.6 0.0 165 24.2 8.1 4.2 4 23.9 7.8 9.9 0.5 6.2 0.1 102 8.1 31.3 4 111.2 9.9 3 0.1 108 8.1 31.3 <0.2 6.2 23.9 90 1.0 0.2 200 24.4 8.1 30.0 121. 8.6 8.5 3.9 3 86 <0.2 0.5 Surface 24.4 8.1 30.1 121.2 88 1.0 8 1 3.9 2 <0.2 0.2 218 24.3 30.2 4.3 178 6.1 3 82 85 <0.2 <0.2 0.5 0.1 24.2 8.1 30.8 8.0 IM4 Calm 11:11 Middle 24.2 8.0 30.9 114.2 819723 804601 6.1 4.3 0.1 193 24.1 8.0 2 7.5 7.5 4 0.4 7.6 7.6 0.1 125 131 24.0 24.0 8.0 31.7 7.5 7.6 89 <0.2 Rottom 24.0 8.0 31.6 107.5 7.6 0.1 92 < 0.2 0.5 1.0 0.3 24.7 93 226 8.1 28.4 125.4 8.9 3.6 5 <0.2 Surface 24.7 8.1 28.4 125.4 8.1 28.4 8.9 5 95 <0.2 1.0 0.3 240 24.7 125. 3.6 4.0 212 24.4 5.1 5 85 <0.2 0.5 0.2 8.1 8.9 30.0 126.7 IM5 11:19 8.1 30.0 126.5 820749 804883 Fine Calm 8.0 Middle 24.4 0.5 4.0 24.4 8.1 30.0 8.9 5.2 4 87 < 0.2 0.6 0.2 223 126. <0.2 0.5 88 7.0 0.2 205 222 24.4 8.1 30.2 6.3 6.3 3 8.1 120.3 120.6 8.5 8.5 8.5 Bottom 24.4 30.2 0.2 24.4 0.5 0.6 0.6 0.5 243 1.0 0.2 24.6 8.1 28.5 8.9 4.0 2 92 <0.2 126.1 Surface 24.6 8.1 28.6 125.9 1.0 0.2 263 24.5 8.1 28.7 125.0 8.9 4.4 3 91 <0.2 3.9 0.1 231 24.4 8.1 29.5 8.3 5.1 3 87 <0.2 7.8 Middle 24.4 8.1 29.5 116.8 821060 805839 IM6 Fine Calm 11:28 3.9 0.1 238 24.4 8.1 29.5 116. 8.2 5.2 4 84 <0.2 0.6 6.8 0.1 167 24.4 29.6 8.1 7.0 4 86 <0.2 Bottom 24.4 8.1 29.6 115.4 8.1 6.8 0.2 8.1 8.1 7.0 24.4 1.0 0.1 276 24.7 8.1 28.2 8.9 4.1 4 82 <0.2 0.5 Surface 24.7 8.1 28.4 125.2 1.0 0.1 292 24.6 8.1 28.5 124.9 8.8 4.1 5 85 <0.2 0.5 89 1.2 4.5 0.2 119 24.4 8.1 6.2 4 <0.2 29.5 IM7 Fine Calm 11:35 9.0 Middle 8.1 29.6 114.4 821345 806832 <0.2 4.5 0.2 128 24.3 8.1 29.7 113. 8.0 6.3 3 86 8.0 0.1 100 24.2 8.0 30.2 95.4 6.7 8.9 4 88 <0.2 1.3 Bottom 8.0 30.2 95.5 6.7 8.0 0.2 101 24.2 8.0 30.2 95.5 6.7 8.9 88 <0.2 1.3 1.0 2.1 256 24 9 8.2 26.9 7.9 2.0 83 < 0.2 1.2 111.4 Surface 26.9 1.0 2.3 275 24.9 8.2 26.9 7.9 2.1 4 84 <0.2 4 0 23 256 24.6 8.2 28.0 108.6 7.7 2.4 4 86 88 <0.2 2.1 IM8 Cloudy Moderate 10:53 7.9 Middle 24.6 8.2 28.0 108.6 821852 808123 1.9 7.7 4.0 2.5 269 24.6 8.2 28.1 108.5 2.5 < 0.2 6.9 2.3 257 24.5 8.2 29.3 92.8 6.6 3.6 6 87 <0.2 2.1 8.2 Bottom 24.5 29.3 92.9 6.6 2.4 264

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 Qua		toring Res	ults on		22 April 21 d	luring Mid-l	Ebb Tide																					
Monitoring	Weather	Sea	Sampling	Water	0	()	Current Speed	Current	Water Te	emperature (°C)		рН	Salir	ity (ppt)		aturation (%)	Dissolv Oxyge		Turbidity(	NTU)	Suspende (mg/		Total Alkal (ppm)	Coord		Coordinate	Chromium (µg/L)	Nickel (µg/l
Station	Condition	Condition	Time	Depth (m)	Sampling Depth	(m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value [	DA (Nort		HK Grid (Easting)	Value DA	Value DA
					Surface	1.0 1.0	2.2	317 327	24.7 24.7	24.7	8.2 8.2	8.2	27.1 27.1	27.1	106.5 106.5	106.5	7.6 7.6	Ì	2.2		3		88 90				<0.2 <0.2	1.4
IM9	Cloudy	Moderate	10:46	7.1	Middle	3.6	2.1	319	24.6	24.6	8.1	8.1	28.3	28.3	92.9	93.0	6.6	7.1	3.3	4.0	4	3	92	92 822	104	808799	<0.2	1.3
					Bottom	3.6 6.1	2.2	330 313	24.6 24.5	24.5	8.1 8.2	8.2	28.4 28.8	28.8	93.0 94.0	94.1	6.6	6.7	3.6 6.1	L	3 4		97				<0.2 <0.2	1.2
					Surface	6.1 1.0	2.3	315 171	24.5 25.0		8.2		28.8		94.2		6.7 7.5	***	6.4 0.9		3		91 84				<0.2 <0.2	1.4
						1.0 3.8	2.7 2.6	178 170	25.0 24.6	25.0	8.2 8.2	8.2	24.9 28.1	24.9	105.0 97.2	105.1	7.5	7.2	0.9 3.2	F	2		86 88				<0.2	1.5
IM10	Cloudy	Moderate	10:38	7.5	Middle	3.8	2.7	173	24.6	24.6	8.2	8.2	28.1	28.1	97.3	97.3	6.9		3.6	3.6	3	3	88	822	378	809806	<0.2	1.5
					Bottom	6.5 6.5	2.8 3.0	171 183	24.5 24.5	24.5	8.2 8.2	8.2	29.2 29.2	29.2	96.9 97.0	97.0	6.9	6.9	6.4 6.4	-	3 4		90 92				<0.2 <0.2	1.5 1.6
					Surface	1.0 1.0	3.0	118 126	24.9 24.9	24.9	8.1 8.1	8.1	26.9	26.9	96.1 96.1	96.1	6.8	6.8	1.1	-	2		98 95			}	<0.2	1.9
IM11	Cloudy	Moderate	10:23	7.8	Middle	3.9 3.9	2.9	120 130	24.3 24.3	24.3	8.2 8.1	8.1	29.5 29.5	29.5	94.4	94.4	6.7 6.7	0.0	2.3	1.9	2	2	87 85	90 822	065	811472	<0.2	1.8
					Bottom	6.8	2.9 3.0	120 126	24.1 24.1	24.1	8.1 8.1	8.1	30.5	30.5	86.9 86.9	86.9		6.1	2.3	Ī	2		84 88				<0.2 <0.2	2.0
					Surface	1.0	2.4	170	24.7	24.7	8.2	8.2	26.2	26.2	100.5	100.5	7.2		1.9		3		83				<0.2	2.0
IM12	Cloudy	Moderate	10:15	9.5	Middle	1.0 4.8	2.4 2.4	174 175	24.7 24.2	24.2	8.2 8.1	8.1	26.3 30.0	30.0	100.5 93.2	93.2	6.6	6.9	1.9 1.8	3.1	3	2	85 86	36 821	443	812069	<0.2	1.9
IIVITZ	Cloudy	Woderate	10.13	3.5		4.8 8.5	2.6	178 173	24.1 24.0		8.1 8.1		30.0		93.1 84.4		6.6		1.9 5.5	-	2	-	87	021	113	012003	<0.2	1.8
					Bottom	8.5 1.0	2.7	178	24.0 24.2	24.0	8.1 8.2	8.1	30.7 29.6	30.7	84.5 96.8	84.5	6.0	6.0	5.7 2.2		2 <2		88				<0.2	1.9
					Surface	1.0		-	24.2	24.2	8.2	8.2	29.7	29.6	96.7	96.8	6.0	6.9	2.3		<2						-	-
SR1A	Cloudy	Calm	09:37	5.0	Middle	2.5	-		-	-	-	-	Ė	-	-	-			-	2.5	-	<2	-	- 819	976	812664	-	-
					Bottom	4.0 4.0	-		24.2 24.2	24.2	8.2	8.2	30.1	30.1	96.5 96.5	96.5	6.8	6.8	2.8	-	<2 <2		-				-	-
					Surface	1.0 1.0	0.1	15 15	24.2	24.2	8.2	8.2	29.8 29.8	29.8	100.1	100.1	7.1 7.1		1.5 1.5	-	<2 <2		91 92				<0.2	2.0
SR2	Cloudy	Moderate	09:20	4.5	Middle	-	-	- :	-	-	-	-	-	-	-	-	-	7.1	-	2.0	-	2	- 8	821	448	814184	- <0.2	2.0
					Bottom	3.5 3.5	0.1	20 20	24.1 24.1	24.1	8.2 8.2	8.2	30.1	30.1	95.1 95.1	95.1	6.7 6.7	6.7	2.3	Į	3		85 85				<0.2	2.0
					Surface	1.0	2.3	195	24.8	24.8	8.3	8.3	26.7	26.7	117.7	117.7	8.4		1.9		3		-				-	-
SR3	Cloudy	Moderate	11:00	9.0	Middle	1.0 4.5	2.5 2.5	211 198	24.8 24.5	24.5	8.3 8.2	8.2	26.7 28.8	28.8	117.6 99.2	99.2	7.0	7.7	1.9 2.3	2.4	3 4	3	-	- 822	125	807557	-	-
OKS	Cloudy	Woderate	11.00	3.0		4.5 8.0	2.7	208 195	24.5 24.5		8.2 8.2		28.8		99.2 99.8		7.0 7.1		2.4		3	3	-	022	133	007337		-
					Bottom	8.0 1.0	2.8 0.3	202 88	24.5 24.7	24.5	8.2 8.2	8.2	29.1 28.3	29.1	99.8 130.5	99.8	7.1 9.2	7.1	3.2 3.0		3		-	_			-	-
					Surface	1.0	0.3	90	24.7	24.7	8.2	8.2	28.3	28.3	130.3	130.4	0.2	9.1	3.0	ļ	3 4		-					-
SR4A	Fine	Calm	10:00	9.0	Middle	4.5	0.2	75	24.5	24.5	8.1	8.1	29.3	29.1	125.3	126.0	8.9	-	4.9	5.0	3	3	-	- 817	181	807798	<u> </u>	-
					Bottom	8.0 8.0	0.2	80 87	24.4 24.4	24.4	8.1 8.1	8.1	30.0	30.0	116.8 117.0	116.9	8.2 8.2	8.2	7.2 7.1	-	4		-				-	-
					Surface	1.0 1.0	0.1 0.1	84 90	24.4 24.3	24.4	8.1 8.1	8.1	29.4 29.5	29.5	120.6 120.2	120.4	8.5 8.5		4.3 4.2		5 4		-				-	-
SR5A	Fine	Calm	09:18	3.2	Middle		-		-		-	-	Ė	-	-	-	-	8.5	-	4.4	-	5	-	- 816	613	810714	<u> </u>	-
					Bottom	2.2	0.1	55 57	24.3	24.3	8.0	8.0	29.6	29.6	118.1	118.0	8.4 8.3	8.4	4.7 4.6	Į	5		-				-	-
					Surface	2.2 1.0	0.1	142	24.3	24.0	8.0	8.0	30.1	30.2	109.6	109.7	7.8		3.2		4		-	+				-
SR6A	Fine	Calm	08:50	4.2	Middle	1.0	0.1	147	23.9		8.0		30.2		109.8		7.8	7.8	3.2	3.7	3	3	-	- 817	061	814723	-	-
SKOA	rine	Cairii	08.50	4.2		3.2	0.1	150	23.8		8.0	-	30.7	-	105.2	-	7.5		4.2	3./	2	3	-	- 017	901	014/23	= 1	-
					Bottom	3.2	0.1	153 105	23.8	23.8	8.0 8.1	8.0	30.7	30.7	105.6 85.4	105.4	7.5	7.5	4.2 1.5		3		-				=	-
					Surface	1.0	4.1	115	23.9	23.9	8.1	8.1	31.8	31.8	85.4	85.4	6.0	6.0	1.6		3		-					-
SR7	Cloudy	Moderate	08:23	15.8	Middle	7.9 7.9	3.5 3.7	106 110	23.8 23.8	23.8	8.1 8.1	8.1	32.0 32.0	32.0	85.0 85.0	85.0	6.0		1.5 1.5	1.6	3	3	-	- 823	635	823753	-	-
					Bottom	14.8 14.8	3.7	105 113	23.7	23.7	8.1 8.1	8.1	32.2 32.2	32.2	84.9 84.9	84.9	6.0	6.0	1.8		3		-				-	-
					Surface	1.0 1.0	-	-	24.7 24.6	24.7	8.2 8.2	8.2	26.2 26.3	26.2	103.4 103.4	103.4	7.4	Ţ	3.4	Ŧ	2		-				-	-
SR8	Cloudy	Moderate	10:07	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.4	-	2.9	-	3	-	- 820	395	811640		
					Bottom	3.5	-	-	24.4	24.4	8.2	8.2	29.7	29.7	103.3	103.3	7.3	7.3	2.5		3		-			}	-	-
DA: Denth-Ave	<u> </u>					3.5	-	-	24.4		8.2		29.7		103.3		7.3		2.5		3		-				-	<u> </u>

DA: Depth-Averaged

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

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

Water Quality Monitoring Results on during Mid-Flood Tide 22 April 21 Turbidity(NTU) Suspended Solids Total Alkalinity DO Saturation Dissolved Chromium Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Value Value Average Value (Easting) 25.2 0.3 Surface 25.3 8.2 28.6 143.5 1.0 0.3 46 25.3 28.6 142.9 10.0 3.8 84 <0.2 23.9 5.5 88 2.0 0.2 121.8 <0.2 C1 8 1 32.0 121.6 804237 13:58 84 Middle 23.9 815626 Fine Calm 86 1 9 32.0 121.: 8.5 5.6 3 89 <0.2 1.9 0.2 42 23.9 8.1 7.4 0.2 37 23.7 8.1 32.4 106.4 7.5 7.5 6.8 4 86 <0.2 1.9 8.1 7.5 Bottom 23.7 32.4 106.5 1.8 7.4 23.7 32.4 6.8 0.2 8.1 106. 4 86 < 0.2 1.0 3.3 89 25.4 1.6 < 0.2 8.4 Surface 25.4 8.4 25.4 113.3 1.6 25.3 24.6 8.1 1.6 2.9 90 1.0 8.4 25.4 <0.2 3.6 3 88 1.4 6.2 8.4 7.6 27.9 106. C2 Fine Moderate 12:52 123 Middle 24.6 8.4 27.9 106.8 90 825692 806952 1.6 3.7 27 27.9 106. 7.6 2.9 3 91 <0.2 6.2 24.6 8.4 11.3 3.8 27 24.3 8.4 91.1 6.4 3.0 3 92 <0.2 1.6 29.9 8.4 91.0 6.4 Bottom 24.3 29.9 11.3 3.9 27 24.3 8.4 29.9 90.9 3.0 3 92 <0.2 1.6 3.2 24.8 8.3 0.8 88 <0.2 0.5 8.2 Surface 24.8 8.3 29.3 117.3 1.0 3.5 272 24.8 8.3 29.3 8.2 0.9 2 86 <0.2 0.5 1.0 0.6 6.0 7.3 <2 2 92 92 <0.2 3.4 252 24.3 8.3 30.4 C3 15:10 103.1 817798 Fine Moderate 12.0 Middle 24.3 8.3 30.4 822123 0.8 3.6 256 24.3 11.0 3.7 253 23.9 8.2 6.0 4.5 2 <0.2 1.2 Bottom 23.9 8.2 31.8 85.5 6.0 11.0 4.0 257 23.9 8.2 31.8 85.5 6.0 4.7 1.2 1.0 0.1 347 25.4 8.2 2.6 88 <0.2 0.7 Surface 25.5 8.2 27.8 147.5 1.0 0.1 347 25.5 8.2 27.7 147. 10.3 2.5 3 87 <0.2 0.7 807108 IM1 Fine Calm 13:37 Middle 817960 4 0 0.1 22 24.2 8.2 30.6 122.5 8.6 4.4 5 85 < 0.2 0.7 Bottom 24.3 8.2 30.5 122.9 8.7 4.0 0.1 23 24.3 8.2 30.4 123.2 8.7 44 5 86 <0.2 0.6 332 2.9 1.0 0.1 25.0 8.2 28.5 148.6 10.5 6 86 < 0.2 1.4 Surface 8.2 28.6 148.4 1.0 0.1 350 24.8 8.2 28.8 148.1 10.4 2.8 5.7 5 86 <0.2 1.3 3.5 0.1 354 24.1 8.1 30.7 127. 9.0 7 89 <0.2 1.4 IM2 Fine Calm 13:30 7.0 Middle 8.1 30.8 126.4 89 818139 806178 5.7 <0.2 3.5 0.1 326 24.1 8.1 30.9 8.8 6 90 1.4 7.5 7 1.6 1.6 6.0 0.2 46 23.9 8 1 31.6 8.0 90 <0.2 8.1 31.6 113.8 8.0 6.0 7.5 0.2 47 8 1 31.6 8.0 6 ٩n <0.2 23.9 113 1.0 0.1 311 24.8 8.2 29.0 147 10.4 3.0 87 < 0.2 1.2 Surface 8.2 29.1 147.0 2.9 5.5 5.5 7.3 1.2 1.0 7 88 0.1 337 24.7 8.2 29.2 146. 10.3 <0.2 1.4 1.4 1.5 3.6 0.1 24.1 8.2 6 87 <0.2 342 30.9 131. 9.3 IM3 Fine Calm 13:24 7.2 Middle 24.1 8.2 31.1 130.0 89 818779 805591 5 4 0.1 89 <0.2 3.6 358 24.0 8.2 128 9.1 6.2 28 23.9 8.1 31.7 7.8 92 110.5 Rottom 23.9 8.1 31.7 7.8 6.2 0.1 8.1 31.7 7.8 7.4 4 91 <0.2 1.5 28 23.9 1.0 0.1 342 4.4 1.2 24.6 8.1 29.8 118.1 8.3 7 86 <0.2 Surface 24.6 8.1 29.8 118.4 1.0 0.1 345 24.5 29.9 8.3 4.5 8 86 <0.2 1.3 5.7 87 <0.2 1.5 4.2 24.3 5 0.1 8.1 30.5 8.2 IM4 Fine Calm 13:16 8.4 Middle 24.3 8.1 30.6 115.7 819709 804628 4.2 7.4 0.1 24.2 8.1 8.1 5.7 89 <0.2 5 0.2 23.8 8.5 5 90 1.8 7.4 8.1 Bottom 23.9 32.0 105.2 7.4 7.4 0.2 23.9 32.0 8.4 4 <0.2 1.8 300 1.3 1.0 0.1 24.5 8.1 29.4 4.4 90 <0.2 122. 8.6 3 Surface 24.5 8.1 29.5 122.1 1.0 0.1 328 24.5 8.6 4.5 3 86 <0.2 4.0 0.1 287 24.4 5.3 3 88 <0.2 1.2 8.1 30.2 8.6 IM5 Fine Calm 13:08 8.0 Middle 24.4 8.1 30.2 122.3 820742 804876 4.0 0.1 301 24.4 5.4 91 <0.2 1.4 0.0 121 24.3 8.1 8.1 30.2 8.1 6.3 4 87 <0.2 24.4 8.1 114.9 8.1 Bottom 30.2 24.4 7.0 0.0 131 30.2 114 5 89 < 0.2 1.0 0.1 189 25.7 8.1 28.2 8.9 3.3 5 84 <0.2 1.4 Surface 25.2 8.1 28.7 128.7 1.0 0.1 205 24.6 8 1 29.2 9.2 3.4 5 86 <0.2 1.4 3.8 0.1 215 24.5 8.1 8.8 4.1 3 88 <0.2 Fine Calm 13:01 Middle 24.5 8.1 29.6 125.3 821054 805825 <0.2 3.8 0.1 223 24.5 8.1 29.6 8.8 4.1 4 85 5.2 5.1 1.2 6.6 0.1 226 24.4 8.1 30.0 8.7 3 89 <0.2 122.9 8.7 6.6 0.1 229 24.4 8 1 30.0 4 91 1.6 1.5 1.0 0.2 223 25.0 8.1 25.6 128.8 3.3 5 88 <0.2 Surface 128.6 92 3.2 4.1 1.0 0.2 236 24 9 8 1 26.0 128 4 85 <0.2 3 1.8 4.5 212 8.1 86 <0.2 0.1 24.5 29.1 127.7 9.0 IM7 Calm 12:53 9.0 Middle 24.5 8.1 127.4 821330 806843 89 4.5 0.1 231 24.5 8.1 29.2 127. 9.0 4.0 4 8.0 0.1 87 24.2 7.9 30.3 91.4 6.5 7.3 4 89 <0.2 1.4 Bottom 24.2 7.9 30.3 91.4 6.5 8.0 0.1 94 24.2 <0.2 1.3 1.0 2.4 6 25.6 8.3 23.7 123.9 8.9 8.9 1.2 6 86 < 0.2 2.2 Surface 25.6 8.3 23.7 123.9 23.8 8.3 <0.2 1.0 2.5 25.6 123. 1.2 5 88 2.0 2.2 2.1 2.2 8.3 27.0 8.2 1.8 5 89 <0.2 4.0 2.5 25.1 116.5 8.3 27.1 116.4 821823 808151 IM8 Fine Moderate 13:21 7.9 Middle 25.1 89 2.2 89 27.2 8.2 1.9 4.0 25.0 8.3 116. 6 2.7 6.9 2.4 24.6 8.3 29.1 108.4 3.3 91 <0.2 7.6 5 24.6 8.3 29.1 108.3 7.6 Rottom

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 during Mid-Flood Tide 22 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Condition Depth (m) Value Value Average Value (Easting) 25.3 2.5 2.2 Surface 8.3 25.3 2.6 245 25.3 1.0 2.1 2.3 3.7 24 232 24.6 8.3 28.6 108.0 7.6 5 89 <0.2 108.0 808805 IM9 Fine Moderate 13:27 24.6 8.3 28.6 822098 3.7 2.6 238 24.6 8.3 28.6 108.0 7.6 2.3 4 89 <0.2 2.2 6.4 2.1 230 24.6 8.3 29.1 109.1 7.7 2.8 5 90 <0.2 2.1 Bottom 8.3 29.1 109.4 7.7 6.4 2.2 237 24.7 8.3 29.1 109.6 77 2.7 4 90 <0.2 2.1 1.0 2.6 24 24.9 8.4 26.8 8.9 1.2 87 < 0.2 2.2 Surface 8.4 26.7 125.0 <0.2 1.0 2.6 25 24.9 8.4 26.7 124.9 8.9 1.2 4 87 2.1 2.4 2.2 2.2 2.1 4.1 2.3 24.6 8.3 28.6 8.2 2.2 4 5 86 86 <0.2 IM10 Moderate 13:36 8.1 Middle 8.3 28.6 115.7 822374 809804 4.1 2.4 8.3 26 24.6 28.6 115. 8.2 7.1 2.6 8.3 1.9 3 21 24.6 28.9 105. 7.4 94 < 0.2 Bottom 8.3 28.8 105.3 7.5 7.1 7.5 4 27 22 8.3 105.4 2.0 92 24.6 28.7 **-**0 2 1.0 2.6 24.9 1.4 88 2.0 2.2 1.9 1.8 8.4 26.9 8.7 Surface 8.4 26.8 123.0 1.0 8.7 1.4 5 88 < 0.2 2.9 48 24.9 8.4 26.8 122. 83 1.7 5 4 <0.2 7.9 7.9 86 89 3.8 24.6 8.3 28.6 IM11 Fine Moderate 13:46 7.5 Middle 8.3 28.6 111.6 89 822077 811473 2.7 24.6 8.3 28.6 5 1.7 6.5 2.9 36 24.4 8.3 29.4 7.0 2.0 90 <0.2 99.1 24.5 8.3 7.0 Bottom 29.4 99.2 6.5 3.0 37 24.5 8.3 29.4 99.3 7.0 2.0 4 92 <0.2 1.6 2.9 25.2 1.4 4 88 <0.2 1.8 8.3 26.5 Surface 25.2 8.3 26.5 122.5 1.0 3.0 42 25.2 8.3 26.5 122.5 1.5 4 89 <0.2 1.7 4.7 2.8 41 2.0 4 <0.2 1.7 24.5 8.3 28.9 108.4 92 821461 812033 IM12 Fine Moderate 13:53 9.4 Middle 24.5 8.3 28.9 108.4 4.7 8.3 1.9 5 93 <0.2 1.6 43 24.5 2.9 108. 8.4 2.8 24.2 8.2 30.4 92.8 6.5 1.9 5 <0.2 1.8 24.2 8.2 92.8 6.5 Rottom 30.4 8.4 3.0 39 24.2 8.2 30.4 92.7 6.5 1.9 1.7 25.7 8.3 26.6 8.5 4 120.7 Surface 25.7 8.3 26.6 120.5 1.0 25.7 8.4 1.1 5 2.8 Fine Calm 14:29 5.5 Middle 819983 812661 2.8 4.5 25.0 8.3 27.6 8.1 4.2 5 Bottom 25.0 8.3 27.7 115.1 8.1 4.5 25.0 83 27.8 8 1 4.6 4 1.0 0.1 70 25.7 8.3 25.7 125.0 8.9 0.3 6 86 <0.2 1.1 Surface 25.7 8.3 25.7 125.4 1.0 0.1 70 25.7 8.3 25.7 8.8 0.4 6 86 < 0.2 1.1 8.9 SR2 14:47 4.3 Middle 821479 814170 33 344 3.7 91 0.1 24.2 8.3 98.1 6.9 5 <0.2 1.3 Bottom 30.3 98.2 3.7 33 316 83 30.3 6 12 0.1 24.3 90 r0 2 1.0 2.2 245 25.1 8.4 25.7 119.9 8.6 8.6 14 4 Surface 8.4 25.7 119.9 1.0 8.4 1.6 5 24 258 25.1 25.7 4.6 246 2.5 4 2.3 24.6 8.4 28.7 7.6 SR3 Moderate 13:14 Middle 8.4 28.7 107.0 822140 807576 5 4.6 259 8.4 28.7 106 2.4 24.6 8.1 2.2 239 24.5 24.5 8.4 8.4 29.4 7.2 6.5 6.7 6 7 Bottom 24.5 8.4 29.4 101.9 7.2 8.1 2.4 241 29.4 1.0 0.1 236 24.8 8.2 29.5 141.9 10.0 4.4 4 Surface 24.7 8.1 29.6 141.5 1.0 29.8 141.0 9.9 4.5 0.1 249 24.6 8.1 4 4.6 0.0 111 5.7 4 24.3 8.1 8.8 . 30.2 125.4 SR4A 14:19 8.1 30.2 125.2 817175 807791 Fine Calm 9.2 Middle 24.4 4.6 116 24.4 8.1 30.2 5.8 5 0.0 125. 7.1 8.2 0.1 24.2 24.2 8.1 30.6 8.0 8.1 113.1 8.0 5 Bottom 24.2 30.6 0.1 85 7.1 1.0 0.1 256 25.5 8.2 10.4 5.6 29.0 149.3 Surface 25.5 8.2 29.0 149.3 1.0 0.1 275 25.5 8.2 10.4 5.6 6 SR5A 3.6 Middle 816578 810688 Fine Calm 14:36 2.6 0.1 270 25.3 29.0 145.2 10.1 6.6 5 Bottom 25.3 8.2 29.0 145.1 10.1 0.1 275 25.3 144. 10.1 6.5 2.6 1.0 0.1 228 25.2 8.1 29.1 128.0 3.2 Surface 25.2 8.1 29.2 128.0 1.0 0.1 228 25.2 8.1 29.2 127.9 8.9 3.2 6 SR6A Fine Calm 15:05 4.0 Middle 817961 814737 3.0 0.0 234 25.1 8.9 4.9 6 Bottom 8.1 29.4 127.2 8.9 3.0 0.0 248 25.1 8 1 20 / 4.9 5 1.0 3.8 285 24.7 8.3 31.3 106.5 0.5 4 106.4 Surface 31.3 1.0 3.8 298 24.7 8.3 31.3 106.2 5.3 0.5 3 79 4 0 287 24 በ 8.2 31.8 88.9 4.6 0.8 4 SR7 Moderate 15:43 15.7 Middle 8.2 31.8 88.9 823635 823723 Fine 7.9 4.2 313 24.0 8.2 31.8 88.9 4.6 0.8 14.7 4.1 287 24.1 8.2 31.8 90.4 4.3 0.8 4 Bottom 8.2 31.8 90.5 4.3 14.7 4.5 297 24.1 8.2 31.8 90.5 4.4 0.8 4 1.0 25.3 8.3 26.8 114.2 8.1 2.5 2.7 4 Surface 25.3 8.3 26.9 114.1 1.0 25.2 8.3 26.9 114.0 8.1 4 . . 820393 811631 SR8 Fine Moderate 14:02 4.4 Middle -3.4 24.8 3.6 4 8.3 27.9 105.3 7.4 Bottom 24.8 8.3 27.9 105.3 7.4

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.

Martin   M	Water Qua					24 April 21 duri	ing Mid-E	Current		I		1				DO S	aturation	Dissolved	T =		Suspende	ed Solids	Total Alkalin	ity	T	Chromium	T
Martin   M		Weather	Sea	Sampling	Water	Sampling Depth (m)				Water Te	emperature (°C)	<u> </u>	pH	Salin	ity (ppt)				Turbidity	Ì			(ppm)	HK Grid		(µg/L)	Nickei (µg/L
Mary   Mary	Station	Condition	Condition	Time	Depth (m)						Average		Average		Average		-			DA		DA					
Mary   Cale   Mary   Cale						Surface					25.3		8.3		26.7	137.8	137.4	0.7	2.5	+			86 86			<0.2	2.0 1.9
Burny   Moderate   M	C1	Misty	Calm	11:12	8.6	Middle				24.1	24.1		8.1	31.3	31.3			8.2	4.2	4.6		3	89	815641	804246	<0.2	2.0
C2 Bury Modelee 1300 11.6 Modele 5.5 S. 150						Bottom	7.6	2.2	133	23.9	23.9	8.1	8.1	32.1		109.2	100.4	7.7	6.2	<u> </u>	4		88			<0.2	1.8
Column   Modelmen   13:00   11:6   Modelmen   13:00   11:6   Modelmen   13:00   11:6   Modelmen   13:00   11:6   Modelmen   13:00   11:6   Modelmen   13:00   11:6   Modelmen   13:00																	420.0	9.9	6.2							<0.2	1.9
Color   Modele   U.S.   10   Modele   U.S.   10   Modele   U.S.   10   Modele   U.S.   10   Modele   U.S.   10   Modele   U.S.   10   Modele   U.S.   10   Modele   U.S.																				1			00			40.2	1.7
Color   Colo	C2	Sunny	Moderate	13:00	11.6		5.8	0.5	156	25.2	25.2	8.5	8.5	26.7	26.7	101.5	101.6	7.2	4.6	5.2	4	5	89	825697	806967	<0.2	2 1.8 1.8 1.7
California   Cal							10.6	0.5	158	24.9	24.9	8.6	8.6	28.4	28.4	93.8	93.6	6.6	6.1		5		93			<0.2	1.7
Californ   Moderate   10-0   12-0   Moderate   12-0   Moderate   13-0   12-0   Moderate   13-0   1						Surface					25.3		8.4		27.4			0.1	2.0	+		1					1.2
Botton	СЗ	Sunny	Moderate	10:04	12.5	Middle					24.4	8.2	8.2		30.6			6.9	3.6	3.8	4	3	90 00	822123	817802	<0.2	2 1.2 1.2
Mil Fre Cam 11:30							11.5	0.1	120	24.3	24.3	8.2	8.2	31.2	31.2	94.1	04.2	6.6	4.9	1	3		94			<0.2	1.2
Mil						i	1.0	0.1	188	25.0	25.0	8.2	8.2	27.8	27.0	128.2	129.0	9.0	4.9	1	7		89			<0.2	1.1
May   Five   Calm   11-50   Five   Calm   11-50   Five   Calm   11-50   Five   Calm   11-50   Five   Calm   11-50   Five   Calm   11-50   Five   Calm   11-50   Five   Calm   11-50   Five   Five   Calm   11-50   Five   Calm   Ca		_										8.2	0.2	28.1	21.3	127.7	120.0	9.0		ł		_					1.8
No.   Color   11-43   Color   11-45   Color	IM1	Fine	Calm	11:36	5.0	Middle						- 0.0	-	- 20.4	-	- 112.0	-	-	7.2	6.1	-	6	-	817949	807139		2 - 1.8
Martin						Bottom	4.0	0.1	139	24.7	24.7	8.2	8.2	29.0		113.1	113.1	8.0	7.3		4		88			<0.2	1.7
Mode   Section   Mode						Surface		2.6	282	25.6	25.6	8.3	8.3		26.3		133.6	9.4	3.9	1	4	İ	85			<0.2	1.6
Bottom   S.8   27   276   243   24	IM2	Fine	Calm	11:43	6.8	Middle					24.3	8.2	8.2		30.4			8.2	6.2	5.9		4		818164	806178		2 1.6 1.6
Main and large   Main						Bottom	5.8	2.7	276	24.3	24.3	8.2	8.2	30.7		113.3	440.5	8.0	7.7	1	3		90			<0.2	1.6
May   Fine   Calm   11:50   7.0   Middle   3.5   11.4   69   24.4   24.4   24.4   24.4   24.2   24						Surface	1.0	1.3	61	25.5	25.5	8.3	8.3	26.3	26.4	135.7	105.4	9.6	4.0	1	4		87			<0.2	1.6
Bottom   Go   15   65   242	IM3	Fine	Calm	11:50	7.0	Middle	3.5	1.4	69	24.4		8.2		29.3		117.3	117.2	8.3	7.6	7.1	5	5	90 00	818760	805610	<0.2	1.4 2 1.5 1.5
Second   S	livio	rile	Callii	11.50	7.0													77	0.7	71	5	3	87	818700	803010	<0.2	1.5
Martin   M						Bottom	6.0	1.6	70	24.2	24.2	8.1	8.1	30.8	30.8	109.9	110.0	7.7	9.6	<u> </u>	4		87			<0.2	1.5
MA						Surface	1.0	1.9	35	25.2	25.2	8.1	8.1	27.2	27.1	116.0	110.2	8.2	7.4	1	7		91			<0.2	1.5
Solid   Soli	IM4	Fine	Calm	12:03	8.2	Middle				24.5	24.5		8.1		29.5				8.6	8.4		7	91	819719	804594	<0.2	1.5
Middle   12:18   7.8   Surface   1.0   3.0   220   25.4   25.4   8.2   8.2   26.4   26.5   121.7   121.7   8.6   8.6   6.0   6.0   6.0   7.7   87   91   91   91   91   91   91   91   9						Bottom					24.3		8.1		30.4		109.1	7.7 7.7		1						<0.2	1.6 1.5
Middle   Signature   Middle   Signature						Surface	1.0	3.0	220	25.4	25.4	8.2	8.2	26.4		121.7	121.7	8.6	6.0		7		86			<0.2	1.6
Bottom 6.8 3.0 218 24.6 24.6 8.1 8.1 28.9 28.9 199.0 190.9 77 7.7 7.4 7.4 8 87 6 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	IM5	Fine	Calm	12:18	7.8	Middle	3.9	3.0	219	24.9	24.9	8.1	8.1	28.0		115.1	445.0	8.1	6.3	6.5	7	7	90	820748	804875	<0.2	1.5 1.8 1.8
Note   Note			-						218			8.1					100.0	7.7	7.4	-	7		91			<0.2	1.9
Moderate   12:30   7.2   Middle   10   22   10   25.4   2.9   8.1   8.1   27.6   27.6   115.5   115.5   8.2   8.4   9.8   8.5   6   8.9   9.8   8.1   8.1   8.1   27.7   27.6   115.5   115.																		1.1	7.4								1.9
Middle   12:30   72   Middle   3.6   2.1   2.0   24.9   24.9   8.1   8.1   27.7   27.6   115.5   115.5   115.5   12.2   9.7   8.5   7   6   89   90   821045   80805   6.2						Surface	1.0	2.2	10	25.4	25.4	8.2	8.2	26.4	26.4	120.0	120.4	8.5	5.6	1	5		89			<0.2	2.0
Moderate   12:42   8.0   Middle   4.0   2.9   2.12   2.5   2.5   2.5   8.1   8.1   8.1   2.7   2.1   111.1   11.0   7.8   7.8   10.0   7   9.2	IM6	Fine	Moderate	12:30	7.2	Middle	3.6	2.1	20	24.9	24.9	8.1	8.1	27.7	27.6	115.5	115.5	8.2	9.7	8.5	7	6	89	821045	805805	<0.2	1./
Surface 1.0 2.8 223 25.7 25.6 8.2 8.2 24.8 132.4 131.9 9.4 4.7 6 88 88 88 88 86.5 5.4 6.0 6 6 90 90 821354 806826 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2						Bottom					24.8		8.1		28.0					-						<0.2	1.7
Moderate   12:42   8.0   Middle   4.0   2.9   2.18   25:1   25:1   8.1   8.1   27:1   27:2   27:1   111.1   111.0   79   8.0   5.5						Surface	1.0	2.8	223	25.7	25.6	8.2	8.2	24.7		132.4	404.0	9.4	4.7		6		88			<0.2	1.8
Bottom 7.0 2.9 222 24.9 24.9 8.1 8.1 27.8 27.8 113.5 13.8 8.0 8.0 9.0 6 91	IM7	Fine	Moderate	12:42	8.0	Middle	4.0	2.9	218	25.1	25.1	8.1	8.1	27.1		111.1	111.0	7.9	5.4	6.4	6	6	90 00	821354	806826	<0.2	2 1.3
Surface 1.0 0.2 190 26.1 1.0 0.2 207 26.0 26.1 8.6 8.6 23.9 23.9 131.7 131.4 9.3 4.7 7 86 86 86 86 86 86 86 86 86 86 86 86 86							7.0	2.9	222	24.9		8.1		27.8		113.8	112.0	8.0	9.0	1	6	1	90			<0.2	1.2
Sulface 1.0 0.2 207 26.0 20.1 8.6 0.0 23.9 131.1 131.4 9.3 8.5 4.7 6 86 86 Q.2 Q.2 Q.2 Q.2 Q.2 Q.2 Q.2 Q.2 Q.2 Q.2									227	24.9		8.1				113.7	113.6	8.0	9.0				92 86			<0.2	1.2 1.5
IM8 Sunny Moderate 12:33 76 Middle 3.8 0.2 181 25.3 25.3 8.6 8.6 26.0 26.0 107.7 107.6 7.6 6.9 6.4 6 6 90 on 821810 808146 <0.2 1						Surface	1.0	0.2	207	26.0	26.1	8.6	8.6	23.9	23.9	131.1	131.4	9.3	4.7	‡	6	<b>†</b>	86			<0.2	1.5
7 3.8 0.2 190 25.3 8.6 26.0 107.5 7.6 7.0 6 90 < 0.2	IM8	Sunny	Moderate	12:33	7.6	Middle	3.8	0.2	190	25.3	25.3	8.6	8.6	26.0	26.0	107.5	107.6	7.6	7.0	6.4	6	6	90	821819	808146	<0.2	1.8
Bottom 6.6 0.1 235 25.2 25.2 8.6 8.6 27.0 27.0 103.5 103.7 7.3 7.7 5 94 0.2 0.2						Bottom					25.2		8.6		27.0												1.8

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

Water Quality Monitoring Results on during Mid-Ebb Tide 24 April 21 DO Saturation Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Average Value Average Value Average Value (Northing) (Easting) 0.3 140 Surface 8.4 23.8 131.2 0.4 152 26.0 5.0 6.2 1.6 3.7 0.4 139 25.5 8.3 25.0 7.9 5 90 <0.2 110.9 808788 IM9 Sunny Moderate 11:51 7.4 25.5 8.3 25.0 6.3 90 822087 3.7 0.4 141 25.5 8.3 25.0 110.7 7.9 6.2 6 91 <0.2 1.6 6.4 0.2 87 25.1 8.3 27.1 102.4 7.2 7.7 6 94 <0.2 1.2 Bottom 8.3 27.1 102.5 7.3 25.1 6.4 0.2 93 25.1 8.3 27 1 102 5 7.3 7.7 6 94 <0.2 1.3 1.0 0.5 124 26.0 8.4 24.1 130.5 9.2 4.8 85 < 0.2 1.3 Surface 8.4 24.1 130.4 1.0 0.6 134 26.0 8.4 24.1 130.3 9.2 4.7 5 86 <0.2 1.3 3.7 0.6 131 25.5 25.5 8.4 8.5 6.2 5 91 90 <0.2 1.4 IM10 Sunny Moderate 11:42 7.4 Middle 8.4 25.2 119.6 822375 809804 3.7 0.7 140 6 <0.2 8.4 119. 8.5 6.4 0.4 118 8.3 1.3 25.2 26.6 104. 7.4 8.9 7 93 < 0.2 Bottom 8.3 26.6 104.9 7.4 1.5 6.4 0.4 121 25.2 8.3 104 9 7.4 9.0 6 94 26.6 **-**0 2 1.0 0.5 26.1 4.2 8.4 8.9 1.6 Surface 8.4 23.9 125.0 1.7 1.0 4.3 86 0.6 116 26.0 8.4 23.9 124.9 8.9 5 < 0.2 82 5.8 1.6 1.5 25.2 25.2 7.5 7.6 6 5 90 91 4.4 8.3 26.9 106. <0.2 IM11 Sunnv Moderate 11:25 8.7 Middle 8.3 26.9 107.2 90 822039 811460 1.6 117 4.4 0.6 8.3 26.8 1.6 7.7 0.3 104 24.8 8.2 28.7 89.0 6.3 6.9 3 94 <0.2 6.3 Bottom 24.8 8.2 28.7 89.1 7.7 0.3 107 24.8 8.2 28.7 89.2 6.3 6.8 4 94 <0.2 1.5 0.5 26.1 5.0 8.3 86 <0.2 1.6 24.0 119.2 8.4 Surface 26.1 8.3 24.0 119.2 1.0 0.5 95 26.0 8.3 24.0 119.1 8.4 4.9 6 90 <0.2 1.6 4.8 0.4 116 7.2 5.4 5 <0.2 1.5 25.2 8.3 27.2 101. 90 812026 IM12 Moderate 11:18 9.6 Middle 25.2 8.3 27.1 101.8 821454 Sunny 4.8 8.3 5.3 4 90 94 <0.2 1.4 0.4 120 25.2 8.6 0.2 24.9 8.2 28.3 96.1 6.8 5.3 4 <0.2 1.3 24 9 8.2 28.4 95.8 6.8 Rottom 0.2 94 24.9 8.2 28.5 95.5 6.7 5.1 1.5 8.6 25.9 8.4 25.5 4 132.4 9.3 Surface 25.9 8.4 25.5 132.3 1.0 25.9 8.4 132. 9.3 3.7 5 2.6 Sunnv Moderate 10:46 5.2 Middle 819972 812661 2.6 4.2 25.2 8.3 27.6 8.3 4.8 5 Bottom 25.2 8.3 27.6 118.2 8.3 4.2 25.2 83 27.6 118 83 4.8 5 1.0 0.4 25.9 8.4 24.7 131. 9.3 3.7 86 <0.2 1.5 Surface 25.9 8.4 24.7 131.2 1.0 0.4 73 25.9 8.4 24.7 131. 9.3 3.7 4 85 < 0.2 1.6 SR2 Sunny Moderate 10:29 4.3 Middle 821465 814179 33 5.0 90 0.2 71 25.2 8.4 7.7 8.0 4 <0.2 1.6 111.4 7.9 Bottom 5.0 33 8.4 27.6 3 15 0.2 75 25.3 90 r0 2 1.0 0.3 211 26.1 8.5 23.9 137 9.7 4.6 7 Surface 8.5 137.6 9.7 8.5 4.5 1.0 0.3 221 26.1 23 0 6 4.3 7.0 7 0.1 224 25.3 8.4 25.9 109. 7.8 SR3 Moderate 12:38 Middle 8.4 109.6 822144 807592 6.9 4.3 8.4 6 0.1 235 25.3 25.9 5 4 7.6 7.6 0.1 235 25.1 8.4 8.4 26.8 7.6 7.6 11.2 11.1 Bottom 25.1 8.4 26.8 107.4 7.6 0.1 245 25.1 26.8 1.0 1.7 251 5.9 25.3 8.2 26.9 125. 8.9 5 Surface 25.3 8.2 27.0 125.3 1.0 27.1 8.8 1.8 269 25.2 8.2 125. 5.9 6 4.6 1.7 254 24.7 8.4 6 8.1 8.1 . 28.8 114.4 SR4A 8.1 28.8 114.4 817209 807827 Misty Calm 10:50 9.2 Middle 24.7 4.6 268 24.7 8.1 28.8 114.4 8.5 5 1.8 8.2 1.7 255 263 24.6 8.1 112.0 7.9 7.9 9.6 9.7 8.1 29.1 29.1 112.6 79 6 24.6 29.1 Rottom 1.8 24.6 1.0 0.1 25.7 8.2 26.5 9.7 5.0 6 137.8 25.7 8.2 26.5 137.7 Surface 1.0 0.1 25.7 8.2 26.5 137. 9.7 4.9 7 SR5A 10:31 3.2 Middle 816608 810696 Mistv Calm 2.2 0.1 25.7 26.5 136.1 9.6 6.0 8 Bottom 25.7 8.2 26.5 135.7 9.6 25.7 9.5 6.0 2.2 0.1 15 1.0 0.1 41 25.7 8.3 25.7 145.4 3.2 Surface 25.8 8.3 25.7 145.4 1.0 0.1 43 25.8 8.3 25.7 145.3 10.2 3.1 6 SR6A Misty Calm 10:02 4.2 Middle 817972 814753 3.2 0.1 277 25.5 134. 9.5 4.2 5 Bottom 8.2 26.3 134.6 9.5 3.2 0.1 299 25.5 26.3 13/1 4.3 5 1.0 0.6 61 24.7 8.3 30.0 108.0 7.6 3.4 4 108.0 Surface 30.0 1.0 0.7 61 24.7 8.3 30.1 107.9 7.6 3.3 4 74 0.2 14 24.3 8.2 31.1 95.4 6.7 3.9 4 SR7 Sunny Moderate 09:33 14.8 Middle 8.2 31.1 95.4 823649 823733 4 7.4 0.2 15 24.3 8.3 31.1 95.4 6.7 3.9 13.8 0.2 55 24.2 8.3 31.4 93.1 6.5 3.9 2 Bottom 8.3 31.4 93.2 6.5 13.8 0.2 56 24.2 8.3 31.4 93.2 6.5 3.9 3 1.0 26.3 8.4 23.8 135.4 9.6 4.5 6 Surface 26.3 8.4 23.8 135.3 135.2 1.0 26.3 8.4 23.8 9.6 4.6 5 -. 811645 SR8 Sunny Moderate 11:10 4.7 Middle 820384 -3.7 26.5 5.1 5 8.4 24.4 126.5 8.9 26.5 8.4 24.4 126.4 8.9

DA: Depth-Averaged

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

Water Quality Monitoring Results on during Mid-Flood Tide 24 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Condition Time Depth (m) (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Value DA Condition Value Value Average Value (Easting) 2.0 25.6 Surface 25.6 8.3 27.1 136.2 1.0 2.2 25.6 135. 9.5 4.9 88 <0.2 1.6 2.2 24.1 7.9 5.9 1.6 91 <0.2 C1 8 1 31.1 111.9 804263 16:23 8.2 Middle 24.1 815618 Fine Calm 17 4.1 24.1 31.1 7.9 5.9 5 91 <0.2 1.7 2.2 8.1 7.2 2.2 24.0 8.1 31.7 108.7 7.6 6.8 3 93 <0.2 1.7 8.1 7.6 Bottom 24 0 31.7 108.7 6.7 2.3 24.0 1.6 7.2 8.1 4 93 < 0.2 1.0 0.3 87 4.5 < 0.2 8.6 1.6 Surface 26.5 8.6 22.7 150.9 358 26.5 25.1 10.7 4.4 4 88 1.0 0.3 8.6 <0.2 5.1 91 2.3 5.4 0.4 8.5 7.0 4 26.3 98.9 C2 Fine Moderate 15:10 10.7 Middle 25.1 8.5 26.3 98.9 91 825670 806945 1.9 26.3 98.9 7.0 5.1 4 91 <0.2 5.4 0.4 29 25.1 8.5 9.7 0.4 346 25.0 8.5 27.4 97.2 6.9 6.2 5 95 <0.2 1.8 8.5 27.4 97.4 6.9 Bottom 25.0 9.7 0.5 318 25.0 8.5 27.4 97.5 6.9 6.1 5 95 <0.2 1.7 1.0 0.3 241 25.4 8.4 3.1 4 <0.2 2.0 Surface 25.4 8.4 27.4 134.8 1.0 0.3 251 25.4 8.4 134.4 9.4 3.1 3 87 <0.2 2.2 4 5 1.9 6.1 0.4 7.1 3.3 91 90 <0.2 252 24.6 8.2 30.0 101. C3 101.5 817806 Sunnv Moderate 17:22 12.1 Middle 24.6 8.2 30.0 822114 1.9 0.4 24.6 11.1 0.4 266 24.3 8.2 92.9 6.5 7.9 5 95 <0.2 1.8 Bottom 24.3 8.2 31.2 93.0 6.5 11.1 0.4 290 24.3 8.2 31.2 93.0 6.5 7.9 4 94 1.8 1.0 0.2 24.6 8.3 29.6 134.4 5.3 88 <0.2 1.8 Surface 24.6 8.3 29.7 134.0 1.0 24.6 8.3 29.8 133.0 9.4 5.3 6 87 <0.2 1.6 0.2 807154 IM1 Fine Calm 16:01 4.6 Middle 817965 3.6 0.1 345 24.3 8.2 30.9 112 2 7.9 9.3 87 < 0.2 1.8 Bottom 24.3 8.1 30.9 112.0 7.9 3.6 0.1 317 24.3 8.1 30.8 1117 79 9.3 7 87 <0.2 1.7 266 1.0 2.6 25.0 8.3 28.7 134.4 9.4 5.5 6 87 < 0.2 1.9 Surface 8.3 28.8 133.7 1.0 2.7 278 24.8 8.3 28.9 132.9 9.4 5.5 7 87 <0.2 1.8 7.5 1.8 3.3 2.7 263 24.4 8.2 30.3 7.9 6 91 <0.2 IM2 Fine Calm 15:53 6.6 Middle 8.2 30.4 112.3 818153 806187 7.6 <0.2 3.3 2.8 283 24.3 8.2 30.5 7.9 5 91 24.2 6 5 1.7 5.6 2.6 266 8.2 31 1 7.8 8.6 92 <0.2 8.2 31.1 111.3 7.8 26 1.7 5.6 274 8.2 31 1 7.8 8.7 92 <0.2 24.2 1.0 22 40 26.1 83 26.9 141 ( qq 4.8 89 < 0.2 1.9 Surface 8.3 26.9 141.0 1.8 1.0 4.8 89 2.2 41 26.1 8.3 140. 9.8 8 <0.2 26.9 7.6 7.6 10.8 1.8 1.7 1.7 7.7 5 92 <0.2 3.4 2.3 45 24.4 8.1 30.0 109. IM3 Fine Calm 15:46 6.8 Middle 24.4 8.1 30.0 109.3 818760 805598 2.5 4 92 93 3.4 48 24.3 8.1 <0.2 4 5.8 43 24.2 8.1 31.2 109.2 7.7 Rottom 24.2 8.1 31.2 109.2 7.7 5.8 2.7 24.2 8.1 31.2 109.2 7.7 10.8 5 93 1.6 46 <0.2 1.7 236 1.0 4.7 1.8 26.0 8.3 26.6 139.5 9.7 6 88 <0.2 Surface 26.0 8.3 26.7 139.0 1.0 1.8 252 26.0 8.3 26.8 4.7 5 89 <0.2 1.7 4.0 9.2 <0.2 1.8 245 6 91 2.2 24.6 8.1 29.0 7.3 IM4 Fine Moderate 15:35 8.0 Middle 24.6 8.1 29.0 102.7 819725 804609 4.0 263 251 24.6 8.1 9.3 91 <0.2 2.3 29.1 5 2.3 24.3 10.5 5 93 1.5 8.1 30.3 8.1 101 1 Bottom 24.3 30.3 7.0 2.3 274 24.3 10.4 4 93 <0.2 1.7 236 1.8 1.0 2.1 25.7 8.3 25.7 4.8 91 <0.2 141. 10.0 9 Surface 25.7 8.3 25.8 141.1 1.0 2.2 244 25.7 9.9 4.8 9 91 <0.2 9.2 3.7 1.9 240 6.0 8 91 <0.2 1.6 25.3 8.2 26.6 8.5 IM5 Moderate 15:27 7.4 Middle 25.3 8.1 26.6 119.7 820752 804885 Fine 3.7 251 25.3 6.1 91 <0.2 2.0 8 1.8 6.4 2.0 240 25.2 8.1 8.1 7.9 8.2 8.2 93 <0.2 25.2 8.1 27.0 111.3 7.9 Bottom 6.4 2.1 244 25.2 93 < 0.2 1.0 1.8 27 25.5 8.3 26.1 6.4 6 88 <0.2 1.8 9.8 Surface 25.5 8.3 26.2 138.1 1.0 1.9 27 25.4 8.3 9.7 6.4 7 88 <0.2 1.2 3.4 1.9 31 25.2 26.8 8.2 8.0 6 90 <0.2 Fine Moderate 15:20 Middle 25.2 8.1 26.8 116.1 821056 805837 <0.2 3.4 2.0 31 25.2 8.1 26.8 115. 8.2 7.9 6 90 1.3 5.8 2.0 33 25.2 8.1 26.8 114. 8.1 8.1 5 92 <0.2 114.6 8.1 5.8 34 25.2 8 1 26.8 8.2 6 91 1.7 1.4 1.0 88 25.7 8.3 25.6 141 10.0 5.6 87 <0.2 Surface 141.5 10.0 5.6 9.1 1.0 1.8 92 25.6 83 25.7 141 6 87 <0.2 6 1.3 4.0 1.8 90 90 <0.2 25.3 8.1 26.5 122.1 8.6 IM7 Moderate 15:11 Middle 122.5 821325 806828 90 4.0 1.8 92 25.2 8.2 26.6 122. 8.7 9.0 6 7.0 1.7 84 25.1 8.1 27.1 7.9 10.0 6 92 <0.2 1.3 Bottom 25.1 8.1 27.1 111.7 7.9 7.0 1.8 85 25.1 8.1 10.0 6 <0.2 1.3 1.0 0.4 246 26.1 8.5 24.8 147.5 10.4 3.8 5 88 < 0.2 1.7 Surface 26.1 8.5 24.8 147.9 24.8 147.8 10.4 1.6 8.5 1.0 0.4 260 26.1 3.8 6 87 < 0.2 8.5 24.8 10.0 4.2 6 91 <0.2 1.7 3.8 0.3 245 26.0 141.3 26.0 8.5 24.8 140.9 821849 808142 IM8 Sunny Moderate 15:32 7.5 Middle 1.6 1.7 24.8 140. 9.9 4.3 91 3.8 261 26.0 8.5 5 0.3 7.0 95 1.5 6.5 0.3 265 25.4 8.3 26.2 110.0 7.8 7.9 <0.2 6 25.4 8.3 26.2 110.9 7.9 Rottom

DA: Depth-Average

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

Water Quality Monitoring Results on during Mid-Flood Tide 24 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Condition Condition Depth (m) Value Value Average Value (Northing) (Easting) 0.4 Surface 8.5 24.8 0.5 267 26.1 10.7 4.0 1.6 3.4 0.4 241 25.9 8.4 25.0 128 1 9.0 4.4 6 91 <0.2 130.7 808830 IM9 Sunny Moderate 15:40 8.4 25.0 822101 3.4 0.4 251 25.9 8.4 25.0 133.2 9.4 4.4 5 92 <0.2 1.6 5.8 0.4 252 25.3 8.3 26.4 101.7 7.2 6.4 5 95 <0.2 1.6 Bottom 8.3 26.4 101.8 7.2 25.3 5.8 0.5 257 25.3 8.3 26.4 101.8 72 6.4 6 95 <0.2 1.6 1.0 0.4 289 26.4 8.6 24.6 167. 11.7 3.8 87 < 0.2 1.5 Surface 8.6 24.6 166.8 1.0 0.4 305 26.4 8.6 24.6 166. 11.7 3.8 6 87 <0.2 1.5 8.7 4.1 0.3 270 25.8 25.8 8.4 4.5 4.5 6 92 91 <0.2 1.5 IM10 Sunny Moderate 15:49 8.2 Middle 8.4 25.3 123.0 822384 809804 4.1 291 8.7 0.3 8.4 25.3 122. 0.3 8.3 5.3 5 1.6 7.2 280 25.4 26.1 106.4 7.5 95 < 0.2 Bottom 8.3 26.1 106.4 7.5 1.7 7.5 5.3 6 72 0.3 307 25.4 8.3 106.3 95 26.1 **-**0 2 1.0 0.4 288 26.4 4.0 8.6 24.7 11.8 1.4 Surface 8.6 24.7 168.5 3.9 3.9 3.9 1.5 1.0 168. 11.8 87 < 0.2 0.4 310 26.4 8.6 24.7 5 1.3 25.9 25.9 9.5 91 92 <0.2 3.8 0.4 278 289 8.4 135. IM11 Sunnv Moderate 16:01 7.6 Middle 8.4 25.3 135.4 822053 811454 6 0.4 8.5 135.4 7 <0.2 1.5 6.6 0.4 281 25.0 8.2 27.4 6.6 12.9 95 93.9 8.2 94.2 6.7 Bottom 25.0 27.4 6.6 0.4 292 25.0 8.2 27.4 94.4 6.7 12.7 8 95 <0.2 1.4 0.4 26.4 <0.2 1.7 8.5 24.6 Surface 26.4 8.5 24.6 157.7 1.0 0.4 314 26.4 8.5 24.6 157.3 3.5 6 88 <0.2 1.6 4.7 0.3 289 7.2 5.2 5 91 <0.2 1.5 25.2 8.2 26.7 812069 IM12 Moderate 16:09 9.3 Middle 25.2 8.2 26.7 101.0 821478 Sunny 4.7 5.3 6 92 95 <0.2 1.6 0.4 301 8.2 25.2 8.3 0.2 289 24.5 8.2 29.9 6.1 7.2 6 <0.2 1.6 24.5 8.2 87.2 6.1 Rottom 29.9 8.3 0.2 289 24.5 8.2 29.9 87 3 7.2 1.5 26.5 8.5 25.2 11.2 11.2 4.0 5 160.5 Surface 26.5 8.5 25.2 160.4 1.0 26.5 4.0 6 2.7 Sunnv Moderate 16:42 Middle 819981 812660 2.7 44 26.1 8.4 25.5 142.0 10.0 4.2 8 Bottom 26.1 8.4 25.5 141.9 10.0 44 26.1 8.4 25 5 141 99 4.2 8 1.0 0.4 306 25.9 8.4 26.4 144.2 10.1 4.6 9 88 <0.2 1.3 Surface 25.9 8.4 26.4 144.0 1.0 0.4 318 25.9 8.4 26.4 143.7 10.1 4.6 9 87 < 0.2 1.4 SR2 Sunny Moderate 16:57 5.0 Middle 821452 814189 4 0 225 6.7 91 0.2 25.0 8.2 28.7 7.2 6 <0.2 1.4 102.9 7.2 Bottom 4 0 239 8.2 28.7 6.9 6 15 0.2 24 9 91 r0 2 1.0 0.5 217 26.6 8.6 24.0 153.3 10.8 4.1 7 Surface 8.6 24.0 153.2 8.6 41 7 1.0 0.6 226 26.6 24 0 4.6 4.7 8 0.5 226 25.9 8.5 24.8 8.8 SR3 Moderate 15:26 Middle 8.5 24.8 124.8 822161 807591 4.8 4.6 8.5 0.5 245 25.8 24.8 8 8.1 0.3 245 25.2 8.4 8.4 26.6 12.3 13.1 Bottom 25.2 8.4 26.6 102.3 7.3 8.1 0.3 250 25.2 26.6 1.0 4.9 1.9 33 26.0 8.3 26.9 143.4 10.0 8 Surface 25.9 8.3 27.1 143.1 1.0 142.8 10.0 4.9 2.0 34 25.8 8.3 9 4.5 2.4 6.0 8 25.0 8.5 . 8.2 28.6 120.8 SR4A 8.1 28.7 121.4 817170 807796 Fine Calm 16:43 9.0 Middle 25.0 4.5 24.9 8.1 28.7 8.6 5.9 7 2.6 36 122. 9.9 9.9 8.0 2.3 24.2 24.2 8.1 30.8 7.4 38 8.1 105.4 7.4 Rottom 24.2 30.8 8.0 30.8 8 1.0 0.2 273 26.2 8.3 26.5 10.8 3.4 8 155.4 26.2 8.3 26.5 154.9 Surface 1.0 0.2 281 8.3 154. 10.8 3.4 9 26.2 SR5A 17:01 4.4 Middle 816593 810678 Fine Calm 3.4 0.1 276 26.2 26.5 10.5 4.2 8 Bottom 26.3 8.3 26.5 150.7 10.5 0.1 285 26.3 8.3 10.4 4.2 3.4 1.0 0.0 93 26.1 8.4 27.1 172.8 3.5 Surface 26.1 8.4 27.1 172.9 1.0 0.0 96 26.1 8.4 27.1 172.9 12.0 3.6 7 SR6A Fine Calm 17:45 4.6 Middle 817949 814729 3.6 0.1 200 25.2 9.1 6.4 8 Bottom 8.2 28.3 129.1 9.1 3.6 0.1 216 25.2 28 / 6.4 7 1.0 0.0 116 24 9 8.3 30.0 120.6 8.4 3.5 120.6 Surface 30.0 1.0 0.0 121 24.9 8.3 30.0 120.5 8.4 3.5 4 73 0.1 184 24.4 8.2 31.0 97.0 6.8 4.9 5 5 SR7 Sunny Moderate 17:58 14.6 Middle 8.2 31.0 97.0 823644 823737 7.3 0.1 190 24.4 8.2 31.0 97.0 6.8 4.9 13.6 0.1 76 24.4 8.2 31.2 97.7 6.8 5.5 6 Bottom 8.2 31.2 97.8 13.6 0.1 79 24.4 8.2 31.2 97.8 6.8 5.3 5 1.0 26.5 8.5 146.5 10.2 4.9 5 Surface 26.5 8.5 25.0 146.1 145.7 1.0 26.5 8.5 25.0 10.2 4.9 6 0.2 . . 820385 811600 SR8 Sunny Moderate 16:18 4.2 Middle -3.2 26.5 12.8 3 8.4 25.9 125.3 8.7 Bottom 26.5 8.4 25.9 125.4 8.8

DA: Depth-Averaged

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

Martine   Mart			toring Res			27 April 21 d	uring Mid-E	Current	1			1	-11	C-F	it - (==4)	DO Sa	aturation [	Dissolved	The sale (see )	NITI II			Total Alkalinit	y Consultani	Constitution	Chromium	Nielel ( 4
Column   C		Weather	Sea	Sampling	Water	Sampling Depth (	m)	Speed		Water Te	emperature (°C)	<u> </u>		Salin	nity (ppt)	(	%)	Oxygen	-		· (mg	/L)	(ppm)	HK Grid		(µg/L)	піскеї (µg/L
Marche   1909   Marche   190	Station	Condition	Condition	Time	Depth (m)						Average		Average		Average					DA		DA		(Northing)	(Easting)		
Class   Male						Surface					24.3		8.2		30.4	113.0	112.9	· a					86 87			<0.2	1.5
Martin	C1	Cloudy	Moderate	12:50	8.7	Middle	4.4	2.3	275	24.3	24.3	8.2	8.2	31.6	31.7	110.4	110.4	7.0	4.8	8.3	7	6	87	815604	804264	<0.2	1.6
Control   Cont						Bottom	7.7	2.2	278	24.4	24.4	8.2	8.2	32.3	323	109.7	100 7	.6 76	15.1	:	7	İ	90			<0.2	1.4
Second   S																	7	.6									
Mary   Modern   11-22   11-3   Stock						Surface	1.0	0.5	169	24.7	24.7	8.2	8.2	28.0	27.9	91.5	91.5	i.5	5.3	. [	11	•	88			<0.2	1.7
Moderne   1,27   11,8   Moderne   13,7   11,8   Moderne   13,7   11,8   Moderne   13,7   11,8   Moderne   13,8   Moderne	C2	Rainy	Moderate	11:22	12.0	Middle	6.0		184	24.7	24.7	8.2	8.2		28.4		91.6	i.5	8.6	7.7	9	10	91	825677	806940	<0.2	1.6
Californ   Californ						Bottom					24.7		8.2		28.5					. [							
Martine   1327   113   Martine   1327   114   Martine   1327   115   Martine   1327   115   Martine   1327   115   Martine   1327   115   Martine   1327   125   Martine   1327   125   Martine   1327   125   Martine   1327   125   Martine   1327   125   Martine   1327   125   Martine   1327   125   Martine   1327   Martine   1327   125   Martine   1327   Marti						Surface	1.0	0.5	50	24.6	24.6	8.2	8.2	28.8	28.9	94.8	046 6	.7	4.6		6		85			<0.2	1.4
Mary   Moderate   12-31   Fig.   Moderate   12-31   Fig.   Moderate   12-31   Fig.   Moderate   12-31   Fig.   Moderate   12-31   Fig.   Moderate   12-31   Fig.   Moderate   12-31   Fig.	00	D.:		40.07	44.0												6						00	000400	047000	.0.0	4.4
May Moderate 1224 72 Mo	C3	Rainy	Moderate	13:27	11.8	Middle		0.4	69	24.6		8.2		29.6		92.5	92.0 6	.5	5.3	5.3	6	Ь	88	822130	817820	<0.2	1.5
Mart   Modelsee   1231   5.3   Solution   1231   5.3						Bottom	10.8	0.3	80	24.5	24.5	8.2	8.2	30.0	30.0	92.1	92.0	5.5	6.0	-	6		89			<0.2	1.5
Main   Moderate   1231   5.3						Surface					24.3		8.2		30.2			1		.							
Mary   Moderne   12-04   Part   Par	IM1	Rainy	Moderate	12:31	5.3	Middle	-	-	-	-	-	-		-		-		7.4	-	9.9	-	7	- 89	817958	807144	- <0.2	1.7
Moderate 12.94 7.2 Moderate 12.17 7.5 Moderate 12.1						Pottom	4.3	2.0	0	24.3	24.2	8.2	0.7		21.2		105.1	.4 7.4	12.3		8	ĺ	91			<0.2	1.6
Moderate   12.4   7.2   Moderate   12.4   7.2   Moderate   12.5   12.5   Moderate   12.5   12.5   Moderate   12.5   12.																	7	.4						1			
Moderate   Moderate						Surface	1.0	2.2	231	24.3	24.3	8.2	8.2	30.5	30.4	106.9	106.9	.5	5.8		7		86			<0.2	1.6
Mail	IM2	Rainy	Moderate	12:24	7.2	Middle		2.1	228	24.3	24.3	8.2	8.2	31.2	31.1				5.9	7.7	6	7	89	818164	806175	<0.2	1.8
May Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 75 Moderate 12:17 85 Moderate						Bottom					24.4	8.2	8.2		31.6		107.0	7.5		. [							
MB Rairy Moderate 12:17 7.5 Middle 3.3 2.1 2.5 4.8 4.3 2.4 5.2 4.3 1.2 3.2 2.1 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2						Surface	1.0	2.3	258	24.3	24.3	8.2	8.2	30.4	30.4	107.2	407.2 7	.5	6.5	.	6		86			<0.2	1.5
Bottom   S.   24   248	IMO	Point	Moderate	10:17	7.5	Middle	3.8		257			8.2			21.2		407.7	.5 7.5	6.9		7	7	88 00	919704	905504	-0.2	1.6
Moderate   1207   Rainy   Moderate   1207   Rainy   Moderate   1208   Rainy   Moderate   1208   Rainy   Moderate   1208   Rainy   Moderate   1208   Rainy   Moderate   1209   Rainy   Rainy   Moderate   1209   Rainy   Rainy   Moderate   1209   Rainy   Rainy   Moderate   1209   Rainy   Rainy   Moderate   1153   Rainy   Rainy   Moderate   1153   Rainy   Moderate   1153   Rainy   Moderate   1153   Rainy   Moderate   1153   Rainy   Moderate   1154   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Moderate   1155   Rainy   Rainy   Rainy   Rainy   Moderate   1155   Rainy	livio	Railly	Woderate	12.17	7.5	ivildale									31.2		7	5		0.0		,	87	010754	803394	<0.2	1./
May Moderate Pair Pair Pair Pair Pair Pair Pair Pair						Bottom	6.5	2.4	271	24.4	24.4	8.2	8.2	31.7	31.7	107.4	107.5	7.5	13.2		8		91			<0.2	1.5
Marcon   Moderate   12.07   Mo						Surface					24.4		8.2		29.6			1		.						<0.2	1.5
Bottom 7.0 2.6 272 2.44 2.4. 8.2 8.2 31.9 31.9 105.1 105.1 7.3 7.3 102. 7.8 90 91 90 91 90 90 91 90 90 91 90 90 91 90 90 90 90 90 90 90 90 90 90 90 90 90	IM4	Rainy	Moderate	12:07	8.0	Middle	4.0	2.3	270	24.4	24.4	8.2	8.2	31.3	31.4	105.5	405 5 7	.4 7.3	8.6	8.2	6	7	88	819740	804604	<0.2	1.6
Note   Note						Bottom	7.0	2.6	272	24.4	24.4	8.2	8.2	31.9	31.9	105.1	105 4 7	.3 -,	10.2		7		90			<0.2	1.8
Moderate   12:00   8.4   Middle   4.2   1.6   6.7   24.3   24.3   8.2   8.2   31.2																	1	.3									
Moderate   12-00   Moderate						Surface	1.0	1.6	59	24.5	24.5	8.1	8.1	28.4	28.4	100.6	700.0	1.1	4.9	. [	4		86			<0.2	1.6
Moderate   11.53   Rainy   Moderate   11.64   Rainy   Moderate   11.65   Rainy   Moderate   11.65   Rainy   Moderate   11.65   Rainy   Moderate   11.65   Rainy   Moderate   11.67   Rainy   Moderate   11.67   Rainy   Moderate   11.67   Rainy   Moderate   11.67   Rainy   Moderate   11.57   Rainy   Rainy   Moderate   11.57   Rainy   Rainy   Moderate   11.57   Rainy   Rai	IM5	Rainy	Moderate	12:00	8.4	Middle	4.2	1.6	71	24.3	24.3	8.2	8.2	31.2	31.2	102.8	102.9	.2	8.5	7.5	4	5	87	820735	804883	<0.2	1.7
Moderate   11:53   7.6						Bottom					24.4	8.1	8.1		31.4		102.5	7.2	9.3	.		İ				<0.2	1.6
Moderate   11:53   7.6   Middle   3.8   1.8   1.44   24.3   24.3   24.3   8.1   8.1   30.4   30.4   100.5   7.1   7.1   7.1   9.2   9.5   5   5   5   88   88   821066   805807   6.2   4.2   4.2   4.3						Surface	1.0	1.8	145	24.5	24.5	8.1	8.1	28.2	28.3	100.6	100 6 7	1.1	6.0		5		86			<0.2	1.8
Bottom 6.6 1.7 140 24.3 24.3 8.1 8.1 30.5 100.4 100.4 7.0 7.0 12.8 5 89 9	IMG	Point	Moderate	11:59	7.6	Middle			144	24.3	24.2	8.1	0.1	30.4	20.4	100.5	100 5	1.1	9.2	0.5	5	_	88	921066	905907	<0.2	1.7
Moderate   11:67   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:58   Moderate   11:58   Moderate   11:59   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:58   Moderate   11:58   Moderate   11:59   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:58   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:58   Moderate   11:58   Moderate   11:57   8.4   Moderate   11:57   8.4   Moderate   11:58   Moderate   11:57   8.4   Moderate   11:58   Moderate   11:58   Moderate   11:58   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:57   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:57   Moderate   11:58   Moderate   11:58   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:58   Moderate   11:57   Moderate   11:58	IIVIO	Railly	Woderate	11.55	7.0												- /			9.5		3	88	82 1000	803807	<0.2	1./
Moderate Half Mo						Bottom	6.6	1.7	153	24.3	24.3	8.1	8.1	31.0	30.9	100.4	7 7	.0 7.0	13.3		4		91			<0.2	1.6
May   Moderate   11:46   8.2   Middle   4.1   2.1   358   24.3   24.3   8.1   8.1   30.2   30.3   10.2   10.2   17.2   9.6   9.8   5   88   88   821366   80681   40.2   40.2   40.2   1.1   1.2   4.3   4.1   4						Surface				24.6	24.6	8.1	8.1	27.3	27.3	100.0	100.2	.2	6.3	.						<0.2	1.5
Bottom 7.2 3.0 1 24.3 24.3 8.1 8.1 30.5 30.5 10.8 10.8 7.2 7.2 13.2 5 90	IM7	Rainy	Moderate	11:46	8.2	Middle				24.3	24.3		8.1		30.3	102.1	102.1	7.2	9.6	9.8	5	5		821366	806851	<0.2	1.1
No.   No.						Bottom	7.2	3.0	1	24.3	24.3	8.1	8.1	30.5	30.5	101.8	101 0 7	.2 72	13.2	:	5	İ	90			<0.2	1.1
M8 Rainy Moderate 11:57 8.4 Middle 4.2 0.2 111 24.5 24.5 8.2 8.2 8.2 8.3 8.4 93.4 93.6 93.5 6.6 7.7 7.9 5 92.5 92.5 92.5 92.5 92.5 92.5 92.5																	/	.2						1			1.0
Rainy Modelate 11.57 6.4 Milutie 4.2 0.2 111 24.5 24.0 8.2 0.2 28.5 24.4 93.6 93.5 6.6 7.7 7.9 5 92 90 02101 000105 <0.2 <0.2 <0.2 11.5 Section 7.4 0.2 54 24.4 24.4 8.2 8.2 29.1 28.9 94.0 04.0 6.7 6.7 9.1 6 93						Surface	1.0	0.2	135	24.7		8.2	8.2	27.3	27.2	92.5	92.5	6.6	6.9	. [	7	•	86			<0.2	1.6
	IM8	Rainy	Moderate	11:57	8.4	Middle	4.2	0.2	111	24.5	24.5	8.2	8.2	28.5	28.4	93.6	93.5	i.6	7.7	7.9	5	6	92	821817	808163	<0.2	1.6
						Bottom	7.4 7.4	0.2 0.2	54 58	24.4 24.4	24.4	8.2	8.2	29.1 28.8	28.9	94.0 94.0			9.1 9.0	F	6	I	93 93			<0.2 <0.2	1.5

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

Nater Qua	lity Monit	oring Res	ults on		27 April 21	during Mid-		е																				
Monitoring	Weather	Sea	Sampling	Water	0	11. ()	Current Speed	Current	Water Te	mperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Dissolve Oxyge		ity(NTU)	Suspende (mg.		Total Al (pp		Coordinate HK Grid	Coordinate	Chron (µg/		Nickel (µg/l
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	ith (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA Value	DA	Value	DA	Value	DA	(Northing)	HK Grid (Easting)	Value	DA	Value DA
					Surface	1.0	0.3	104 111	24.7	24.7	8.2 8.2	8.2	26.7	26.7	92.8 92.9	92.9	6.6	5.8		9		87 87				<0.2		1.4
IM9	Rainy	Moderate	12:03	8.0	Middle	4.0	0.4	98	24.7	24.5	8.2	8.2	28.7	28.7	93.7	93.8	6.6	7.1	7.2	6	9	90	90	822083	808827	<0.2	<0.2	1.6
IIVI9	Rainy	Woderate	12.03	6.0	iviidale	4.0	0.3	98	24.5	24.5	8.2	0.2	28.8	20.7	93.9	93.0	6.7	7.1	1.2	12	9	90	90	022003	000027	<0.2	<0.2	1.5
					Bottom	7.0	0.4	61 66	24.4	24.4	8.2 8.2	8.2	28.9	28.9	94.7 94.9	94.8	6.7	8.6	-	12 4		91 92				<0.2		1.5 1.5
					Surface	1.0	0.6	107	24.7	24.7	8.2	8.2	27.4	27.5	92.0	91.9	6.5	4.8		4		87				<0.2	Ħ	1.3
						1.0 4.1	0.6	114 104	24.7 24.7		8.2 8.2		27.6 27.9		91.8 91.7		6.5	6.5	+	5		87 91				<0.2		1.4
IM10	Rainy	Moderate	12:10	8.2	Middle	4.1	0.6	112	24.7	24.7	8.2	8.2	28.2	28.0	91.6	91.7	6.5	6.1	6.1	4	4	91	90	822403	809788	<0.2	<0.2	1.4
					Bottom	7.2 7.2	0.5 0.5	95 101	24.6 24.6	24.6	8.2 8.2	8.2	28.5	28.5	92.5 92.6	92.6	6.6	6.6		3		92 92				<0.2	. }	1.4
					Surface	1.0	0.6	110	24.7	24.7	8.2	8.2	27.5	27.6	90.9	90.8	6.5	5.4		6		84				<0.2	$\overline{}$	1.6
					Surface	1.0	0.6	119	24.6	24.7	8.2	0.2	27.7	27.0	90.7		6.4	5.5		5		84				<0.2	. [	1.4
IM11	Rainy	Moderate	12:20	8.6	Middle	4.3 4.3	0.7	105 113	24.6 24.6	24.6	8.2 8.2	8.2	28.1	28.1	90.2	90.2	6.4	8.7 8.6	7.9	7	7	88 92	89	822047	811478	<0.2	<0.2	1.5 1.4
					Bottom	7.6	0.5	113	24.6	24.6	8.2	8.2	28.2	28.2	90.3	90.4	6.4	9.5		8		93				< 0.2	, [	1.5
						7.6 1.0	0.5	122 111	24.6 24.8		8.2 8.2		28.2		90.4		6.4	9.6		7		93 86				<0.2		1.5
					Surface	1.0	0.6	119	24.8	24.8	8.2	8.2	26.2	26.2	93.6	93.7	6.7	4.3		6		86				<0.2	.	1.5
IM12	Rainy	Moderate	12:26	10.0	Middle	5.0 5.0	0.6	110 114	24.6 24.6	24.6	8.2 8.2	8.2	27.6 27.8	27.7	90.4	90.3	6.4	4.7		5 6	6	90	89	821466	812064	<0.2	<0.2	1.4 1.5
					Bottom	9.0	0.4	94	24.6	24.6	8.2	8.2	28.1	28.1	91.3	91.5	6.5	5.6		7		92				<0.2	.	1.5
					Bottom	9.0	0.4	103	24.6 24.7	24.0	8.2 8.2	0.2	28.0	20.1	91.6 94.0	31.3	6.5	5.5		7		92				<0.2		1.6
					Surface	1.0	-	-	24.7	24.7	8.2	8.2	27.8	27.8	94.0	94.2	6.7	2.4		5		-				-	.	-
SR1A	Rainy	Moderate	12:53	4.2	Middle	2.1	-	-	-	-	-	-	-	-			- '	6.7	3.3	-	5	-		819971	812659	-	[	
	,					2.1 3.2	-	-	24.5		8.2		27.9		95.8		6.8	4.1	-	- 5		-				-	. }	-
					Bottom	3.2	-	-	24.4	24.5	8.2	8.2	28.0	27.9	96.1	96.0	6.9	4.2		5		-				-		-
					Surface	1.0	0.5	74 77	24.7 24.7	24.7	8.2	8.2	27.1 27.2	27.2	93.0 92.9	93.0	6.6	5.5		5 4		90 91				<0.2		1.5 1.5
SR2	Rainv	Moderate	13:07	4.6	Middle	-	-	-	-		-		-	_	-		- 0.0	5.6	6.6	-	5	-	91	821468	814176	-	<0.2	- 1.
OILE	reality	Woderate	13.07	4.0	Wilde	3.6	0.4	- 68	24.1	-	8.2		28.3		93.6		6.7	7.7	- 0.0	- 4		92		021400	014170	<0.2	NO.2	1.4
					Bottom	3.6	0.4	70	23.9	24.0	8.2	8.2	28.4	28.3	94.3	94.0	6.8	5.8 7.6		5		92				<0.2		1.4
					Surface	1.0	0.2	193	24.8	24.8	8.2	8.2	26.7	26.8	92.8	92.8	6.6	5.3		5		-						-
						1.0 4.8	0.2	206 175	24.8 24.6		8.2 8.2		27.0 27.7		92.8 93.4		6.6	5.6 7.1	-	5 11		-	1			-		-
SR3	Rainy	Moderate	11:48	9.6	Middle	4.8	0.2	184	24.6	24.6	8.2	8.2	28.0	27.9	93.7	93.6	6.6	7.1	6.8	8	′	-	-	822152	807553	-	, - [	
					Bottom	8.6 8.6	0.2	84 87	24.4	24.4	8.2 8.2	8.2	29.4	29.4	94.8 94.8	94.8	6.7	8.2	-	6		-				-	. }	-
					Surface	1.0	2.1	16	24.3	24.3	8.1	8.1	30.6	30.6	104.5	104.4	7.4	7.0		7		-				-		-
						1.0 4.2	2.3	17 17	24.3 24.3		8.1 8.1		30.7		104.2		7.3	7.3		- 8 - 7		-				-		-
SR4A	Cloudy	Moderate	13:15	8.4	Middle	4.2	2.0	17	24.3	24.3	8.1	8.1	31.0	31.0	104.0	104.0	7.3	8.3	7.9	7	7	-	-	817179	807788	-		-
					Bottom	7.4	1.9 1.9	11 11	24.2 24.1	24.2	8.1 8.1	8.1	31.1	31.1	104.1 104.1	104.1	7.3	7.3	_	6 7		-				-	: }	-
					Surface	1.0	0.1	297	24.3	24.3	8.1	8.1	29.5	20.6	101.3	101.2	7.2	6.4		7		-					$\overline{}$	
					Ourlace	1.0	0.1	320	24.3	24.5	8.1	0.1	29.6	23.0	101.1	101.2	7.2	7.2 6.5		8		-				-		-
SR5A	Cloudy	Moderate	13:33	4.0	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	8	-	-	816584	810672	$\overline{}$		
					Bottom	3.0	0.1	255	24.1	24.1	8.1 8.1	8.1	29.9		100.7	100.8	7.1	7.1		8		-				-	, [	-
						3.0 1.0	0.1	256 12	24.0 24.5		8.1		30.0		100.9		7.7	7.1		9		-				H		-
					Surface	1.0	0.1	12	24.5	24.5	8.1	8.1	28.2	28.2	108.7	108.7	77	7.7 5.6		6		-				-	, [	
SR6A	Cloudy	Moderate	14:03	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	-	5	-	-	817944	814722	-		-
					Bottom	3.3	0.1	12	24.2	24.2	8.1	8.1	28.3		108.6	108.6	7.8	7.8 4.7		4		-				-	,	-
						3.3	0.2	12 47	24.1		8.1 8.2		28.4		108.6		7.8	4.6	-	4		-					_	-
					Surface	1.0	0.9	47	24.7	24.7	8.2	8.2	28.8		101.3	101.4	7.2	7.0 1.4	1	5		-						-
SR7	Rainy	Moderate	13:55	15.4	Middle	7.7	0.7 0.7	36 39	24.6 24.5	24.6	8.2 8.2	8.2	29.8 29.9	29.8	95.2 95.1	95.2	6.7	2.5	2.4	6	6	-	-	823651	823763	-	[	
					Bottom	14.4	0.7	2	24.5	24.5	8.2	8.2	29.9	29.8	96.1	96.3	6.8	3.2		6		-	l l			-	, }	-
					DOLLOTTI	14.4	0.5	2	24.5	24.5	8.2	0.2	29.8	29.0	96.4	90.3	6.8	3.3		6		-				-		-
					Surface	1.0	-	-	24.9 24.9	24.9	8.2	8.2	27.8	27.8	94.0	94.1	6.7	5.3	+	7		-				-	, }	-
SR8	Rainy	Moderate	12:33	5.4	Middle	-	-	-	-	-	Ŀ		<u> </u>		-		- (	6.7	6.6	-	7	-	.	820393	811601	-	, . †	Ξ.
	,					4.4	-	-	24.4		8.2		28.0		94.8		6.8	7.8	-	7		-				-	. }	-
	1		1		Bottom	4.4			24.4	24.4	8.2	8.2	28.1	28.1	95.1	95.0	6.8	5.8	$\dashv$	8	1		t 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 boiled and underlined

Water Quality Monitoring Results on during Mid-Flood Tide 27 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Weather Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (mg/L) (maga) Sampling Depth (m) HK Grid HK Grid Station Direction Value DA Condition Time (m/s) Average Average Value Average Value DA Value DA Value DA Value DA (Northing) Value DA Condition Depth (m) Value Value Average Value (Easting) 24.4 2.0 Surface 24.4 8.2 30.9 109.8 1.0 2.1 16 24.4 31.0 109.9 7.7 9.8 <0.2 24.4 7.7 8.9 87 1.2 <0.2 C1 8.2 32.2 111.2 804229 07:17 8.2 Middle 24.4 815633 Rainv Moderate 87 4.1 24.4 8.2 32.2 7.7 4 88 <0.2 1.0 2.2 9.0 7.2 2.0 13 24.4 8.2 32.2 7.6 11.3 4 89 <0.2 1.0 109. 7.6 Bottom 24.4 8.2 32.2 109.7 2.1 7.6 24.3 8.2 11.9 1.1 7.2 14 32.2 5 89 < 0.2 1.0 0.1 322 24.9 < 0.2 8.2 1.3 Surface 24.9 8.2 25.9 90.4 1.4 24.9 8.2 90.4 6.5 7.1 11 87 1.0 0.1 340 <0.2 290 24.8 8.6 9 1.6 6.0 0.1 8.2 6.5 90 26.3 91.0 C2 Rainv Moderate 08:28 12 0 Middle 24.8 8.2 26.3 91.2 90 825692 806931 1.5 8.2 26.3 91.3 6.5 8.6 8 91 <0.2 6.0 0.1 291 24.8 11.0 0.0 141 24.5 8.2 92.5 6.6 9.3 6 93 <0.2 1.6 28.6 8.2 92.5 6.6 Bottom 24.5 28.6 11.0 0.0 24.5 8.2 28.6 92.5 6.6 9.3 7 93 <0.2 1.5 0.6 24.7 8.2 3.1 4 <0.2 1.2 28.9 Surface 24.7 8.2 29.0 94.6 1.0 0.6 272 24.7 8.2 29.0 94.6 6.7 3.0 4 85 <0.2 1.4 3.8 4 5 1.2 5.8 0.7 6.7 89 89 <0.2 263 24.6 8.2 29.4 94.5 C3 817789 Misty Calm 06:29 11.6 Middle 24.6 8.2 29.4 94.5 88 822123 1.3 0.8 263 24.6 10.6 0.6 263 24.6 8.2 29.6 94.3 6.6 9.0 5 91 <0.2 1.3 Bottom 24.7 8.2 29.5 94.4 6.7 10.6 0.7 272 24.7 8.2 29.5 94.5 6.7 9.1 5 1.3 1.0 1.7 24.2 29.8 6.3 87 <0.2 1.2 Surface 24.2 8.1 29.8 102.9 1.0 1.8 24.2 8.1 29.8 102. 7.3 6.5 11 86 <0.2 1.1 807124 IM1 Rainv Moderate 07:36 5.5 Middle 817962 4.5 16 358 24.3 8.1 30.1 102.5 7.2 8.0 13 89 < 0.2 Bottom 8.1 30.1 102.5 7.2 4.5 1.7 358 24.3 8.1 30.1 102 5 72 8.3 5 90 <0.2 1.2 335 13 85 1.0 0.1 24.3 8.1 29.9 7.3 12.6 < 0.2 1.0 Surface 8.1 29.9 103.1 1.0 0.1 338 24.3 8.1 29.9 7.3 12.5 13 87 <0.2 1.0 3.8 0.1 354 24.3 8.1 29.9 7.3 14.6 17 87 <0.2 1.0 IM2 Moderate 07:43 7.6 Middle 8.1 29.9 102.7 818160 806180 1.1 3.8 0.1 326 24.3 8.1 29.9 15.0 17 88 <0.2 18 6.6 0.2 43 24.3 8 1 29.9 7.2 11.5 90 <0.2 1.1 8.1 29.9 102.5 7.2 11 9 17 1.1 6.6 0.2 46 8 1 91 <0.2 24.3 29 9 102 1.0 0.1 312 24.3 8.2 30.0 104 2 7.4 12.5 86 < 0.2 1.0 Surface 8.2 30.0 104.3 1.1 1.0 12.6 86 0.1 333 24.3 8.2 30.1 7.4 6 <0.2 104. 14.0 3.6 0.1 348 6 87 1.1 24.3 8.1 30.6 105 7.4 <0.2 IM3 Rainy Moderate 07:49 7.2 Middle 24.3 8.1 30.6 105.3 88 818798 805576 6 7 0.1 7.4 14.0 88 1.0 3.6 320 24.3 8.1 30.6 <0.2 14.3 6.2 26 24.3 8.1 30.6 104.0 7.4 90 Rottom 24.3 8.1 30.6 104.6 6.2 0.1 24.3 8.1 30.6 7.4 14.6 8 91 1.1 26 <0.2 1.0 0.1 342 12.9 1.1 24.3 8.2 31.1 107.2 7.5 3 85 <0.2 Surface 24.3 8.2 31.1 107.2 0.1 315 24.3 8.2 13.2 3 86 <0.2 1.0 0.9 0.9 1.0 12.0 87 <0.2 3.9 24.3 3 0.1 8.2 31.2 106.9 7.5 IM4 07:58 7.8 Middle 24.3 8.2 31.2 106.9 819730 804606 Rainv Moderate 3.9 0.1 24.3 8.2 12.0 14 87 <0.2 6.8 0.2 24.3 14.7 12 89 8.1 7.5 8.1 7.5 Bottom 24.3 31.2 106.5 6.8 0.2 24.3 31.2 14.9 10 <0.2 1.0 289 1.0 1.0 0.1 24.3 8.2 30.5 10.9 16 86 <0.2 104.9 7.4 Surface 24.3 8.2 104.9 30.5 0.1 299 24.3 8.2 30.5 10.9 15 86 <0.2 4.1 0.1 287 24.3 11.7 12 87 <0.2 1.0 8.2 7.4 IM5 08:04 8.2 Middle 24.3 8.2 30.7 104.7 820722 804862 Rainy Moderate 4.1 0.1 304 24.3 11.9 11 87 <0.2 13.3 12 1.1 0.0 123 24.3 8.2 8.2 7.3 90 <0.2 24.3 8.2 103.8 7.3 Bottom 30.7 7.2 0.0 129 24.3 30.7 91 < 0.2 1.0 0.1 209 24.5 8.1 27.6 99.9 5.6 6 86 <0.2 1.0 Surface 8.1 27.7 100.0 1.0 0.1 216 24.5 8 1 5.7 6 86 <0.2 1.0 3.8 0.1 224 24.4 8.1 28.6 7.8 6 87 <0.2 Rainy Moderate 08:10 Middle 8.1 28.7 100.5 821051 805818 <0.2 3.8 0.1 227 24.4 8.1 28.7 8.2 7 87 1.1 6.6 0.1 231 24.3 8.1 7.1 11.4 9 90 <0.2 100.7 7.1 6.6 0.1 237 24.3 8 1 29.5 11 4 8 91 1.4 1.0 0.2 246 24.6 8.1 26.2 99.4 6.1 8 86 <0.2 Surface 8.1 99.5 99.5 1.0 0.2 246 24.6 8 1 26.2 7 1 86 <0.2 5 9.4 87 1.3 4.0 213 8.1 <0.2 0.1 24.4 29.3 99.2 7.0 IM7 Moderate 08:19 Middle 8.1 99.2 821368 806851 88 4.0 0.1 227 24.4 8.1 29.3 99.1 7.0 9.1 6 7.0 0.1 89 24.3 8.1 29.4 99.1 7.0 10.6 4 90 <0.2 1.4 Bottom 24.3 8.1 29.5 99.1 7.0 7.0 0.1 89 24.3 8.1 29.5 10.8 <0.2 1.4 1.0 0.2 52 25.0 8.2 25.2 91.5 6.6 1.9 4 88 < 0.2 1.5 Surface 25.0 8.2 25.2 91.5 25.2 91.4 1.5 8.2 1.0 0.2 56 25.0 1.9 5 88 < 0.2 8.2 25.6 25.7 6.5 3.3 4 91 <0.2 1.3 4.2 0.2 63 24.9 90.9 8.2 25.7 90.9 821851 808125 IM8 Rainy Moderate 08:02 8.4 Middle 24.9 1.5 90.9 3.3 6.5 4 91 4.2 63 24.9 8.2 0.2 7.4 1.5 0.2 24.9 8.2 25.7 91.9 4.5 93 <0.2 56 6.6 3 24.9 8.2 25.6 92.0 6.6 Rottom

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

rater Quai	ity Wonit	oring Resi	lits on		27 April 21	during Mid-		de	T				_		DO 0	aturation	Dissol	hod 1			Suspende	4 65:1-	Total A	lkolici±			Chromium	. 1
Monitoring	Weather	Sea	Sampling	Water	Camalian D	h (m)	Current Speed	Current	Water Te	mperature (°C)	L	pН	Salin	ity (ppt)		aturation %)	Oxyg		Turbidity(f	NTU)	Suspende (mg/	u Solids 'L)_	l otal Al		Coordinate HK Grid	Coordinate HK Grid	(µg/L)	Nickel (µ
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	h (m)	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	Value
					Surface	1.0	0.3	20	25.0	25.0	8.2	8.2	25.4	25.4	91.5	91.5	6.5		2.4		13		87				<0.2	1.6
						1.0 4.0	0.3	20 45	25.0 24.8		8.2 8.2		25.4 26.2		91.4 91.4		6.5	6.5	2.5 6.5	}	13 11		87 91				<0.2	1.5
IM9	Rainy	Moderate	07:56	8.0	Middle	4.0	0.2	45	24.8	24.8	8.2	8.2	26.4	26.3	91.4	91.4	6.5		6.5	5.7	12	12	91	90	822092	808824	<0.2	1.5
					Bottom	7.0 7.0	0.1	45 46	24.8 24.8	24.8	8.2	8.2	26.6 26.6	26.6	92.1 92.5	92.3	6.6	6.6	8.3 8.2	ŀ	11 10		92 92				<0.2	1.4
					Surface	1.0	0.5	310	24.7	24.7	8.2	8.2	27.5	27.5	94.3	94.3	6.7		7.6		4		87				<0.2	1.5
					Surface	1.0 3.6	0.5 0.5	317 311	24.7 24.7	24.1	8.2 8.2	0.2	27.5 27.5	21.5	94.2 94.0	34.3	6.7	6.7	7.7 8.6	F	5 5		87 90				<0.2	1.7
IM10	Misty	Moderate	07:49	7.2	Middle	3.6	0.5	314	24.7	24.7	8.2	8.2	27.5	27.5	94.0	94.0	6.7	ŀ	8.6	8.7	6	5	90	90	822403	809810	<0.2 <0.2	2 1.6
					Bottom	6.2	0.3	314	24.7	24.7	8.2	8.2	27.5	27.5	94.4 94.6	94.5	6.7	6.7	10.0	F	5		93				<0.2	1.6
						6.2 1.0	0.3	332 267	24.6		8.2 8.2		27.5 27.9		94.6		6.7		10.0 4.8		5 7		93 85				<0.2 <0.2	1.5 1.6
					Surface	1.0	0.4	290	24.7	24.7	8.2	8.2	27.9	27.9	91.9	91.9	6.5	6.5	4.9	Ī	6		85				<0.2	1.5
IM11	Misty	Moderate	07:39	8.2	Middle	4.1 4.1	0.4	256 278	24.7 24.7	24.7	8.2 8.2	8.2	28.1	28.1	91.8 91.9	91.9	6.5		5.9 5.9	5.6	7	6	89 89	88	822051	811458	<0.2	2 1.6
					Bottom	7.2	0.3	252	24.7	24.7	8.2	8.2	28.1	28.1	92.6	92.8	6.6	6.6	6.1	Į	5		90				<0.2	1.6
						7.2 1.0	0.4	252 236	24.7		8.2 8.2		28.1 27.9		93.0 92.6		6.6		6.2 5.5		4 5		90 85				<0.2 <0.2	1.6
					Surface	1.0	0.4	248	24.7	24.7	8.2	8.2	27.9	27.9	92.6	92.6	6.6	6.6	5.6	Ė	4		85				<0.2	1.1
IM12	Misty	Calm	07:33	9.9	Middle	5.0 5.0	0.3	239 253	24.7 24.7	24.7	8.2 8.2	8.2	27.9 27.9	27.9	92.6 92.7	92.7	6.6	0.0	7.6 7.7	7.6	16 17	13	89 90	89	821446	812065	<0.2	2 1.1
					Bottom	8.9	0.4	242	24.7	24.7	8.2	8.2	27.9	27.9	93.3	93.4	6.6	6.6	9.4	ŀ	17		91				<0.2	1.1
					Bottom	8.9 1.0	0.3	262	24.7	24.1	8.2	0.2	27.9 27.5	21.5	93.4 93.5	33.4	6.6	0.0	9.5 1.1		16 5		92				<0.2	1.1
					Surface	1.0	-		24.5	24.6	8.2	8.2	27.5	27.5	94.0	93.8	6.7	6.7	1.1	Ė	5		-				-	-
SR1A	Misty	Calm	07:04	4.2	Middle	2.1	-	-	-		-	-	-	-	-	-	-	0.7	-	1.7	-	6	-	-	819982	812658		-
ļ					Bottom	3.2	-		24.2	24.2	8.2	8.2	27.7	27.7	95.1	95.3	6.8	6.8	2.2	ŀ	5		-				-	-
					BOILOTTI	3.2	-	-	24.1	24.2	8.2	0.2	27.8	21.1	95.4	95.3	6.8	0.0	2.2		8		-				-	-
					Surface	1.0	0.3	341 314	24.7 24.7	24.7	8.2	8.2	27.8 27.8	27.8	92.7 92.8	92.8	6.6		9.4 9.3	ŀ	12 12		88 88				<0.2 <0.2	1.2
SR2	Misty	Calm	06:48	5.0	Middle	-	-	-	-		-		-	-	-	-	-	6.6	-	9.6	-	11	-	89	821456	814185	- <0.2	2 -
					_	4.0	0.3	2	24.7		8.2		27.8		93.5		6.6		9.8	ŀ	10		- 89				<0.2	1.3
					Bottom	4.0	0.3	2	24.7	24.7	8.2	8.2	27.8	27.8	93.9	93.7	6.7	6.7	9.8		10		90				<0.2	1.3
					Surface	1.0	0.2	39 41	24.8 24.8	24.8	8.2	8.2	25.6 25.7	25.6	91.2 91.3	91.3	6.5		5.4 5.3	ŀ	5		-				-	-
SR3	Rainy	Moderate	08:09	9.6	Middle	4.8	0.4	78	24.8	24.8	8.2	8.2	26.3	26.3	91.6	91.7	6.5	6.5	8.8	7.9	6	6	-		822152	807580		-
O.LO	rtuiry	moderate	00.00	0.0		4.8 8.6	0.4	84 89	24.8 24.5		8.2 8.2		26.3 28.6		91.7 93.1		6.6		8.7 9.6		6 8	Ü	-		OLLIGE	007000	-	-
					Bottom	8.6	0.9	93	24.5	24.5	8.2	8.2	28.5	28.6	93.1	93.1	6.6	6.6	9.7		7		-				-	-
					Surface	1.0	0.9 1.0	275 298	24.2 24.2	24.2	8.1 8.1	8.1	29.9	29.9	102.7 102.6	102.7	7.3	- 1	9.1 9.2	ŀ	6 7		-				-	-
SR4A	Rainv	Moderate	06:51	8.5	Middle	4.3	1.0	271	24.2	24.2	8.1	8.1	29.9	29.9	102.4	102.4	7.2	7.3	10.4	10.0	7	7	-		817184	807829	-	-
SK4A	Rally	Woderate	00.51	0.5	Wildule	4.3 7.5	1.1	276 269	24.2	24.2	8.1 8.1	0.1	29.9 29.9	29.9	102.4 102.5	102.4	7.2		10.4 10.6	10.0	7	,	-		017104	807829		-
					Bottom	7.5	1.1	275	24.2	24.2	8.1	8.1	29.9	29.9	102.5	102.5	7.3	7.3	10.6	ŀ	8		-				-	-
					Surface	1.0	0.1	73 77	24.4	24.4	8.1 8.1	8.1	28.5 28.5	28.5	101.3 101.3	101.3	7.2		4.4 4.4		4						-	-
SR5A	Rainv	Moderate	06:30	4.1	Middle	1.0	0.1	- ''	24.4	-	8.1		28.5		101.3		7.2	7.2	4.4		-		-		816610	810696	-	-
SKSA	Rainy	Woderate	06.30	4.1	ivildale	-	-	-	-		-	-	-	-	-	•	-		-	4.5	-	4	-	-	010010	810090		-
					Bottom	3.1 3.1	0.1 0.1	78 82	24.4	24.4	8.1 8.1	8.1	28.4	28.4	101.2 101.2	101.2	7.2	7.2	4.6 4.6	ŀ	4		-				-	-
					Surface	1.0	0.1	155	24.5	24.5	8.1	8.1	28.5	28.5	102.2	102.2	7.3		3.6		3		-				-	-
						1.0	0.1	160	24.5		8.1		28.5		102.1		7.2	7.3	3.7	}	4	_	-				-	-
SR6A	Rainy	Moderate	06:02	4.0	Middle		-		-	-	-	-	-	-	-	-	-		-	3.7	-	3	-	-	817941	814725		-
					Bottom	3.0	0.0	155 169	24.5 24.5	24.5	8.1 8.1	8.1	28.6 28.6	28.6	102.3 102.5	102.4	7.3	7.3	3.7	ŀ	3		-				-	-
	1		i i		Surface	1.0	0.2	290	24.7	24.7	8.1	8.1	28.6	28.7	94.6	94.6	6.7		1.5		4		-				-	
						1.0 7.7	0.3	305 12	24.7		8.1 8.1		28.7 29.1		94.6 94.8		6.7	6.7	1.5 2.1		4		-				-	-
SR7	Misty	Calm	06:00	15.4	Middle	7.7	0.1	13	24.7	24.7	8.1	8.1	29.1	29.1	94.7	94.8	6.7		2.2	2.4	4	4	-	-	823622	823735	-	-
					Bottom	14.4 14.4	0.1	23 24	24.6 24.6	24.6	8.1	8.1	29.7	29.8	94.0	94.0	6.6	6.6	3.5 3.6	F	3		-				-	-
					Surface	1.0	-	-	24.7	24.7	8.2	8.2	27.6	27.6	94.2	94.2	6.7		7.3		6							
J					Suitace	1.0	-	-	24.7	24.1	8.2	0.2	27.6	27.0	94.2	54.∠	6.7	6.7	7.2	F	5		-				-	=
j								-		-		1		1			-	- 1		7.9	-	6					1	-
SR8	Misty	Calm	07:25	5.4	Middle	4.4		-	24.7		8.2		27.7		-		-	1	8.6	7.9	7	О	-	-	820396	811640	-	-

DA: Depth-Averaged

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

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

Water Quality Monitoring Results on during Mid-Ebb Tide 29 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinit Water Temperature (°C) Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Sampling Water Monitoring Current Speed Oxvaen (ma/L) Sampling Depth (m) HK Grid HK Grid Direction Value DA Time (m/s) Value Average Value Average Value Average Value Average Value DA Value DA Value DA DA Value DA Condition Condition Depth (m) Value (Northing) (Easting) 25.0 2.3 261 28.1 101.8 1.0 263 25.0 28.1 101.8 7.2 4.9 1.4 <0.2 3.9 2.6 254 24.2 8.1 31.1 100.8 7 1 10.3 6 89 1.2 C1 14:04 31.1 100.8 804261 Cloudy Moderate 7.8 Middle 24.2 8.1 89 815632 <0.2 3.9 2.6 274 24.2 8.1 31.1 100.7 7 1 10.3 6 90 1.4 6.8 2.5 262 24.2 8.1 31.3 99.8 7.0 11.9 6 90 <0.2 1.3 8.1 31.3 Bottom 24.2 99.8 6.8 2.6 267 24.2 8.1 31.3 99.8 7.0 11.9 6 91 <0.2 1.3 159 1.0 0.4 24.9 8.3 86.7 6.1 8.3 84 <0.2 1.1 Surface 8.3 27.1 86.7 <0.2 0.4 25.0 8.3 27.1 86.7 6.1 8.2 6 84 1.1 6.5 0.3 151 152 24.7 8.3 28.1 84.3 6.0 8.1 7 87 87 <0.2 1.2 C2 Moderate 12:47 12.9 Middle 8.3 28.1 84.3 825681 806967 <0.2 6.5 8.3 8.1 6 0.3 24.7 28.1 84.3 6.0 11.9 143 24.7 7.7 8 89 0.2 8.3 29.4 84.9 6.0 < 0.2 1.1 Bottom 24.7 8.3 29.4 85.0 6.0 7.6 7 11 9 0.2 148 24.7 8.3 6.0 89 <0.2 11 29.4 85 N 0.6 111 24.8 8.3 11 <0.2 1.2 8.2 28.5 6.2 Surface 24.8 8.2 28.5 87.2 <0.2 1.0 116 28.5 12 85 1.2 0.6 24.8 8.2 87.2 6.2 8.4 10.2 13 <0.2 88 88 1.2 24.8 24.8 28.7 6.0 0.4 111 8.3 86.8 6.1 C3 Fine Moderate 15:25 12.0 Middle 24.8 8.3 28.7 86.8 12 88 822122 817784 <0.2 1.2 121 8.3 0.5 6.1 <0.2 11.0 0.3 97 24.8 8.3 11.1 12 90 1.1 28.7 87.0 6.1 8.3 87.1 Bottom 24.8 28.7 11.0 0.3 98 24.8 8.3 28.7 87.1 6.1 11.0 13 90 <0.2 1.1 291 24.8 6.4 28.3 97.5 <0.2 1.2 8.1 6.9 Surface 24.8 8.1 28.3 97.5 1.0 1.9 315 24.7 8.1 28.3 97.4 6.9 6.4 6 86 <0.2 1.2 817926 807136 IM1 Cloudy Moderate 13:44 5.2 Middle 87 <0.2 1.2 4.2 1.8 293 24.4 8.1 29.0 96.2 6.8 12.8 8 88 <0.2 1.2 24.4 8.1 29.0 96.2 6.8 Rottom 4.2 1.9 309 24.4 8.1 29.0 96.2 6.8 12.6 1.0 2.3 24.7 28.3 4.9 85 <0.2 0.8 6 Surface 24.7 8.1 28.4 100.2 1.0 2.5 95 24.6 8.1 7.1 4.8 6 85 84 24.4 4.4 89 <0.2 <0.2 <0.2 0.9 0.9 1.0 29.2 7.2 6 7 818147 Cloudy Moderate 13:36 6.9 Middle 24.4 8.1 29.2 101.1 <0.2 3.5 84 24.4 8.1 4.4 90 90 2.3 5.9 2.4 85 24.3 8.1 30.1 98.9 98.9 7.0 14.6 7 Bottom 24.3 8.1 30.1 98.9 <0.2 5.9 2.5 89 24.3 8.1 7.0 14.6 6 91 0.9 <0.2 1.1 1.0 2.4 241 24.9 8.1 29.0 98.5 4.6 88 Surface 8.1 29.0 1.0 2.5 254 24.9 8.1 29.0 98.6 6.9 4.6 8 87 90 90 91 <0.2 <0.2 <0.2 <0.2 0.9 3.6 2.4 242 24.4 8.1 29.9 103.1 7.3 5.1 7 IM3 Sunny Moderate 13:30 7.1 Middle 103.0 818799 805572 1.0 2.6 3.6 258 24.4 8.1 5.2 6 241 10.3 0.9 6.1 24.3 8.1 30.6 99.5 7.0 5 30.6 99.5 7.0 8.1 30.6 10.2 6 6.1 2.4 256 24.3 91 <0.2 <0.2 <0.2 <0.2 1.1 1.0 2.6 225 25.0 8.1 27.7 95.8 6.8 6.0 8 86 Surface 25.0 8.1 27.7 95.9 6.8 6.0 8 1 95.9 q 87 1.0 2.6 233 24 9 4.4 224 6.9 8.2 7 1.1 2.4 24.3 8.1 30.2 98.5 89 IM4 Cloudy 13:21 8.7 Middle 24.3 30.2 98.5 89 819745 804599 <0.2 Rough 98.5 8.2 89 8.1 30.2 4.4 2.6 228 24.3 7.7 15.4 15.0 <0.2 1.0 2.3 216 24.2 8.1 8.1 31.2 31.2 97.2 97.1 6.8 8 7 90 Bottom 24.2 8.1 31.2 97.2 6.8 90 2.3 216 24.2 249 <0.2 <0.2 <0.2 <0.2 1.0 24.8 10 86 1.1 2.8 8.1 27.9 97.2 6.9 6.9 Surface 24.8 8.1 28.0 97.3 24.7 8.1 28.1 97.4 86 1.1 1.0 2.8 269 6.9 6.9 9 4.2 2.8 246 7.1 10 89 1.1 24.5 29.3 97.6 6.9 8.1 IM5 13:14 24.5 8.1 29.3 97.6 820716 804885 Cloudy Rough 8.3 Middle 10 89 4.2 254 24.4 8.1 29.3 97.6 6.9 7.8 9 89 1.1 3.0 <0.2 1.1 12.4 12.5 11 7.3 2.6 248 24.3 30.9 30.6 97.5 97.4 6.9 90 8.1 8.1 30.7 97.5 6.9 24.3 Rottom 262 24.3 <0.2 1.0 2.5 228 24.5 28.0 28.1 28.1 94.5 94.9 6.7 8.5 14 85 0.7 8.1 24.5 8.1 94.7 Surface 1.0 24.5 8.1 6.7 8.6 13 87 <0.2 0.6 2.6 228 3.8 2.4 218 24.4 97.6 97.5 6.9 8.7 12 89 8.1 29.9 IM6 13:06 7.6 Middle 24.4 8.1 29.9 97.6 821080 805810 Cloudy Moderate < 0.2 0.6 3.8 218 24.3 8.1 30.0 6.9 8.9 89 <0.2 2.5 6.6 2.4 211 24.3 8.1 30.5 30.5 96.8 6.8 11.6 <0.2 0.6 24.3 8.1 30.5 96.8 Bottom 8.1 6.8 11.5 6.6 2.4 222 24.3 1.0 2.3 81 24.8 8.0 95.7 6.8 85 <0.2 0.6 27.2 Surface 24.8 8.0 27.2 95.8 1.0 2.3 86 24.8 8.1 27.2 95.8 6.8 7.1 5 86 <0.2 0.5 4.5 84 24.5 11.3 3 88 2.3 8.1 28.8 IM7 Cloudy Moderate 12:57 9.0 Middle 24.5 8.1 28.9 95.7 821368 806823 <0.2 0.6 89 4.5 91 24.4 8.1 28.9 95.7 6.8 11.4 4 8.0 2.4 87 24.4 8.1 29.7 95.9 6.8 16.5 4 90 <0.2 0.6 8.1 29.7 95.9 8.0 2.4 93 24.4 8.1 29.7 95.9 6.8 16.6 3 90 <0.2 0.6 1.0 0.2 97 24.9 8.2 26.8 87 N 6.2 7.3 10 84 <0.2 1.1 8.2 Surface 26.8 87.0 <0.2 1.0 0.2 104 24.9 83 26.8 87.0 6.2 7.3 11 85 1.2 43 0.2 92 24.8 8.3 27.0 88.7 6.3 8.5 11 10 87 88 <0.2 1.1 IM8 Fine Moderate 13:08 8.5 Middle 8.3 27.0 88.8 10 87 821828 808139 <0.2 4.3 0.2 94 24.8 8.3 27.0 88.8 6.3 8.5 7.5 0.3 74 24.6 8.3 28.5 90.7 6.4 10.3 9 89 <0.2 1.2 8.3 Bottom 24.6 28.5 90.7 7.5 24.6

DA: Depth-Averaged

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

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

during Mid-Ebb Tide Water Quality Monitoring Results on 29 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinit Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Sampling Water Water Temperature (°C) Monitoring Current Speed Oxvaen (ma/L) Sampling Depth (m) HK Grid HK Grid Station Direction Time Value Value Average Value Average Value Average Value DA Value DA Value DA DA Value DA Value DA Condition Condition Depth (m) (m/s) Average Value (Northing) (Easting) 0.3 24.9 Surface 27.2 87.3 1.0 102 24.9 87.3 6.2 8.3 84 3.9 0.3 97 24.8 8.2 27.3 87.5 6.2 9.0 10 86 <0.2 1.2 IM9 27.3 87.5 808788 Fine Moderate 13:14 7.8 Middle 24.8 8.2 86 822108 <0.2 3.9 0.3 102 24.8 8.2 27.3 87.5 6.2 8.9 9 87 <0.2 1.1 6.8 0.4 83 24.6 8.3 28.0 89.1 6.3 10.5 10 89 <0.2 11 8.3 28.0 6.3 Bottom 24.6 89.1 6.8 0.4 87 24.6 8.3 28.0 89.1 6.3 10.3 q 89 <0.2 1.1 1.0 0.7 115 25.0 8.3 88.4 6.3 8.2 10 83 <0.2 1.0 Surface 8.3 27.2 88.4 <0.2 0.8 121 25.0 8.3 27.2 88.3 6.3 8.2 9 83 1.0 4.1 0.6 109 24.7 8.3 27.9 85.3 6.0 9.5 9.6 9 87 88 <0.2 1.1 IM10 Moderate 13:21 8.1 Middle 8.3 27.9 85.3 822390 809808 4.1 118 9 0.6 24.7 8.3 27.9 85.2 6.0 24.7 11.2 7 7.1 0.5 106 8.3 27.9 84.5 6.0 89 < 0.2 Bottom 24.7 8.3 27.9 84.6 6.0 7 7 1 0.5 115 24.7 8.3 6.0 11.0 11 27 9 84.6 89 <0.2 0.9 117 25.0 84 < 0.2 1.1 8.3 89.8 6.4 Surface 25.0 8.3 27.3 89.8 1.0 117 7.5 84 < 0.2 0.9 25.0 8.3 27.3 89.8 6.4 9 1.1 8.4 87 87 <0.2 1.1 24.7 87.2 87.1 4.3 0.8 108 116 27.8 6.2 9 IM11 Fine Moderate 13:33 8.5 Middle 24.7 8.3 27.8 87.2 86 822033 811460 <0.2 4.3 0.8 24.7 8.3 6.2 8.4 <0.2 7.5 0.5 95 24.7 84.2 9.7 9 88 1.2 8.3 28.6 6.0 24.7 8.3 84.2 Bottom 28.6 6.0 7.5 0.5 100 24.7 8.3 28.6 84.2 9.4 8 88 <0.2 1.1 6.0 123 25.2 7.2 <0.2 8.3 90.6 6.4 Surface 25.2 8.3 27.5 90.6 1.0 1.0 125 25.1 8.3 90.5 6.4 7.3 10 85 <0.2 1.2 4.9 0.6 114 24.8 8.4 10 87 <0.2 1.1 8.3 27.9 84.2 6.0 821443 812067 IM12 Fine Moderate 13:38 9.7 Middle 24.8 8.3 27.9 84.2 87 < 0.2 4.9 118 8.6 0.6 24.8 8.3 0.3 109 24.6 8.3 28.9 82.4 10.4 <0.2 1.2 5.8 24.6 8.3 82.4 5.8 Rottom 28.9 8.7 0.3 112 24.6 8.3 28.9 82.4 5.8 10.3 26.9 26.9 86.5 86.5 6.3 8.2 6.1 8 Surface 25.1 8.2 26.9 86.5 1.0 25.1 6.1 6.4 8 2.5 SR1A Fine Calm 14:54 5.0 Middle 819981 812656 2.5 4.0 24.9 8.2 27.6 85.0 6.0 5.2 9 Bottom 24.9 8.2 27.6 85.0 6.0 27.6 4.0 24.9 8.2 85.0 6.0 5.1 8 1.0 0.5 99 24.9 8.3 88.0 7.8 13 83 <0.2 1.1 Surface 24.9 8.3 27.7 88.0 1.0 0.5 100 24.9 8.3 27.7 88.0 6.2 8.0 14 83 < 0.2 1.2 SR2 Moderate 15:06 4.4 Middle 821455 814188 0.4 98 27.8 27.8 13 1.2 3.4 24 9 83 6.2 9.0 88 <0.2 6.2 83 88.2 6.2 93 13 3.4 0.4 qq 24 9 88 12 1.0 0.1 196 25.2 8.3 26.7 87.8 6.2 6.2 q Surface 25.2 8.3 26.7 87.8 6.2 8.3 26.7 87.8 6.2 8 1.0 0.1 208 25.2 4.7 139 27.2 27.2 7.9 8 0.1 24.7 8.4 86.9 6.2 SR3 Moderate 13:03 9.4 Middle 24.7 27.2 87.0 822159 807559 87.0 24.7 8.4 6.2 8.0 4.7 0.1 149 8.4 0.2 100 24.7 8.4 8.4 28.5 28.5 91.2 6.4 8.7 8.7 7 Bottom 24.7 8.4 28.5 91.2 8.4 0.2 105 24.7 150 25.0 5.6 1.0 2.1 8.1 28.1 96.9 6.8 5 Surface 25.0 8.1 28.1 96.9 158 25.0 8.1 28.2 1.0 2.2 96.9 6.8 5.9 2.1 149 8.6 24.5 8.1 29.0 95.9 6.8 SR4A 14:29 29.0 95.9 817210 807830 Cloudy Moderate 9.3 Middle 24.5 8.1 4.7 150 8.1 29.0 95.9 6.8 8.6 2.1 24.5 6 8.3 2.2 146 24.7 29.0 28.9 95.5 95.5 8.9 8.9 8.1 8.1 6.7 24.8 29.0 95.5 6.7 Rottom 159 24.8 1.0 0.1 25.0 27.9 27.9 27.9 97.5 97.5 8.2 8.1 6.9 25.0 8.1 97.5 Surface 1.0 25.0 8.1 6.9 8.4 4 0.1 SR5A Cloudy 14:44 3.1 Middle 816576 810701 Moderate 2.1 0.1 26 25.0 8.0 28.0 6.9 8.5 25.0 8.0 28.0 97.2 6.9 Bottom 6.9 8.8 2.1 28 24.9 1.0 0.0 359 25.0 94.9 4.4 Surface 25.0 8.1 27.7 94.9 1.0 0.0 330 25.0 8.1 27.7 94.9 6.7 4.4 7 SR6A Cloudy Moderate 14:50 3.4 Middle 817962 814730 2.4 0.0 355 24.9 8.1 93.5 6.6 5.0 5 24.9 8.1 27.9 93.6 6.6 2.4 0.0 327 24.9 8 1 27.0 93.6 6.6 5.0 4 27.9 1.0 1.0 118 25.0 83 87.6 6.2 4.5 Surface 27.9 87.6 1.0 1.0 123 25.0 83 27.9 87.6 6.2 4.5 6 8.0 0.7 126 24.9 8.3 28.1 87 1 6.1 5.2 6 7 SR7 Fine Moderate 15:51 16.0 Middle 8.3 28.1 87.1 823657 823758 8.0 0.8 128 24.9 8.3 28.1 87.1 6.1 5.3 15.0 0.3 184 24.8 8.3 29.2 86.3 6.1 5.8 5 Bottom 24.8 8.3 29.2 86.4 15.0 0.3 192 24.8 8.3 29.1 86.4 6.1 5.7 6 1.0 25.2 8.3 26.8 86.8 6.1 5.7 8 Surface 25.2 8.3 26.8 86.8 5.7 1.0 25.2 8.3 26.9 86.8 6.1 8 13:47 811642 SR8 Fine Moderate 4.8 Middle 820410 3.8 25.3 27.0 6.0 7 8.3 86.8 6.1 25.3 8.3 27.0 86.8 6.1

DA: Depth-Averaged

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

Water Quality Monitoring Results on during Mid-Flood Tide 29 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinit Water Temperature (°C) Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Sampling Water Monitoring Speed Current Oxvaen (ma/L) Sampling Depth (m) HK Grid HK Grid Direction Value DA Time Value Average Value Average Value Average Value Average Value DA Value DA Value DA DA Value DA Condition Condition Depth (m) (m/s) Value (Northing) (Easting) 24.4 1.3 115 0.9 Surface 24.4 8.1 28.2 98.6 1.0 1.3 120 24.4 8.1 28.2 98.6 7.0 6.1 83 <0.2 1.0 4.1 1.2 123 24.4 12.3 <0.2 30.1 0.9 C1 8 1 30.0 98.7 804267 08:34 8 1 Middle 24.4 815627 nα Rainv Moderate 85 <0.2 86 1.0 1.2 128 24.4 8.1 30.0 98.7 7.0 12.2 4 7.1 1.1 127 24.3 8.1 31.3 98.8 6.9 14.4 4 87 <0.2 0.9 8.1 6.9 24.3 31.3 98.8 Rottom 1.1 8.1 31.3 98.8 6.9 14.6 <0.2 7.1 130 24.3 87 0.9 347 0.5 24.9 4.3 1.4 8.2 6.2 Surface 24.9 8.2 25.1 86.2 <0.2 <0.2 <0.2 25.1 86.2 6.2 4.3 5.6 88 1.4 1.0 0.6 353 354 24.9 6 6.4 0.5 24.8 1.5 85.3 87 8.2 6.1 26.0 C2 Cloudy Moderate 09:20 12.8 Middle 24.8 8.2 26.0 85.3 88 825680 806933 <0.2 1.5 24.8 8.2 26.0 85.3 5.4 87 6.4 0.5 326 6.1 4 27.6 84.2 11.8 0.4 359 24.7 27.6 27.5 6.5 4 89 <0.2 1.5 8.2 6.0 24.7 8.2 84.3 Bottom 6.0 11.8 24.7 8.2 6.0 6.4 4 89 <0.2 1.5 0.5 330 248 24.7 3.2 84 <0.2 1.2 8.2 6.2 24.7 8.2 27.3 86.6 Surface 0.7 270 24.7 8.2 27.3 86.6 6.2 3.2 4 84 <0.2 1.1 3.3 <0.2 5.6 0.7 248 24.7 5 5 86 87 1.2 8.2 28.3 28.3 86.1 86.1 6.1 C3 07:10 822106 817794 Cloudy Moderate 11.1 Middle 24.7 8.2 28.3 86.1 87 <0.2 1.1 268 24.7 10.1 0.7 251 24.6 8.2 29.7 86.1 6.1 4.3 89 <0.2 1.0 24.6 8.2 29.7 86.2 Bottom 6.1 10.1 0.7 263 24.6 8.2 29.7 86.2 6.1 4.2 89 11 1.0 1.3 340 24.4 27.7 27.8 27.7 94.3 94.1 8.9 82 <0.2 1.0 Surface 24.4 8.1 94.2 1.0 343 24.4 8.1 6.7 8.9 20 88 <0.2 1.2 1.3 IM1 Rainv Moderate 08:53 5.5 Middle 85 817966 807131 <0.2 45 11 331 24.5 8.0 28.2 93.5 6.6 8.9 4 85 <0.2 11 Bottom 24.5 8.0 28.2 93.5 6.6 4.5 11 356 24.5 8.0 28.2 93.5 6.6 8.8 6 85 <0.2 1.0 1.0 331 28.0 12 1.6 24.5 8.1 96.5 6.9 13.5 88 <0.2 1.2 Surface 8.1 28.0 96.5 1.0 1.7 342 24.5 8.1 28.0 96.5 6.9 13.6 13 88 <0.2 1.2 <0.2 <0.2 <0.2 3.7 1.7 328 24.5 8.1 28.1 96.2 6.8 15.2 9 89 1.2 IM2 Cloudy Moderate 09:00 7.3 Middle 8.1 28.1 96.2 818158 806142 1.2 10 13 3.7 1.9 359 24.5 8.1 28.1 6.8 15.3 90 1.3 6.3 2.0 326 24.5 8.1 28 1 96.1 6.8 16.0 85 12 8.1 28.1 96.2 6.8 349 12 12 6.3 2.1 24.5 8.1 28.1 96.2 14 0 <0.2 6.8 86 1 4 118 24.4 8.1 28 1 97.6 6.9 9.0 q 88 <0.2 12 Surface 24.4 8.1 28.1 97.6 1.0 122 97.5 8.9 1.3 1.5 24.4 8.1 28.1 6.9 8 89 <0.2 <0.2 <0.2 1.6 10.9 8 17 1.2 3.9 121 24.4 8.1 28.3 96.7 6.9 90 IM3 Cloudy Moderate 09:07 7.7 Middle 24.4 8.1 28.3 96.7 88 818782 805605 <0.2 1.2 1.7 11.0 1.2 3.9 124 24.4 8.1 28.3 96.6 6.9 90 1.5 21 86 6.7 122 24.5 8.1 28.7 96.3 6.8 12.0 8.1 Bottom 24.5 28.7 96.3 6.8 6.7 1.6 124 24.5 28.7 96.3 6.8 11.9 20 <0.2 1.2 8.1 86 113 1.0 1.2 24.4 10.0 89 <0.2 1.2 8.1 28.3 98.8 7.0 7 Surface 24.4 8.1 28.2 98.8 1.2 122 24.3 9.3 8 89 1.2 28.2 <0.2 <0.2 <0.2 <0.2 4.3 119 13.3 24.4 6.9 89 1.1 1.3 8.1 29.8 97.5 8 IM4 Cloudy 09:15 8.6 Middle 24.4 8.1 29.8 97.5 15 88 819712 804615 <0.2 1.2 Moderate 1.2 4.3 1.4 130 24.4 13.6 22 21 90 84 8.1 29.8 6.9 1.3 127 24.4 13.2 8.1 29.8 97.5 6.9 8.1 24.4 29.8 97.6 6.9 Rottom 7.6 1.4 138 24.4 13.3 22 1.2 24.4 1.0 2.5 334 28.3 97.4 7.8 84 <0.2 1.1 8.1 6.9 Surface 24.4 8.1 97.4 28.3 1.0 2.6 347 24.4 6.9 7.4 18 88 <0.2 1.1 4.1 333 24.4 13.4 88 <0.2 1.1 2.4 8.1 28.4 6.9 5 IM5 Cloudy Moderate 09:21 8.1 Middle 24.4 8.1 28.4 97.1 820734 804887 < 0.2 4.1 2.6 24.4 13.6 4 355 <0.2 2.3 328 24.4 8.1 8.1 28.6 28.6 96.9 96.9 6.9 15.8 4 5 24.4 8.1 96.9 6.9 Bottom 28.6 7.1 2.3 359 24.4 15.5 84 1.1 1.0 1.9 287 24.7 8.0 26.0 94.2 6.8 4.8 84 <0.2 1.2 5 Surface 8.0 26.0 94.2 1.0 1.9 296 24.7 8.0 26.1 94.2 6.8 4.8 6 87 <0.2 3.9 1.5 295 24.5 8.1 6.7 9.6 6 87 1.3 Cloudy Moderate 09:29 7.8 Middle 24.5 8.1 27.3 94.2 821060 805832 1.4 3.9 1.7 310 24.5 8.1 27.4 94.2 6.7 9.6 6 87 <0.2 27.8 27.8 1.3 6.8 1.6 297 24.5 8.1 94.2 6.7 18.4 6 89 6.8 1.6 305 24.4 8.0 94.3 18.5 6 89 1.0 2.3 236 24.7 8.0 26.0 93.5 6.7 5.4 86 <0.2 1.5 Surface 24.7 26.0 93.6 8.0 6.7 <0.2 13 1.0 2.4 252 24.7 26.0 93.6 5.4 6 86 87 <0.2 4.1 2.1 230 27.9 9.8 5 1.3 24.5 8.1 92.8 6.6 IM7 Moderate 09:37 8.1 Middle 24.5 8.1 27.9 92.8 821337 806845 Cloudy 88 1.4 4.1 2.2 233 24.5 8.1 27.9 92.8 6.6 9.5 5 <0.2 7.1 2.2 233 24.5 8.1 28.0 92.7 6.6 13.5 6 89 1.3 Bottom 24.5 8.1 28.0 92.7 6.6 7.1 2.3 251 24.5 8.1 28.0 92.7 6.6 13.7 < 0.2 1.3 1.0 0.4 71 24.9 8.1 25.4 86.4 6.2 3.9 6 83 <0.2 1.4 Surface 24.9 8.1 25.4 86.4 25.4 86.4 84 1.4 1.0 0.4 74 24.9 8.1 4.0 7 4.0 0.3 60 24.8 25.7 25.7 4.4 6 87 <0.2 1.6 8.1 85.8 6.2 8.1 25.7 85.8 821852 808147 IM8 Cloudy Moderate 08:54 8.0 Middle 24.8 87 <0.2 1.4 7 87 1.4 85.8 4.4 4.0 63 24.8 8.1 6.2 0.3 7.0 89 <0.2 0.1 54 24.7 8.1 8.1 26.1 26.1 86.0 86.1 6.2 4.7 6 1.4 24.7 8.1 6.2 Rottom

DA: Depth-Averaged

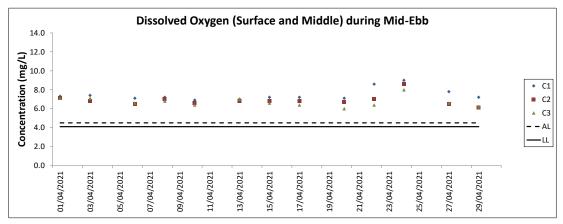
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

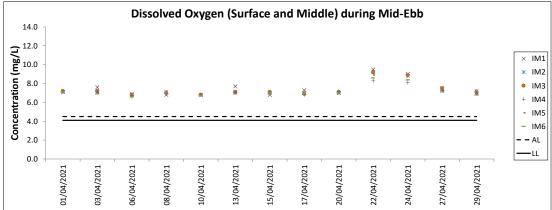
during Mid-Flood Tide Water Quality Monitoring Results on 29 April 21 DO Saturation Dissolved Suspended Solids Total Alkalinit Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Sampling Water Water Temperature (°C) Monitoring Speed Current Oxvaen (ma/L) Sampling Depth (m) HK Grid HK Grid Station Direction Time Value Average Value Average Value Average Value Average Value DA Value DA Value DA DA Value DA Value DA Condition Condition Depth (m) (m/s) Value (Northing) (Easting) 24.8 0.3 43 26.1 85.4 1.0 47 24.8 26.1 85.4 6.1 7.5 7.5 13 84 1.4 4.0 0.3 39 24.8 8.2 26.1 85.1 6.1 12 87 <0.2 1.4 26.1 85.1 808815 IM9 Cloudy Moderate 08:47 7.9 Middle 24.8 8.2 13 87 822083 <0.2 4.0 0.3 40 24.8 8.2 26.1 85.0 6.1 7.5 13 87 <0.2 1.4 6.9 0.3 32 24.8 8.2 26.2 84.8 6.1 8.0 15 89 <0.2 1.4 8.2 26.2 84.8 Bottom 24.8 6.9 0.3 33 24.8 8.2 26.2 84.8 6.1 8.2 14 90 <0.2 1.3 328 1.0 0.8 24.7 8.2 27.4 85.4 6.1 10.9 12 84 <0.2 1.3 Surface 8.2 27.4 85.4 <0.2 0.9 343 24.7 8.2 27.4 85.4 6.1 10.9 11 85 1.4 4.6 0.7 325 24.7 8.2 27.6 84.8 6.0 11.9 12 11 87 87 <0.2 1.3 IM10 Cloudy 08:39 9.2 Middle 8.2 27.6 84.8 13 822399 809786 4.6 333 8.2 0.7 24.7 27.6 84.8 6.0 11.8 0.7 24.7 13.1 15 8.2 324 8.2 27.6 85.1 6.1 89 < 0.2 Bottom 24.7 8.2 27.6 85.2 16 8.2 0.8 350 24.6 8.2 27.6 85.2 6.1 13.1 89 1.3 <0.2 0.7 305 24.8 16 13.0 83 <0.2 1.4 8.2 84.7 6.0 Surface 24.8 8.2 27.5 84.7 1.0 327 12.9 13.8 16 84 <0.2 1.3 0.8 24.8 8.2 27.5 84.7 6.0 16 17 85 85 <0.2 1.3 308 325 24.8 24.8 8.2 8.2 27.5 27.5 4.2 84.2 6.0 IM11 Rainv Moderate 08:29 8.4 Middle 24.8 8.2 27.5 84.2 18 86 822068 811451 <0.2 1.3 4.2 0.7 13.7 6.0 <0.2 7.4 0.5 302 24.7 27.5 14.8 21 88 1.3 8.2 27.5 84.2 6.0 24.7 8.2 84.3 Bottom 6.0 7.4 0.6 317 24.7 8.2 27.5 84.3 6.0 14.9 21 88 <0.2 1.3 24.8 14.6 <0.2 1.4 8.2 27.4 6.0 Surface 24.8 8.2 27.4 85.0 1.0 1.0 277 24.8 8.2 6.0 14.7 19 84 <0.2 1.3 5.0 0.9 268 24.8 84.7 6.0 15.8 20 86 <0.2 1.4 8.2 27.4 821469 812052 IM12 Rainy Moderate 08:23 9.9 Middle 24.8 8.2 27.4 84.7 19 87 < 0.2 5.0 15.8 20 17 1.4 0.9 24.8 281 8.2 271 24.7 8.2 84.4 16.7 <0.2 1.3 27.6 6.0 24.7 8.2 27.6 84.4 6.0 Rottom 8.9 0.8 289 24.7 8.2 27.6 84.4 6.0 16.5 18 26.5 26.5 84.2 84.1 8.1 6.0 Surface 24.7 8.1 26.5 84.2 1.0 24.7 6.0 3.2 4 2.6 SR1A Rainv Calm 07:46 5.1 Middle 819981 812658 2.6 41 24.6 8.1 27.6 82.1 82.1 5.8 5.8 4.3 5 Bottom 24.6 8.1 27.6 82.1 5.8 41 24.6 8.1 44 6 5 1.0 0.1 344 24.7 8.1 83.8 14.4 83 <0.2 1.1 Surface 8.1 27.5 83.8 1.0 0.1 345 24.7 8.1 27.5 83.8 6.0 14.3 83 <0.2 1.2 SR2 Rainy Moderate 07:29 4.8 Middle 821455 814173 0.1 54 27.8 27.8 10 1.3 3.8 24.7 8 1 6.0 15.8 88 <0.2 6.0 84.2 6.0 56 8.1 15.9 11 12 3.8 0.1 24.7 88 1.0 0.3 87 24.9 8.2 24.9 86.5 6.2 3.6 4 Surface 24.9 8.2 24.9 86.5 6.2 8.2 86.5 3.6 5 1.0 0.3 90 24 9 24 9 5.0 86 4.6 4.7 0.4 24.9 8.2 25.1 85.8 6.2 4 SR3 Cloudy Moderate 09:00 10.0 Middle 25.1 822140 807574 25.1 85.8 5 87 8.2 6.2 5.0 0.4 24.9 9.0 0.3 81 24.8 8.2 8.2 25.5 25.5 85.4 85.4 6.1 4.9 4.9 6 7 Bottom 24.8 8.2 25.5 85.4 6.1 9.0 0.3 85 24.8 1.0 1.4 24.5 8.1 28.2 92.3 6.6 7.7 4 Surface 24.5 8.1 28.2 92.3 1.4 24.5 8.1 28.2 92.3 7.7 1.0 6.6 3.8 1.2 355 7.7 5 24.5 8.0 28.4 92.1 6.5 SR4A 08:08 8.0 92.1 817194 807810 Rainy Moderate 7.6 Middle 24.5 28.4 3.8 327 8.0 28.4 92.1 6.5 7.8 6 1.3 24.5 6.6 1.4 358 24.5 28.5 28.5 92.9 93.0 6.6 8.2 8.4 8.0 8.0 93.0 6.6 5 24.5 28.5 Rottom 6.6 1.5 329 24.5 1.0 0.2 292 24.5 28.6 28.6 28.6 92.6 92.6 7.0 8.1 6.6 24.5 8.1 92.6 Surface 1.0 0.2 320 24.5 8.1 6.6 7.1 4 SR5A 07:49 3.1 Middle 816589 810706 Rainy Moderate 2.1 0.1 294 24.5 28.6 92.6 6.6 8.3 24.5 8.1 28.6 92.7 6.6 Bottom 309 8.1 28.6 6.6 2.1 0.2 24.5 1.0 0.1 274 24.6 92.3 7.9 8.0 Surface 24.6 8.0 27.5 92.3 1.0 0.1 274 24.6 8.0 27.5 92.3 6.6 7.9 8 SR6A Cloudy Moderate 07:22 3.5 Middle 817943 814717 6.6 2.5 0.1 324 24.5 8.0 92.2 7.3 5 24.5 8.0 27.7 92.3 2.5 0.1 347 24.5 8.0 92.3 6.6 7.3 5 1.0 0.2 338 24.6 8.2 28.3 86.5 6.1 2.6 Surface 28.3 86.5 1.0 0.3 351 24.6 8.2 28.3 86.5 6.1 2.6 4 8.0 0.2 3 24.6 8.2 28.8 85.6 6.1 3.1 4 SR7 Moderate 06:42 15.9 Middle 8.2 28.8 85.6 823633 823745 Cloudy 5 8.0 0.2 3 24.6 8.2 28.8 85.6 6.1 3.1 14.9 0.3 45 24.5 8.2 29.6 84.7 6.0 4.7 9 Bottom 24.5 8.2 29.6 84.7 14.9 0.3 46 24.5 8.2 29.6 84.7 6.0 4.7 9 1.0 24.8 8.4 26.5 84.4 6.0 13.8 21 Surface 24.8 8.4 26.6 84.5 1.0 24.8 8.4 26.6 84.5 6.0 14.1 20 08:14 820392 811623 SR8 Rainy Moderate 5.0 Middle 19 17 4.0 24.7 27.4 15.6 8.2 85.2 6.1 24.7 8.2 27.4 85.2 6.1

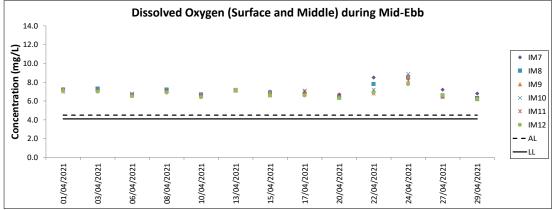
DA: Depth-Averaged

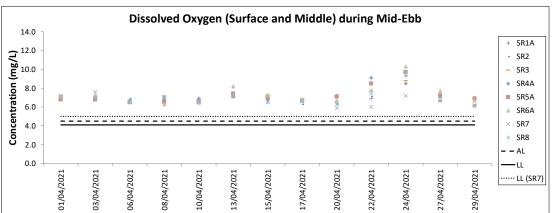
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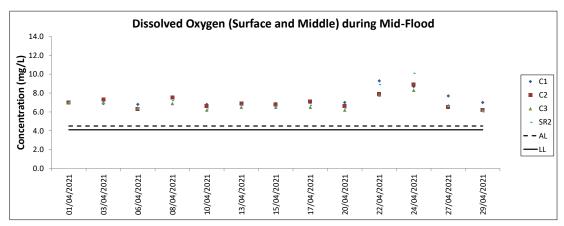
Value exceeding Action Level is underlined: Value exceeding Limit Level is bolded and underlined

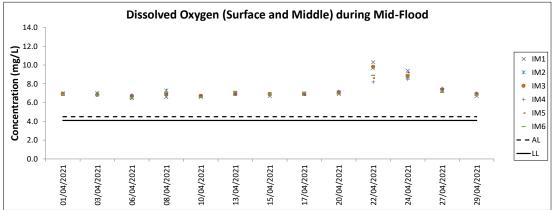


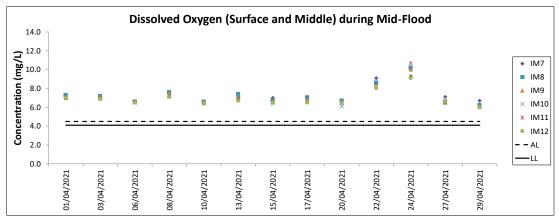


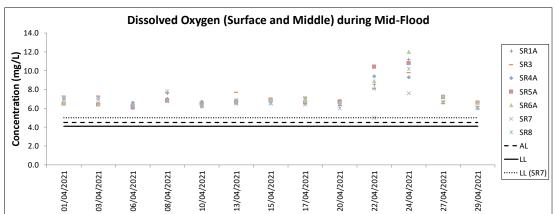


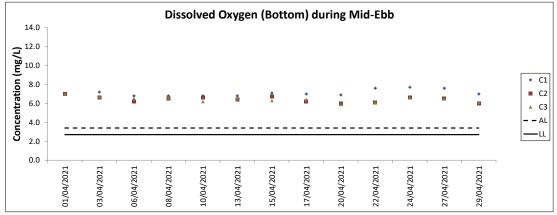


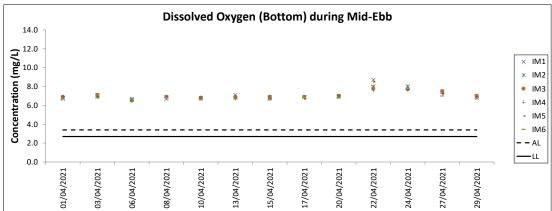


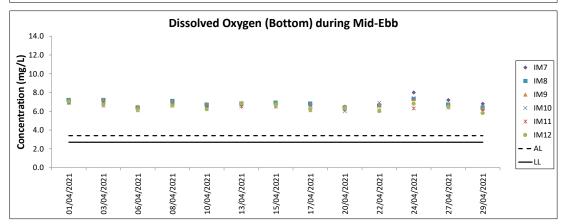


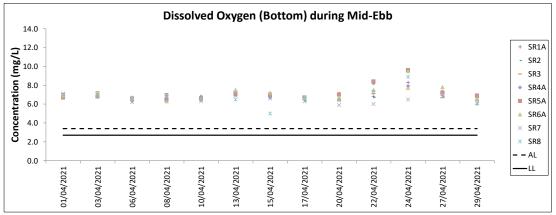


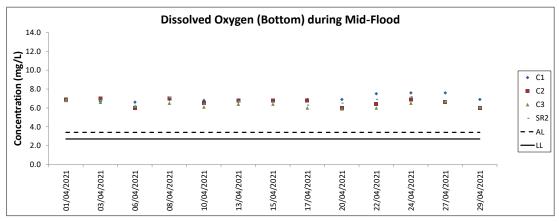


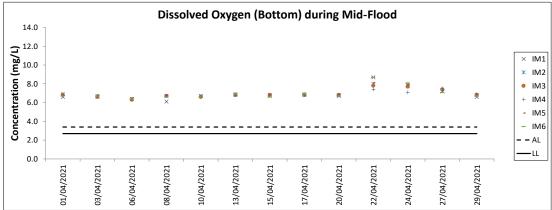


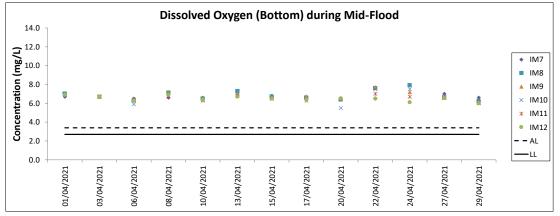


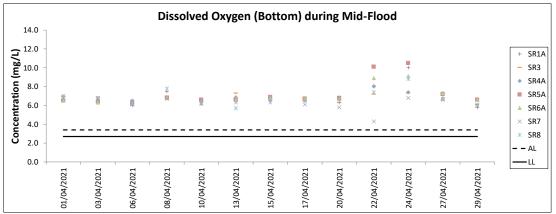


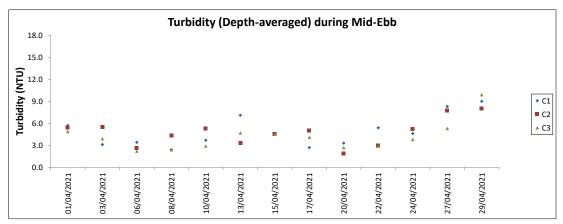


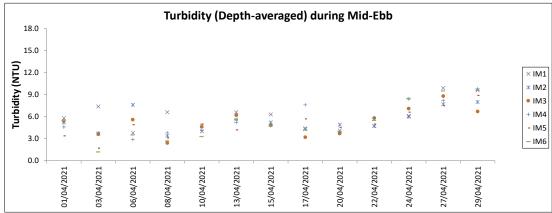


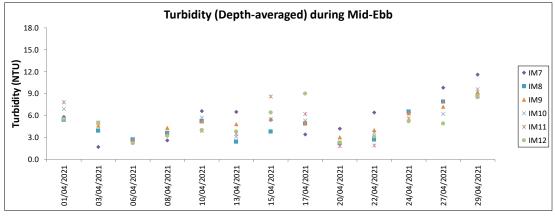


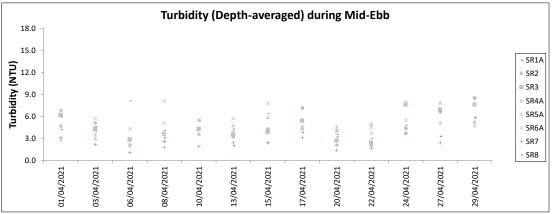


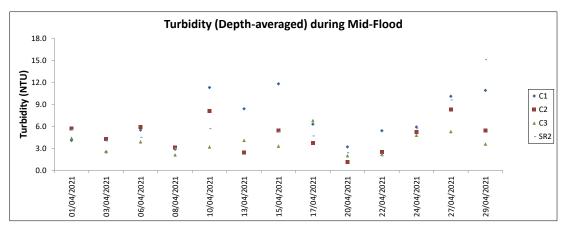


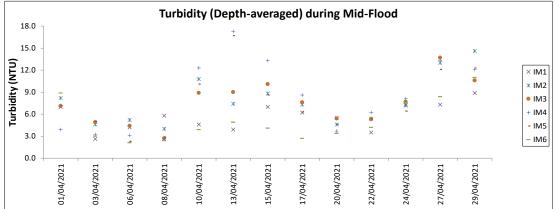


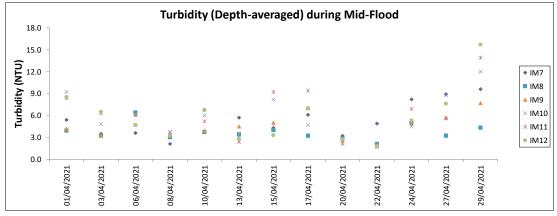


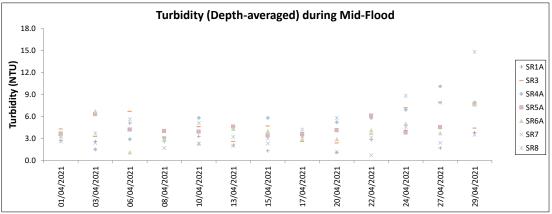


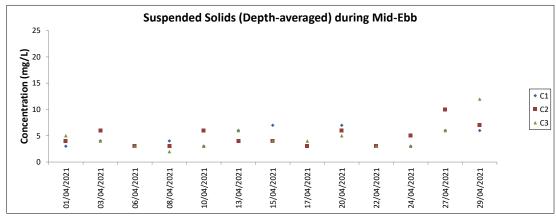


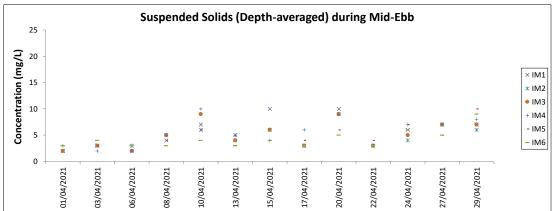


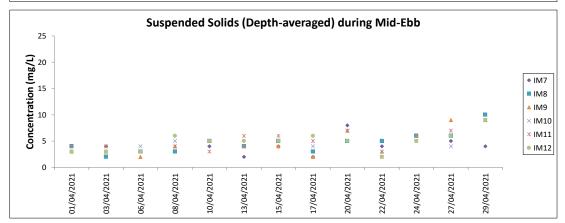


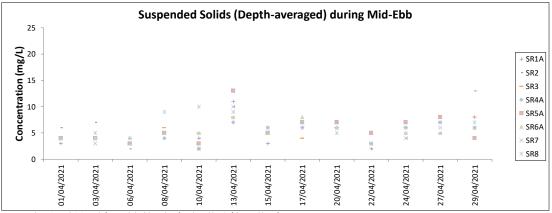




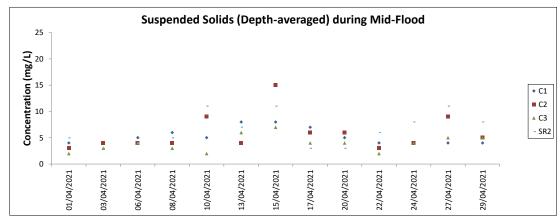


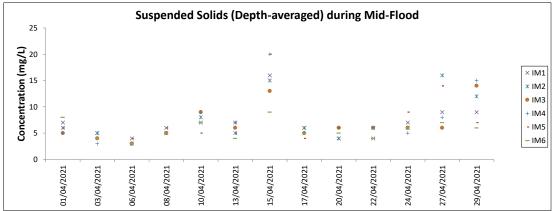


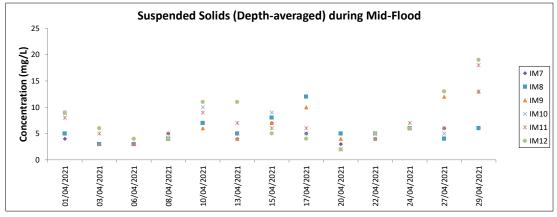


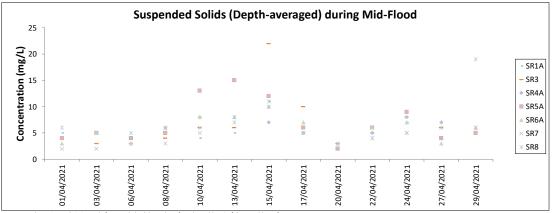


The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

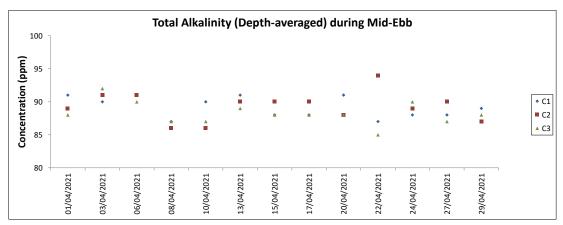


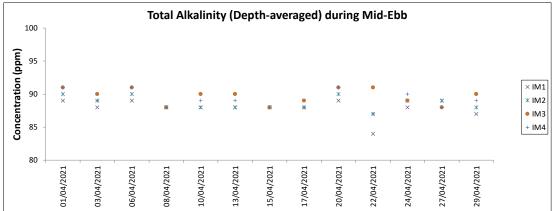


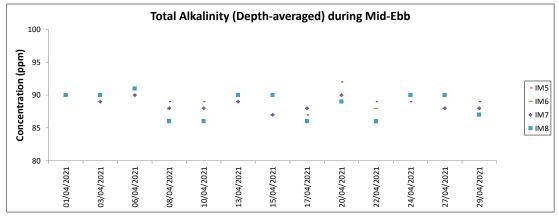


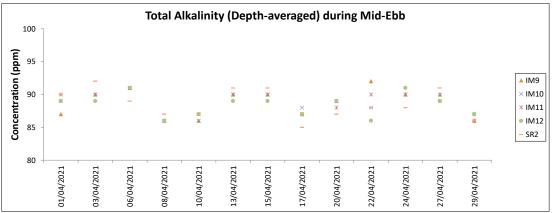


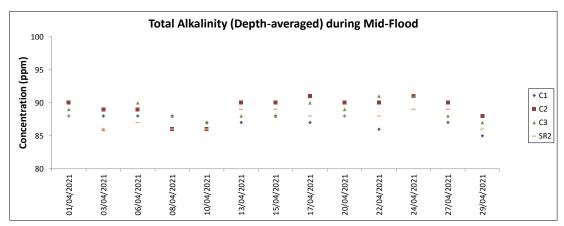
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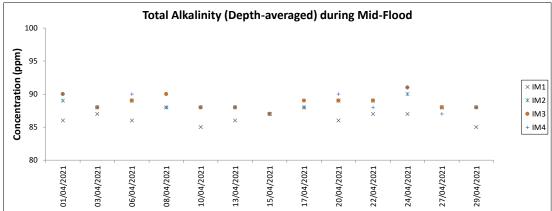


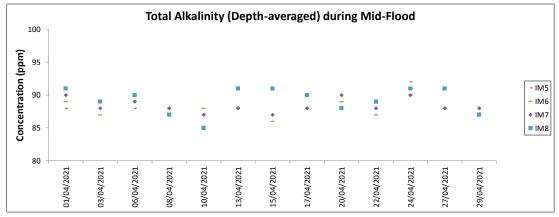


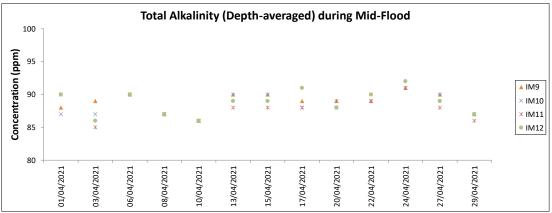


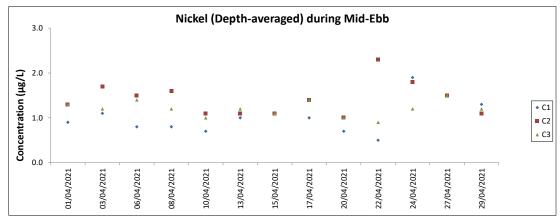


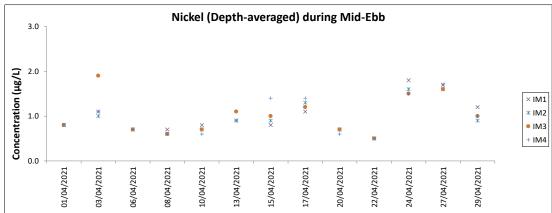


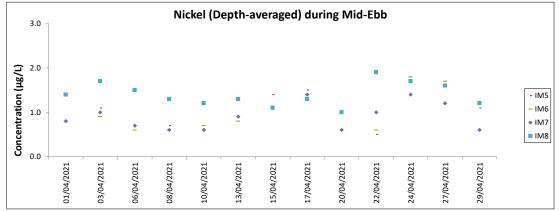


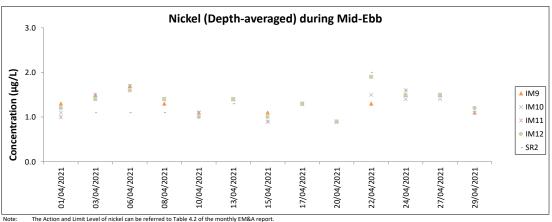


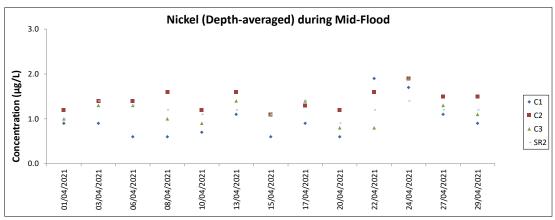


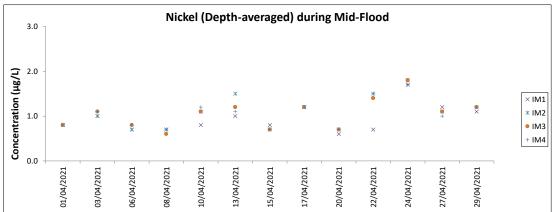


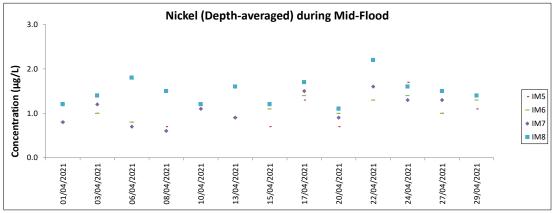


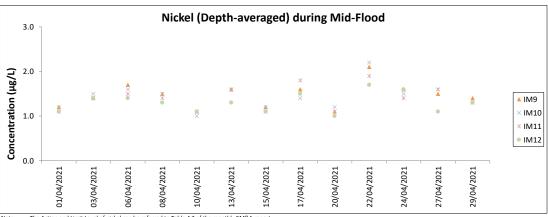












Mott MacDonald   Expansion of Hong Kong International Airport into a Three-Runway System
Chinese White Dolphin Monitoring Results

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

## **Survey Effort Data**

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
5-Feb-21	AW	3	4.670	WINTER	32166	3RS ET	Р
5-Feb-21	WL	2	10.448	WINTER	32166	3RS ET	Р
5-Feb-21	WL	3	6.690	WINTER	32166	3RS ET	Р
5-Feb-21	WL	2	7.922	WINTER	32166	3RS ET	S
5-Feb-21	WL	3	2.180	WINTER	32166	3RS ET	S
8-Feb-21	NWL	2	3.780	WINTER	32166	3RS ET	Р
8-Feb-21	NWL	3	24.720	WINTER	32166	3RS ET	Р
8-Feb-21	NWL	4	30.770	WINTER	32166	3RS ET	Р
8-Feb-21	NWL	2	4.170	WINTER	32166	3RS ET	S
8-Feb-21	NWL	3	1.900	WINTER	32166	3RS ET	S
8-Feb-21	NWL	4	5.440	WINTER	32166	3RS ET	S
9-Feb-21	NEL	2	2.900	WINTER	32166	3RS ET	Р
9-Feb-21	NEL	3	32.690	WINTER	32166	3RS ET	Р
9-Feb-21	NEL	4	1.400	WINTER	32166	3RS ET	Р
9-Feb-21	NEL	3	10.310	WINTER	32166	3RS ET	S
16-Feb-21	AW	3	4.800	WINTER	32166	3RS ET	Р
16-Feb-21	WL	2	10.372	WINTER	32166	3RS ET	Р
16-Feb-21	WL	3	9.920	WINTER	32166	3RS ET	Р
16-Feb-21	WL	2	6.548	WINTER	32166	3RS ET	S
16-Feb-21	WL	3	3.027	WINTER	32166	3RS ET	S
17-Feb-21	NWL	2	8.500	WINTER	32166	3RS ET	Р
17-Feb-21	NWL	3	54.950	WINTER	32166	3RS ET	Р
17-Feb-21	NWL	2	2.000	WINTER	32166	3RS ET	S
17-Feb-21	NWL	3	8.950	WINTER	32166	3RS ET	S
22-Feb-21	SWL	1	11.870	WINTER	32166	3RS ET	Р
22-Feb-21	SWL	2	41.274	WINTER	32166	3RS ET	Р
22-Feb-21	SWL	1	3.184	WINTER	32166	3RS ET	S
22-Feb-21	SWL	2	12.507	WINTER	32166	3RS ET	S
23-Feb-21	SWL	2	52.641	WINTER	32166	3RS ET	Р
23-Feb-21	SWL	3	2.000	WINTER	32166	3RS ET	Р
23-Feb-21	SWL	2	15.510	WINTER	32166	3RS ET	S
24-Feb-21	NEL	2	1.950	WINTER	32166	3RS ET	Р
24-Feb-21	NEL	3	35.420	WINTER	32166	3RS ET	Р
24-Feb-21	NEL	2	2.960	WINTER	32166	3RS ET	S
24-Feb-21	NEL	3	7.270	WINTER	32166	3RS ET	S
3-Mar-21	NEL	3	37.340	SPRING	32166	3RS ET	Р
3-Mar-21	NEL	3	9.760	SPRING	32166	3RS ET	S
8-Mar-21	NWL	2	1.100	SPRING	32166	3RS ET	Р
8-Mar-21	NWL	3	35.740	SPRING	32166	3RS ET	Р
8-Mar-21	NWL	4	26.780	SPRING	32166	3RS ET	Р
8-Mar-21	NWL	2	2.300	SPRING	32166	3RS ET	S
8-Mar-21	NWL	3	5.000	SPRING	32166	3RS ET	S
8-Mar-21	NWL	4	3.900	SPRING	32166	3RS ET	S
9-Mar-21	AW	3	4.720	SPRING	32166	3RS ET	Р
9-Mar-21	WL	2	9.720	SPRING	32166	3RS ET	Р
9-Mar-21	WL	3	10.360	SPRING	32166	3RS ET	Р
9-Mar-21	WL	2	6.740	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
9-Mar-21	WL	3	4.630	SPRING	32166	3RS ET	S
10-Mar-21	NEL	2	1.100	SPRING	32166	3RS ET	Р
10-Mar-21	NEL	3	25.400	SPRING	32166	3RS ET	Р
10-Mar-21	NEL	4	10.430	SPRING	32166	3RS ET	Р
10-Mar-21	NEL	3	7.070	SPRING	32166	3RS ET	S
10-Mar-21	NEL	4	3.100	SPRING	32166	3RS ET	S
12-Mar-21	SWL	1	3.850	SPRING	32166	3RS ET	Р
12-Mar-21	SWL	2	49.702	SPRING	32166	3RS ET	Р
12-Mar-21	SWL	3	0.900	SPRING	32166	3RS ET	Р
12-Mar-21	SWL	2	14.678	SPRING	32166	3RS ET	S
12-Mar-21	SWL	3	1.100	SPRING	32166	3RS ET	S
15-Mar-21	AW	2	1.910	SPRING	32166	3RS ET	Р
15-Mar-21	AW	3	2.740	SPRING	32166	3RS ET	Р
15-Mar-21	WL	2	16.658	SPRING	32166	3RS ET	P
15-Mar-21	WL	3	3.340	SPRING	32166	3RS ET	P
15-Mar-21	WL	2	9.742	SPRING	32166	3RS ET	S
16-Mar-21	NWL	2	58.960	SPRING	32166	3RS ET	P
16-Mar-21	NWL	3	3.860	SPRING	32166	3RS ET	P
16-Mar-21	NWL	2	8.700	SPRING	32166	3RS ET	S
16-Mar-21	NWL	3	1.900	SPRING	32166	3RS ET	S
	SWL	2		SPRING	1	3RS ET	P
17-Mar-21			49.752	SPRING	32166		
17-Mar-21	SWL	3	2.340	SPRING	32166	3RS ET	P
17-Mar-21	SWL	2	15.682		32166	3RS ET	S
7-Apr-21	NWL	2	5.840	SPRING	32166	3RS ET	Р
7-Apr-21	NWL	3	45.160	SPRING	32166	3RS ET	Р
7-Apr-21	NWL	4	12.900	SPRING	32166	3RS ET	Р
7-Apr-21	NWL	3	8.800	SPRING	32166	3RS ET	S
7-Apr-21	NWL	4	2.600	SPRING	32166	3RS ET	S
12-Apr-21	AW	2	2.950	SPRING	32166	3RS ET	Р
12-Apr-21	AW	3	1.920	SPRING	32166	3RS ET	Р
12-Apr-21	WL	2	14.085	SPRING	32166	3RS ET	Р
12-Apr-21	WL	3	4.941	SPRING	32166	3RS ET	Р
12-Apr-21	WL	2	7.213	SPRING	32166	3RS ET	S
12-Apr-21	WL	3	2.029	SPRING	32166	3RS ET	S
12-Apr-21	WL	4	0.970	SPRING	32166	3RS ET	S
13-Apr-21	SWL	1	1.810	SPRING	32166	3RS ET	Р
13-Apr-21	SWL	2	43.686	SPRING	32166	3RS ET	Р
13-Apr-21	SWL	3	7.090	SPRING	32166	3RS ET	Р
13-Apr-21	SWL	2	13.349	SPRING	32166	3RS ET	S
13-Apr-21	SWL	3	2.280	SPRING	32166	3RS ET	S
14-Apr-21	NEL	3	37.080	SPRING	32166	3RS ET	Р
14-Apr-21	NEL	3	9.920	SPRING	32166	3RS ET	S
15-Apr-21	NEL	3	29.770	SPRING	32166	3RS ET	Р
15-Apr-21	NEL	4	7.400	SPRING	32166	3RS ET	Р
15-Apr-21	NEL	3	7.730	SPRING	32166	3RS ET	S
15-Apr-21	NEL	4	2.100	SPRING	32166	3RS ET	S
19-Apr-21	NWL	3	24.300	SPRING	32166	3RS ET	Р
19-Apr-21	NWL	4	33.330	SPRING	32166	3RS ET	Р
19-Apr-21	NWL	5	6.370	SPRING	32166	3RS ET	Р

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
19-Apr-21	NWL	3	5.900	SPRING	32166	3RS ET	S
19-Apr-21	NWL	4	2.900	SPRING	32166	3RS ET	S
19-Apr-21	NWL	5	3.000	SPRING	32166	3RS ET	S
20-Apr-21	AW	3	4.860	SPRING	32166	3RS ET	Р
20-Apr-21	WL	2	1.600	SPRING	32166	3RS ET	А
20-Apr-21	WL	3	18.466	SPRING	32166	3RS ET	Р
20-Apr-21	WL	2	1.100	SPRING	32166	3RS ET	S
20-Apr-21	WL	3	9.774	SPRING	32166	3RS ET	S
21-Apr-21	SWL	3	25.980	SPRING	32166	3RS ET	Р
21-Apr-21	SWL	4	13.080	SPRING	32166	3RS ET	Р
21-Apr-21	SWL	5	15.050	SPRING	32166	3RS ET	Р
21-Apr-21	SWL	3	8.070	SPRING	32166	3RS ET	S
21-Apr-21	SWL	4	4.740	SPRING	32166	3RS ET	S
21-Apr-21	SWL	5	3.380	SPRING	32166	3RS ET	S

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
5-Feb-21	1	1025	CWD	2	WL	2	374	ON	3RS ET	22.2726	113.8471	WINTER	NONE	S
5-Feb-21	2	1031	CWD	4	WL	2	22	ON	3RS ET	22.2692	113.8477	WINTER	GILLNETTER	Р
5-Feb-21	3	1056	CWD	2	WL	2	817	ON	3RS ET	22.2612	113.8506	WINTER	NONE	Р
5-Feb-21	4	1102	CWD	6	WL	2	424	ON	3RS ET	22.2602	113.8404	WINTER	NONE	Р
5-Feb-21	5	1134	CWD	5	WL	2	698	ON	3RS ET	22.2413	113.8449	WINTER	NONE	Р
5-Feb-21	6	1201	CWD	1	WL	2	130	ON	3RS ET	22.2232	113.8366	WINTER	NONE	Р
5-Feb-21	7	1245	CWD	1	WL	3	231	ON	3RS ET	22.1967	113.8335	WINTER	NONE	Р
8-Feb-21	1	1003	CWD	12	NWL	3	513	ON	3RS ET	22.4049	113.8702	WINTER	NONE	Р
8-Feb-21	2	1102	CWD	1	NWL	3	779	ON	3RS ET	22.3266	113.8699	WINTER	NONE	Р
8-Feb-21	3	1133	CWD	10	NWL	2	893	ON	3RS ET	22.2732	113.8703	WINTER	NONE	Р
8-Feb-21	4	1254	CWD	1	NWL	3	18	ON	3RS ET	22.3571	113.8781	WINTER	NONE	Р
16-Feb-21	1	1001	CWD	3	WL	3	698	ON	3RS ET	22.2962	113.8613	WINTER	NONE	Р
16-Feb-21	2	1038	CWD	3	WL	3	175	ON	3RS ET	22.2669	113.8596	WINTER	NONE	S
16-Feb-21	3	1058	CWD	9	WL	3	510	ON	3RS ET	22.2606	113.8443	WINTER	GILLNETTER	Р
16-Feb-21	4	1135	CWD	2	WL	3	275	ON	3RS ET	22.2500	113.8467	WINTER	NONE	Р
16-Feb-21	5	1219	CWD	1	WL	2	35	ON	3RS ET	22.2203	113.8203	WINTER	NONE	S
17-Feb-21	1	1130	CWD	2	NWL	3	6	ON	3RS ET	22.3859	113.8775	WINTER	NONE	Р
22-Feb-21	1	1043	FP	8	SWL	1	288	ON	3RS ET	22.1749	113.9366	WINTER	NONE	Р
22-Feb-21	2	1051	FP	3	SWL	1	72	ON	3RS ET	22.1625	113.9363	WINTER	NONE	Р
22-Feb-21	3	1058	FP	1	SWL	1	9	ON	3RS ET	22.1494	113.9355	WINTER	NONE	S
22-Feb-21	4	1101	FP	8	SWL	1	89	ON	3RS ET	22.1471	113.9322	WINTER	NONE	S
22-Feb-21	5	1108	FP	1	SWL	1	55	ON	3RS ET	22.1477	113.9275	WINTER	NONE	Р
22-Feb-21	6	1115	FP	1	SWL	1	16	ON	3RS ET	22.1572	113.9274	WINTER	NONE	Р
22-Feb-21	7	1308	FP	5	SWL	2	599	ON	3RS ET	22.1761	113.8972	WINTER	NONE	Р
22-Feb-21	8	1314	FP	2	SWL	2	67	ON	3RS ET	22.1663	113.8972	WINTER	NONE	Р
22-Feb-21	9	1320	FP	6	SWL	2	113	ON	3RS ET	22.1568	113.8974	WINTER	NONE	Р
22-Feb-21	10	1330	FP	2	SWL	2	1	ON	3RS ET	22.1518	113.8876	WINTER	NONE	Р
22-Feb-21	11	1339	FP	3	SWL	2	161	ON	3RS ET	22.1696	113.8878	WINTER	NONE	Р
22-Feb-21	12	1405	FP	1	SWL	2	471	ON	3RS ET	22.2064	113.8785	WINTER	NONE	S
22-Feb-21	13	1410	FP	4	SWL	2	64	ON	3RS ET	22.1979	113.8982	WINTER	NONE	Р
22-Feb-21	14	1442	FP	5	SWL	2	513	ON	3RS ET	22.1793	113.8686	WINTER	NONE	Р
22-Feb-21	15	1446	FP	3	SWL	2	199	ON	3RS ET	22.1848	113.8687	WINTER	NONE	Р

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
22-Feb-21	16	1449	FP	5	SWL	2	672	ON	3RS ET	22.1891	113.8684	WINTER	NONE	Р
22-Feb-21	17	1456	FP	1	SWL	2	61	ON	3RS ET	22.1966	113.8685	WINTER	NONE	Р
22-Feb-21	18	1508	FP	3	SWL	2	360	ON	3RS ET	22.1849	113.8590	WINTER	NONE	Р
23-Feb-21	1	1042	FP	2	SWL	2	310	ON	3RS ET	22.1774	113.9358	WINTER	NONE	Р
23-Feb-21	2	1304	FP	3	SWL	2	62	ON	3RS ET	22.1668	113.89727	WINTER	NONE	Р
23-Feb-21	3	1310	FP	7	SWL	2	285	ON	3RS ET	22.1643	113.8972	WINTER	NONE	Р
23-Feb-21	4	1314	FP	3	SWL	2	18	ON	3RS ET	22.1587	113.8975	WINTER	NONE	Р
23-Feb-21	5	1430	FP	3	SWL	2	63	ON	3RS ET	22.1743	113.8688	WINTER	NONE	Р
8-Mar-21	1	0939	CWD	1	NWL	3	150	ON	3RS ET	22.4023	113.8702	SPRING	NONE	Р
9-Mar-21	1	1145	CWD	4	WL	3	41	ON	3RS ET	22.2052	113.8337	SPRING	NONE	Р
12-Mar-21	1	1051	FP	8	SWL	1	49	ON	3RS ET	22.1885	113.9365	SPRING	NONE	Р
12-Mar-21	2	1105	FP	3	SWL	2	25	ON	3RS ET	22.1730	113.9361	SPRING	NONE	Р
12-Mar-21	3	1114	FP	2	SWL	2	41	ON	3RS ET	22.1572	113.9366	SPRING	NONE	Р
12-Mar-21	4	1145	FP	2	SWL	2	17	ON	3RS ET	22.1934	113.9270	SPRING	NONE	Р
15-Mar-21	1	1010	CWD	1	WL	3	71	ON	3RS ET	22.2908	113.8613	SPRING	NONE	Р
15-Mar-21	2	1146	CWD	7	WL	2	434	ON	3RS ET	22.2074	113.8395	SPRING	NONE	S
15-Mar-21	3	1217	CWD	1	WL	2	404	ON	3RS ET	22.2054	113.8230	SPRING	NONE	Р
16-Mar-21	1	1039	CWD	1	NWL	2	915	ON	3RS ET	22.2800	113.8784	SPRING	NONE	Р
16-Mar-21	2	1105	CWD	2	NWL	2	223	ON	3RS ET	22.3070	113.8753	SPRING	NONE	S
17-Mar-21	1	1038	FP	3	SWL	2	200	ON	3RS ET	22.2012	113.9359	SPRING	NONE	Р
17-Mar-21	2	1046	FP	7	SWL	2	315	ON	3RS ET	22.1876	113.9360	SPRING	NONE	Р
17-Mar-21	3	1054	FP	8	SWL	2	9	ON	3RS ET	22.1763	113.9359	SPRING	NONE	Р
17-Mar-21	4	1107	FP	2	SWL	2	2	ON	3RS ET	22.1491	113.9344	SPRING	NONE	S
17-Mar-21	5	1216	FP	2	SWL	2	58	ON	3RS ET	22.1411	113.9089	SPRING	NONE	S
17-Mar-21	6	1223	FP	4	SWL	2	211	ON	3RS ET	22.1526	113.9079	SPRING	NONE	Р
17-Mar-21	7	1228	FP	2	SWL	2	13	ON	3RS ET	22.1556	113.9019	SPRING	NONE	S
17-Mar-21	8	1319	FP	4	SWL	2	184	ON	3RS ET	22.1728	113.8968	SPRING	NONE	Р
17-Mar-21	9	1327	FP	3	SWL	2	72	ON	3RS ET	22.1582	113.8974	SPRING	NONE	Р
17-Mar-21	10	1340	FP	2	SWL	2	186	ON	3RS ET	22.1579	113.8881	SPRING	NONE	Р
17-Mar-21	11	1420	FP	3	SWL	3	67	ON	3RS ET	22.1856	113.8779	SPRING	NONE	Р
17-Mar-21	12	1431	FP	1	SWL	2	122	ON	3RS ET	22.1630	113.8785	SPRING	NONE	Р
17-Mar-21	13	1451	FP	1	SWL	2	11	ON	3RS ET	22.1891	113.8686	SPRING	NONE	Р
17-Mar-21	14	1524	CWD	1	SWL	2	86	ON	3RS ET	22.1843	113.8486	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-21	1	1047	CWD	2	WL	2	271	ON	3RS ET	22.2501	113.8423	SPRING	NONE	Р
12-Apr-21	2	1130	CWD	4	WL	2	335	ON	3RS ET	22.2322	113.8306	SPRING	NONE	Р
12-Apr-21	3	1140	CWD	2	WL	2	52	ON	3RS ET	22.2237	113.8375	SPRING	NONE	S
12-Apr-21	4	1206	CWD	7	WL	2	438	ON	3RS ET	22.2143	113.8293	SPRING	NONE	Р
13-Apr-21	1	1050	FP	3	SWL	2	222	ON	3RS ET	22.1852	113.9374	SPRING	NONE	Р
13-Apr-21	2	1055	FP	4	SWL	2	150	ON	3RS ET	22.1759	113.9373	SPRING	NONE	Р
13-Apr-21	3	1100	FP	3	SWL	2	14	ON	3RS ET	22.1700	113.9372	SPRING	NONE	Р
13-Apr-21	4	1214	FP	1	SWL	2	419	ON	3RS ET	22.1414	113.9163	SPRING	NONE	S
13-Apr-21	5	1349	FP	3	SWL	2	413	ON	3RS ET	22.1900	113.8887	SPRING	NONE	Р
13-Apr-21	6	1450	CWD	3	SWL	3	125	ON	3RS ET	22.1923	113.8691	SPRING	PURSE SEINER	Р
13-Apr-21	7	1536	CWD	3	SWL	3	322	ON	3RS ET	22.1893	113.8491	SPRING	PURSE SEINER	Р
20-Apr-21	1	1204	CWD	2	WL	3	155	ON	3RS ET	22.1910	113.8417	SPRING	PURSE SEINER	S
21-Apr-21	1	1152	FP	4	SWL	5	132	ON	3RS ET	22.1602	113.9181	SPRING	NONE	Р

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 345.703 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 7 on-effort sightings and total number of 23 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in April 2021 are shown as below:

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

$$STG = \frac{7}{345,703} \times 100 = 2.02$$

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

$$ANI = \frac{23}{345,703} \times 100 = 6.65$$

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

A total of 1160.530 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 32 on-effort sightings and total number of 106 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)

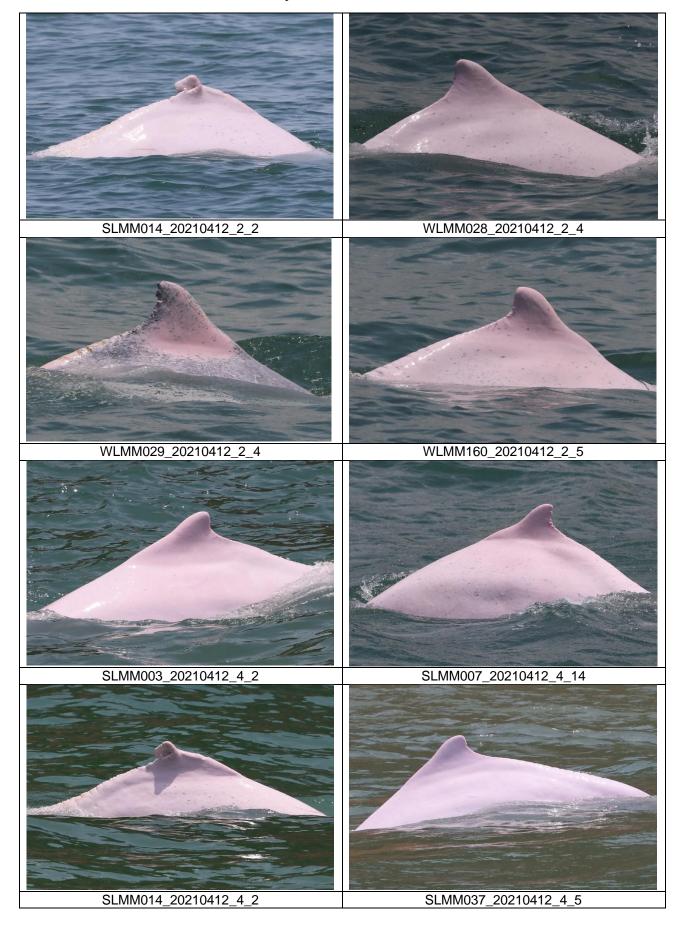
$$STG = \frac{32}{1160.530} \times 100 = 2.76$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

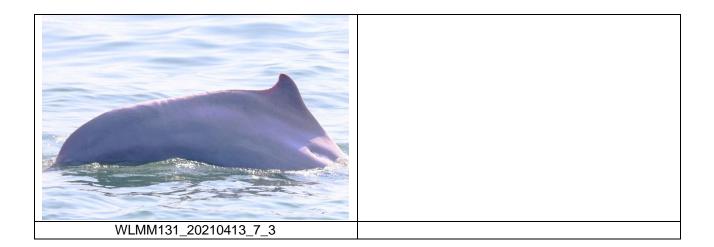
$$ANI = \frac{106}{1160.530} \times 100 = 9.13$$

#### **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
15/Apr/21	Sha Chau	10:43	16:43	6:00	3-4	1-2	0	-
21/Apr/21	Lung Kwu Chau	8:52	14:52	6:00	2-3	2	2	1-4

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

# **Appendix E. Calibration Certificates**



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No.

BA040092

Date of Issue

22 April 2021

Page No.

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#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd. Flat 2207, Yu Fun House, Yu Chui Court, Shatin New Territories, Hong Kong

#### PART B - DESCRIPTION

Attn: Mr. Thomas WONG

Name of Equipment

YSI ProDSS (Multi-Parameters)

Manufacturer

YSI (a xylem brand)

Serial Number

16H104234

Date of Received

Apr 22, 2021

Date of Calibration

Apr 22, 2021

Date of Next Calibration(a)

Jul 21, 2021

#### PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

**Parameter** 

Reference Method

pH at 25°C

APHA 21e 4500-H<sup>+</sup> B APHA 21e 4500-O G

Dissolved Oxygen Conductivity at 25°C

APHA 21e 2510 B

Salinity

APHA 21e 2520 B

Turbidity

APHA 21e 2130 B

Temperature

Section 6 of international Accreditation New Zealand Technical

Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

#### PART D - CALIBRATION RESULTS(b,c)

#### (1) pH at 25°C

Target (pH unit)	Displayed Reading(d) (pH Unit)	Tolerance(e)(pH Unit)	Results
4.00	3.98	-0.02	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	9.92	-0.09	Satisfactory

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

#### (2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.02	0.02	Satisfactory
25	24.00	-1.00	Satisfactory
40	40.00	0.00	Satisfactory

Tolerance limit of temperature should be less than  $\pm 2.0$  (°C)

#### ~ CONTINUED ON NEXT PAGE ~

#### Remark(s): -

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

(b) The results relate only to the calibrated equipment as received

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

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

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

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

## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No.

BA040092

Date of Issue

22 April 2021

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#### PART D - CALIBRATION RESULTS (Cont'd)

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.15	0.27	0.12	Satisfactory
1.88	1.92	0.04	Satisfactory
5.79	5.79	0.00	Satisfactory
8.49	8.42	-0.07	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.50$  (mg/L)

#### (4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (μS/cm)	Tolerance (%)	Results
0.001	146.9	145.3	-1.09	Satisfactory
0.01	1412	1331	-5.74	Satisfactory
0.1	12890	12364	-4.08	Satisfactory
0.5	58670	56724	-3.32	Satisfactory
1.0	111900	109210	-2.40	Satisfactory

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### (5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.18	1.80	Satisfactory
20	20.25	1.25	Satisfactory
30	30.04	0.13	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

#### (6) Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(f)</sup> (NTU)	Tolerance <sup>(g)</sup> (%)	Results
0	0.00		Satisfactory
10	10.10	1.0	Satisfactory
20	20.14	0.7	Satisfactory
100	107.6	7.6	Satisfactory
800	790	-1.3	Satisfactory

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

~ END OF REPORT ~

#### Remark(s): -

<sup>(9) &</sup>quot;Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

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



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### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No.

: BA040093

Date of Issue

22 April 2021

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#### PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd. Flat 2207, Yu Fun House, Yu Chui Court, Shatin New Territories, Hong Kong

Attn: Mr. Thomas WONG

#### PART B - DESCRIPTION

Name of Equipment

YSI 6920V2 (Multi-Parameters)

Manufacturer

YSI (a xylem brand)

Serial Number

0001C6A7

Date of Received

Apr 22, 2021

Date of Calibration

Apr 22, 2021

Date of Next Calibration(a)

Jul 21, 2021

#### PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

**Parameter** 

Reference Method

pH at 25°C

APHA 21e 4500-H+ B

Dissolved Oxygen Conductivity at 25°C APHA 21e 4500-O G APHA 21e 2510 B

Salinity

APHA 21e 2520 B

**Turbidity** 

APHA 21e 2130 B

Temperature

Section 6 of international Accreditation New Zealand Technical

Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

#### PART D - CALIBRATION RESULTS(b,c)

#### (1) pH at 25°C

Target (pH unit)	Displayed Reading(d) (pH Unit)	Tolerance <sup>(e)</sup> (pH Unit)	Results
4.00	4.03	0.03	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.06	0.05	Satisfactory

Tolerance of pH should be less than  $\pm 0.20$  (pH unit)

#### (2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	9.96	-0.04	Satisfactory
25	24.92	-0.08	Satisfactory
40	39.88	-0.12	Satisfactory

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

#### ~ CONTINUED ON NEXT PAGE ~

#### Remark(s): -

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

The results relate only to the calibrated equipment as received

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

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

LEE Chun-ning, Desmond Senior Chemist

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



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No.

: BA040093

Date of Issue

: 22 April 2021

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#### PART D - CALIBRATION RESULTS (Cont'd)

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.15	0.27	0.12	Satisfactory
1.88	1.92	0.04	Satisfactory
5.79	5.79	0.00	Satisfactory
8.49	8.42	-0.07	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.50$  (mg/L)

#### (4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (μS/cm)	Tolerance (%)	Results
0.001	146.9	138.7	-5.58	Satisfactory
0.01	1412	1365	-3.33	Satisfactory
0.1	12890	12484	-3.15	Satisfactory
0.5	58670	56842	-3.12	Satisfactory
1.0	111900	108864	-2.71	Satisfactory

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### (5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.05	0.50	Satisfactory
20	20.17	0.85	Satisfactory
30	30.46	1.53	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

#### (6) Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(f)</sup> (NTU)	Tolerance <sup>(g)</sup> (%)	Results
0	0.00		Satisfactory
10	9.90	-1.0	Satisfactory
20	19.82	-0.9	Satisfactory
100	98.3	-1.7	Satisfactory
800	798	-0.2	Satisfactory

Tolerance limit of turbidity should be less than  $\pm 10.0$  (%)

Remark(s):

<sup>~</sup> END OF REPORT ~

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

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

# **Appendix F. Status of Environmental Permits and Licences**

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

Contract No.	Description	Location	Permit/ Reference No.	Status
3206	Notification of Construction Work	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	under APCO	Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	Registration as Chemical Waste	Site office of 3206	WPN 5213-951- Z4035-01	Completion of Registration on 18 Nov 2016
	Producer	Works area of 3206	WPN 5213-951- Z4035-02	Completion of Registration on 18 Nov 2016
		Works Area of 3206 (Area 11)	WPN 5213-951- Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0187-21	Valid from 24 Mar 2021 to 15 Sep 2021
		Works Area of 3206 (Area 11)	GW-RS0107-21	Valid from 2 Mar 2021 to 30 Jun 2021
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951- F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286- 2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General	Works area of 3301	GW-RS0118-21	Valid from 24 Feb 2021 to 21 Aug 2021
	Works)	Works area of 3301	GW-RS0188-21	Valid from 29 Mar 2021 to 28 Sep 2021
		(Cable ducting works)		
3302	Notification of Construction Work	(Special Case) Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
	under APCO	Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331- 01	Completion of Registration on 4 Jan 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3302	WT00034539- 2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541- 2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General	Works area of 3302	GW-RS0988-20	Valid from 7 Jan 2021 to 6 July 2021
	Works)		GW-RS0987-20	Valid from 7 Jan 2020 to 6 July 2021
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174- 01	Completion of Registration on 17 Jun 2019
	Discharge License under WPCO	Works area of 3303	WT00035689- 2020	Valid from 11 May 2020 to 31 May 2025
		Works area of 3303	WT00036734- 2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0825-20	Valid from 16 Nov 2020 to 15 May 2021
		Works area of 3303	GW-RS0194-21	Superseded by GW-RS0285-21
		(Reclamation area)	GW-RS0285-21	Valid from 30 Apr 2021 to 28 Oct 2021
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oct 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951-A3024- 01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379- 01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926- 2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0033-21	Valid from 7 Feb 2021 to 6 Aug 2021
3402	Notification of Construction Work under APCO	Works area of 3402	464622	Receipt acknowledged by EPD on 18 Feb 2021
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0129-21	Valid from 20 Mar 2021 to 9 Sep 2021
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951- S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841- 2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0822-20	Valid from 29 Nov 2020 to 28 May 2021
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0010-21	Valid from 15 Jan 2021 to 31 May 2021
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951- C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084- 2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0013-21	Valid from 16 Jan 2021 to 7 Jul 2021
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Registration as Chemical Waste Producer	Works area of 3408	WPN 5218-951- B2621-01	Completion of Registration on 14 Jan 2021
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0224-21	Valid from 11 Apr 2021 to 30 Sep 2021
3503	Notification of Construction Work	Works area of 3503	459394	Receipt acknowledged by EPD on 28 Aug 2020
	under APCO	Stockpiling area of 3503	459392	Receipt acknowledged by EPD on 28 Aug 2020
	Registration as Chemical Waste	Works area of 3503	WPN 5113-951- L2845-02	Completion of Registration on 3 Sep 2019
	Producer	Stockpiling area of 3503	WPN 5113-951- L2845-04	Completion of Registration on 19 Jun 2020
	Discharge License under WPCO	Works area of 3503	WT00031258- 2018	Valid from 6 Aug 2019 to 30 Jun 2023
			WT00036551- 2020	Valid from 17 Sep 2020 to 30 Sep 2025
			WT00036697- 2020	Valid from 2 Nov 2020 to 30 Nov 2025
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General	Works area of 3503	GW-RS0054-21	Superseded by GW-RS0257-21
	Works)		GW-RS0257-21	Valid from 16 Apr 2021 to 12.Oct 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
		Stockpiling area	GW-RS0870-20	Superseded by GW-RS0215-21
		of 3503	GW-RS0215-21	Valid from 19 Apr 2021 to 18 Oct 2021
		Works area of 3503 (Special Case)	GW-RS0246-21	Valid from 15 Apr 2021 to 31 May 2021
3508	Notification of Construction Work under APCO	Works area of 3508	459469	Receipt acknowledged by EPD on 4 Sep 2020
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951- G2898-01	Completion of Registration on 28 Sep 2020
	Discharge License under WPCO	Works area of 3508	WT00037209- 2020	Valid from 11 Mar 2021 to 31 Mar 2026
			WT00037523- 2021	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037225- 2020	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037549- 2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)	Works area of	GW-RS0158-21	Superseded by GW-RS0213-21
		3508	GW-RS0213-21	Valid from 1 Apr 2021 to 30 Sep 2021
		Works area of 3508(Area 3)	GW-RS0802-20	Valid from 27 Oct 2020 to 23 Apr 2021
		Works area of 3508 (Special Case)	GW-RS0884-20	Valid from 27 Nov 2020 to 25 May 2021
		Works area of 3508 (Special Case)	GW-RS0088-21	Valid from 23 Feb 2021 to 15 Apr 2021
		Works area of 3508 (Special Case)	GW-RS0175-21	Valid from 1 Apr 2021 to 31 May 2021
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
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste	Works area of 3602	WPN 5296-951- N2673-01	Completion of Registration on 9 Oct 2017
	Producer	Site office of 3602	WPN 5296-951- N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0186-21	Valid from 31 Mar 2021 to 30 Sep 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Site office of 3603	5296-951-S4069- 01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0190-21	Valid from 26 Mar 2021 to 22 Sep 2021
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951- C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0916-20	Valid from 5 Dec 2020 to 3 Jun 2021
3722	Notification of Construction Work under APCO	Works area of 3722A	465843	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722B	465845	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722C	465842	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722D	465846	Receipt acknowledged by EPD on 14 Aug 2020
	Registration as Chemical Waste	Works area of 3722A	WPN 5218-951- T3863-01	Completion of Registration on 18 Mar 2020
	Producer	Works area of 3722B	WPN 5218-951- T3864-01	Completion of Registration on 18 Mar 2020
		Works area of 3722C	WPN 5218-951- T3862-01	Completion of Registration on 18 Mar 2020
		Works area of 3722D	WPN 5218-951- T3865-01	Completion of Registration on 18 Mar 2020
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722B	A/C 7036966	Approval granted from EPD on 6 Apr 2020
		Works area of 3722C	A/C 7036967	Approval granted from EPD on 6 Apr 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3722A, 3722B, 3722C and 3722D	GW-RS0153-21	Valid from 15 Mar 2021 to 14 Sep 2021
3723	Notification of Construction Work	3723A	464440	Receipt acknowledged by EPD on 9 Feb 2021
	under APCO	3723B	464444	Receipt acknowledged by EPD on 9 Feb 2021

Contract No.	Description	Location	Permit/ Reference No.	Status	
	Registration as Chemical Waste Producer	3723A	WPN 5218-951- T3920-01	Completion of Registration on 9 Feb 2021	
		3723B	WPN 5218-951- T3921-01	Completion of Registration on 9 Feb 2021	
	Discharge License under WPCO	Works area of 3723A & 3723B	/	Application submitted on 15 March 2021	
	Bill Account for disposal	Works area of 3723A	A/C 7039755	Approval granted from EPD on 24 Fe 2021	
		Works area of 3723B	A/C 7039754	Approval granted from EPD on 24 Feb 2021	
	Construction Noise Permit (General Works)	Works area of 3723A & 3723B	GW-RS0221-21	Valid from 11 Apr 2021 to 10 Oct 2021	
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017	
			430372	Receipt acknowledged by EPD on 2 Feb 2018	
			435652	Receipt acknowledged by EPD on 16 Jul 2018	
			451991	Receipt acknowledged by EPD on 18 Dec 2019	
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019	
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951- C1169-53	Completion of Registration on 14 Aug 2018	
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535- 2017	Valid from 24 Nov 2017 to 30 Nov 2022	
		Stockpiling area of 3801	WT00037354- 2021	Valid from 8 Mar 2021 to 31 Mar 2026	
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017	
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0826-20	Superseded by GW-RS0245-21	
			GW-RS0245-21	Valid from 28 Apr 2021 to 27 Oct 2021	
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020	
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951- G2895-01	Completion of Registration on 28 Aug 2020	
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020	
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0053-21	Superseded by GW-RS0225-21	
			GW-RS0225-21	Valid from 11 Apr 2021 to 10 Oct 2021	
3901A	Notification of Construction Work	Works area of 3901A	456240	Receipt acknowledged by EPD on 18 May 2020	
	under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021	
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024	
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951- K3400-01	Completion of Registration on 17 Jul 2020	

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3901A	7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0095-21	Valid from 19 Feb 2021 to 17 Jul 2021
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951- G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0146-21	Valid from 14 Mar 2021 to 10 Sep 2021

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

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

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

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

#### Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics			
	Complaints	Notifications of Summons	Prosecutions	
This reporting period	1	0	0	
From 28 December 2015 to end of the reporting period	35	1	1	