香港電燈有限公司
The Hongkong Electric Co., Ltd.

港燈
HK Electric

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) ORDINANCE, CAP. 499

ENVIRONMENTAL PERMIT NO. EP-535/2017

IMPROVEMENT DREDGING FOR LAMMA POWER STATION NAVIGATION CHANNEL

Report Title	Monthly EM&A Report (February 2020)
Date	13 March 2020
Certified by	(Mr. Kenneth Fung, Environmental Team Leader)
Verified by	Mr. Y T Tang (AECOM Asia Company Limited, Independent Environmental Checker)

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EXECUTIVE SUMMARY

The actual dredging work for the "Improvement Dredging for Lamma Power Station Navigation Channel" (the Project) commenced on 18 February 2020. This is the 1st monthly Environmental Monitoring and Audit (EM&A) report for the Project prepared by the Environmental Team (ET). This report presents the results of impact monitoring for the said project in February 2020.

Marine water quality monitoring was performed. The results were checked against the established Alert, Action and Limit levels. On-site audit was conducted once per week. The implementation status of the environmental mitigation measures, Alert/Event and Action Plans and environmental complaint handling procedures were also checked.

Construction Activities Undertaken

Construction activities for the project during the reporting month were dredging and dumping of dredged mud. The maximum hourly and daily dredging rates actually achieved by the contractors were within the limits specified in the latest dredging schedule.

Environmental Monitoring Works

All monitoring work at designated stations was performed as scheduled in the reporting period.

Water Quality

There were four (4) Action Level and two (2) Limit Level exceedances of Suspended Solids (SS) recorded in the reporting month. All exceedances were investigated and found that the affected SR stations were either upstream of the Project during the corresponding tide or occurred at SR stations that are far away (>8km) from the Project with no evidence of effect from the Project. Therefore, the investigations concluded that the exceedances were not related to the Project.

Site Environmental Audit

Independent Environmental Checker (IEC) conducted a site inspection on 27 February 2020. The site conditions were generally satisfactory.

Site audits were carried out on a weekly basis to monitor environmental issues on the construction site. The site conditions were generally satisfactory. All required mitigation measures were implemented.

Environmental Licensing and Permitting

Description	Permit No.	Valid Period		Issued To	Date of Issuance
		From	To		
Environmental Permit	EP-535/2017	10/10/2017	-	HK Electric	10/10/2017
Construction Noise Permit	GW-RS0080-20	12/02/2020	06/08/2020	Contractor	07/02/2020
Marine Dumping Permit	EP/MD/20-076	17/02/2020	-	Contractor	17/02/2020

Implementation Status of Environmental Mitigation Measures

Environmental mitigation measures for the construction activities as recommended in the EM&A manual were implemented in the reporting month.

Environmental Complaints

No complaint against the Project was received in the reporting month.

Environmental Summon and Successful Prosecution

No notifications of summon or successful prosecution was received in the reporting month.

Future Key Issues

The future key issues to be considered in the coming month are as follows:

- to ensure compliance with the CNP already obtained;
- to keep reviewing the water quality monitoring results and to take necessary actions to ensure the marine water quality.

Concluding Remarks

The environmental performance of the project was generally satisfactory.

1. INTRODUCTION

1.1 Background

The Environmental Team (hereinafter called the "ET") was formed within the Hongkong Electric Co. Ltd (HK Electric) to undertake Environmental Monitoring and Audit for "Improvement Dredging for Lamma Power Station Navigation Channel" (hereinafter called the "Project"). Under the requirements of Section 3 of Environmental Permit EP-535/2017, an EM&A programme for impact environmental monitoring is required to be implemented. In accordance with the EM&A Manual, environmental monitoring of water quality and regular environmental audits are required for the Project.

The Project involves re-profiling the Lamma Power Station Navigation Channel (the "Channel") to a target depth of -16.5 mPD with an estimated sediment quantity up to approx. 3.2 million m^3, subject to fine-tuning against the actual existing seabed profile. The Project Area is shown in Figure 1.1.

The majority of dredging work is to be carried out by Trailer Suction Hopper Dredger (TSHD) whereas the minority of dredging work for remedial trimming and near the existing jetty structure is to be carried out by grab dredger. The construction works of the Project was commenced in February 2020.

This report summarizes the environmental monitoring and audit work for the Project for the month of February 2020.

1.2 Project Organisation

The management structure to oversee the Project includes the following:

- Project Proponent (HK Electric);
- Environmental Protection Department (EPD);
- Engineer or Engineer's Representative (ER);
- Independent Environmental Checker (IEC);
- Environmental Team (ET); and
- Contractor.

The project organisation chart and environmental team organisation chart for the construction EM&A programme are shown in Annex A.

1.3 Construction Works undertaken during the Reporting Month

Construction activities undertaken during the reporting month for this Project were dredging and dumping of dredged mud. One Trailing Suction Hopper Dredger (TSHD) was deployed and operated within the Project Area. The total volume of dredged materials from 18 to 29 February 2020 was 2,145,000m^3. Uncontaminated materials were dumped at the designated location within the South Cheung Chau Disposal Area and the total dumped volume in February 2020 was 2,145,000m^3. The location of dumping site is shown in Figure 1.2.

Daily records of dredged / dumped volume are presented in Annex B. The maximum hourly and daily dredging rates achieved by the contractors were within the limits specified in the latest dredging schedule.

The main construction activities carried out during the reporting month and the corresponding environmental mitigation measures are summarized in Table 1.1. The implementation of major mitigation measures in the month is provided in Annex F.

Table 1.1 Construction Activities and Their Corresponding Environmental Mitigation Measures

Construction Activities	**Environmental Mitigation Measures**
Dredging	**Water Quality** – One number of TSHD was operated for the Project. – No concurrent or mixed use with Grab Dredger operation. – Both maximum total hourly and daily dredging rates as specified in the latest dredging schedule were strictly followed. – Vessel speeds within the Project Area were reduced to maximum speed limit. – Neither overflow nor using of lean mixture overboard (LMOB) system was occurred. – All barges for transportation of dredged materials were fitted with tight bottom seals to prevent leakage. **Marine Ecology** – No dredging on Zone 4 of the navigation channel during the calving season for the Finless Porpoise. – All construction related vessels travelled to and from the Project Area followed the designated route to avoid the Finless Porpoise habitat area. – The dumping of chemicals, rubbish, oils etc. into the water was strictly prohibited. **Hazard to Life** – Marine vessels should avoid traveling during berthing and unberthing of coal vessel. – As far as practicable, marine vessels should avoid traveling after sunset or under low visibility when the works area is near submarine pipeline. – Working vessel not to stay right above the submarine pipeline unless it is necessary. – TSHD should not lower suction pipes in close proximity of the submarine pipeline. – TSHD should not stay near the submarine pipeline unless approval is granted. **Noise** – General noise mitigation measures were employed at work site throughout the construction phase. – The number and type of plants and operation conditions as specified in the CNP were strictly followed.

Construction Activities	Environmental Mitigation Measures
	Waste Management – All barges for transportation of dredged materials were fitted with tight bottom seals to prevent leakage. – All vessels were filled to a level such that dredged materials would not spill over during loading and transportation. – Dredged wastes were disposed of at Licensed dumping site – South Cheung Chau. – Records of the quantities of waste generated and disposed of off-site were taken.

1.4 Summary of EM&A Requirements

The EM&A program requires environmental monitoring of water quality. Regular environmental site audits for water quality and waste management were carried out. The detailed EM&A monitoring work for water quality is described in Sections 2 of this report.

The following environmental audits are summarized in Section 3 of the report:

- Environmental monitoring results;
- Waste Management Records;
- Weekly site audit results;
- The status of environmental licensing and permits for the Project;
- The implementation status of environmental protection and pollution control/ mitigation measures.

The future key issues for the Project will be reported in Section 4 of this report.

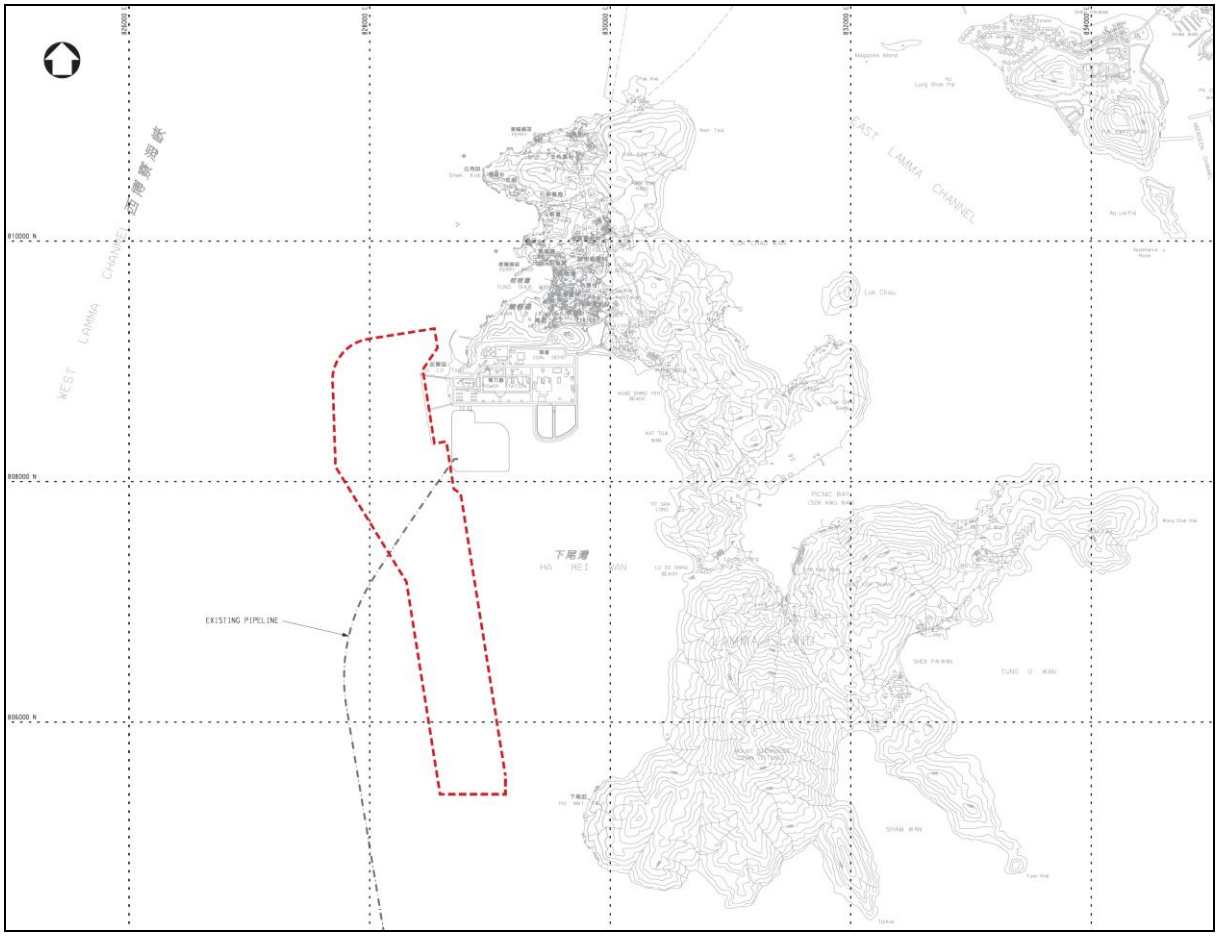


Figure 1.1 Project Area

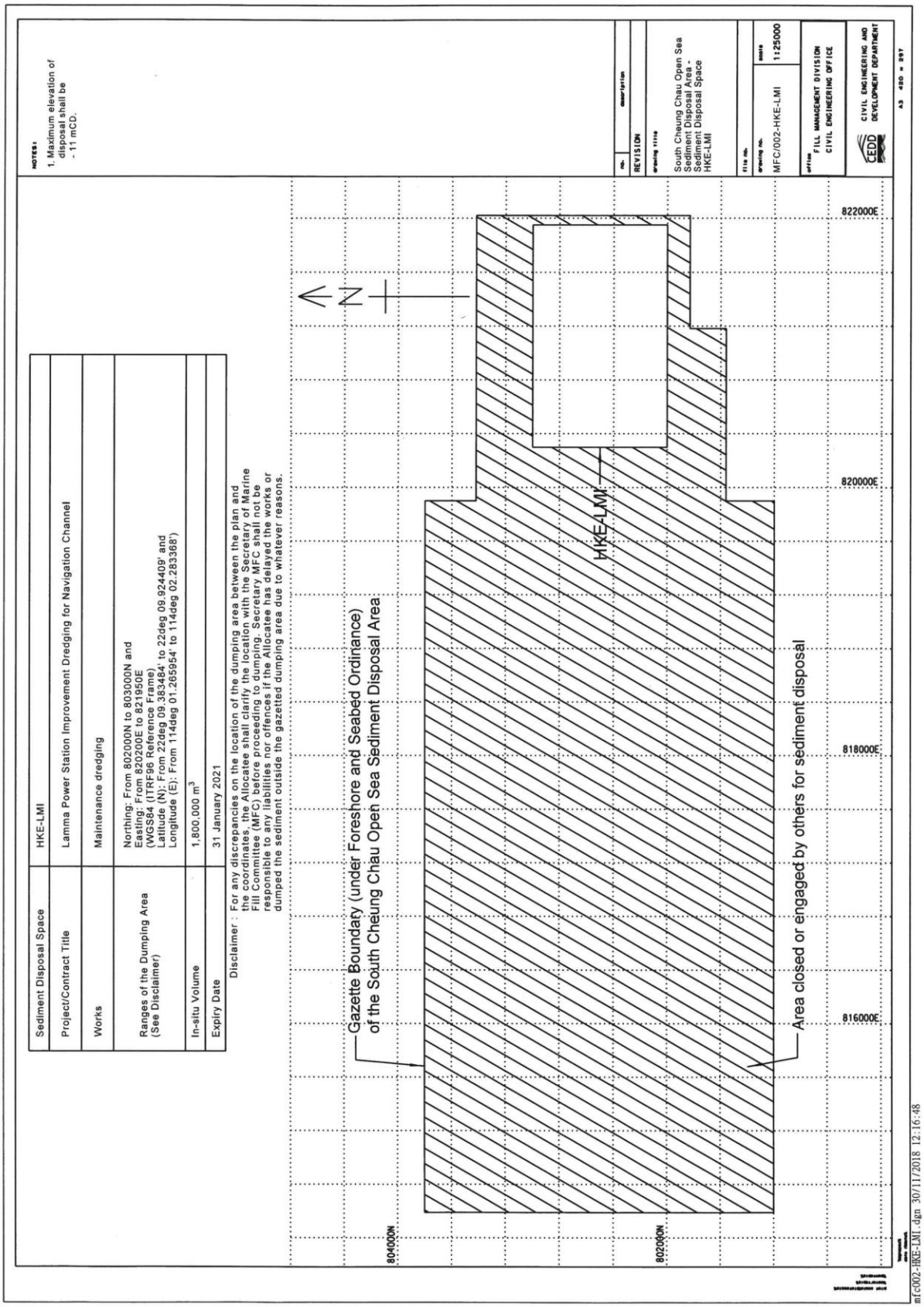


Figure 1.2 Location of Dumping Site

2. WATER QUALITY MONITORING

Marine water quality monitoring was carried out during the marine works to detect and check for any deterioration in water quality and ensure that timely action is taken to rectify deteriorations that are due to the Project.

HK Electric commissioned Mott MacDonald Hong Kong Limited to carry out water quality monitoring works of the Project. Details of the water quality monitoring results and the associated alert/event and action plans presented in the Water Quality Monitoring Report are shown in Annex C.

3. ENVIRONMENTAL AUDIT

3.1 Review of Environmental Monitoring Procedures

The environmental monitoring procedures were regularly reviewed by the Environmental Team. No modification to the existing monitoring procedures was recommended.

3.2 Assessment of Environmental Monitoring Results

Monitoring results for Water Quality

Table 3.1 Summary of Alert, Action and Limit Level Exceedances on Monitoring Parameters

Item	Parameter Monitored	Monitoring Period	No. of Exceedances			Alert/Event and Action Plans Implementation Status and Results
			Alert Level	Action Level	Limit Level	
Water						
1	DO (Surface & Middle)	18/02/2020 29/02/2020	0	0	0	
2	DO (Bottom)	18/02/2020 29/02/2020	0	0	0	
3	Turbidity	18/02/2020 29/02/2020	0	0	0	
4	SS	18/02/2020 29/02/2020	N.A.	4	2	Investigations concluded that the exceedances were not related to the Project. Please refer to Section 2 and Annex C of the report for details.

There were four (4) Action Level and two (2) Limit Level exceedances of Suspended Solids (SS) recorded in the reporting month. All exceedances were investigated and found that the affected SR stations were either upstream of the Project during the corresponding tide or occurred at SR stations that are far away (>8km) from the Project with no evidence of effect from the Project. Therefore, the investigations concluded that the exceedances were not related to the Project. No further action was required. Nevertheless IEC, Engineer and the construction contractor had been informed of the exceedances accordingly as per requirements of the EM&A Manual. For details, please refer to Section 2 and Annex C of the report.

Waste Management

The estimated amounts of waste generated in February 2020 are shown in Table 3.2.

Table 3.2 Estimated Amounts of Waste Generated in February 2020

Waste Type	Estimated Amount (m^3)
Dredged Materials – Marine Mud	2,145,000

The total bulk volume of dredged material was 2,145,000 m^3.

3.3 Site Environmental Audit

Site audits were carried out by ET on a weekly basis to monitor environmental issues at the construction sites to ensure that all mitigation measures were implemented timely and properly. Two site audits were performed in the reporting month. Independent Environmental Checker (IEC) conducted a site inspection on 27 February 2020. The site conditions were generally satisfactory. The site audit findings for the reporting month are summarized in Annex E.

3.4 Status of Environmental Licensing and Permitting

All permits/licenses obtained for the project are summarised in Table 3.3.

Table 3.3 Summary of Environmental Licensing and Permit Status

Description	Permit No.	Valid Period		Highlights	Status
		From	To		
Environmental Permit	EP-535/2017	10/10/2017	-	The whole construction work site	Valid
Construction Noise Permit	GW-RS0080-20	12/02/2020	06/08/2020	Operation of PME during the restricted hours (00:00-24:00 hours on general holidays, and 00:00-07:00 and 19:00-2400 hours on any day not being a general holiday)	Valid
Marine Dumping Permit	EP/MD/20-076	17/02/2020	-	Dumping at South Cheung Chau Open Sea Sediment Disposal Area	Valid

3.5 Status of Submissions under Environmental Permits

The current status of submissions under the EP before and during the reporting period is presented in Table 3.4.

Table 3.4 Status of Submissions under Environmental Permit

EP Condition	Submission	Status
Clause 2.7	Management Organization of Main Construction Companies	Submitted
Clause 2.8	Construction and Operation Works Schedule and Location Plans	Submitted
Clause 2.9	Marine Ecological Baseline Review Report	Submitted
Clause 2.10	Fisheries Baseline Review Report	Submitted
Clause 2.11	Sediment Quality Baseline Review	Submitted
Clause 2.12	Proposal on Enhancement of Water Quality Monitoring near the Project Site	Submitted
Clause 2.13 & Clause 2.14	Updated EM&A Manual	Submitted
Clause 2.15	Silt Curtain Deployment Plan	Submitted
Clause 2.16	Detailed Plan for any recurring Re-profile Dredging	N.A.
Clause 3.1	Baseline Monitoring Report	Submitted

3.6 Implementation Status of Environmental Mitigation Measures

Mitigation measures detailed in the permits and the EM&A Manual are required to be implemented. An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in Annex F.

3.7 Implementation Status of Alert/Event and Action Plans

The Alert/Event and Action Plans for water quality extracted from the EM&A Manual are presented in Annex D.

3.8 Implementation Status of Environmental Complaint Handling Procedures

In February 2020, no complaint against the Project was received.

Table 3.5 Environmental Complaints Received in February 2020

Case Reference / Date, Time Received / Date, Time Concerned	Descriptions / Actions Taken	Conclusion / Status
Nil	N/A	N/A

Table 3.6 Outstanding Environmental Complaints Carried Over

Case Reference / Date, Time Received / Date, Time Concerned	Descriptions / Actions Taken	Conclusion / Status
Nil	N/A	N/A

3.9 Environmental Summon and Successful Prosecution

No notifications of summon or successful prosecution was received in the reporting month.

4. FUTURE KEY ISSUES

4.1 Key issues for the coming month

Key issues to be considered in the coming month include:

Noise Impact

- To ensure compliance with the CNP already obtained.

Water Impact

- To keep reviewing the monitoring results in order to take corresponding action to ensure the seawater quality.

4.2 Monitoring Schedules for the Coming Month

The tentative environmental monitoring schedules for the Project are shown in Appendix C of Annex C.

4.3 Works Programme

The tentative works program is shown in Annex G.

5. CONCLUSION

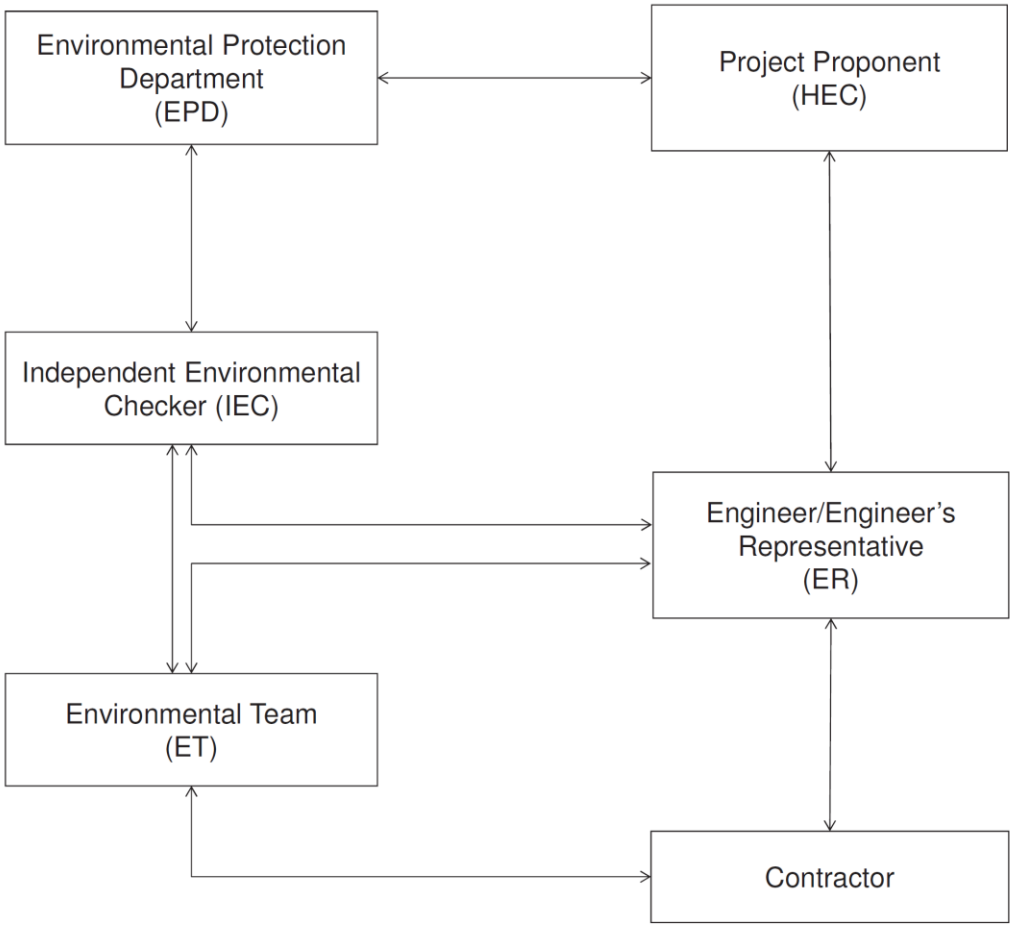
Environmental monitoring was performed as required in the reporting month. All monitoring results were checked and reviewed. The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within the corresponding Action, Limit or Alert Levels stipulated in the EM&A programme. For SS, some of the testing results triggered the relevant Action or Limit Levels, and investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project.

The maximum hourly and daily dredging rates actually achieved by the contractor were within the limits specified in the latest dredging schedule. Environmental mitigation measures recommended in the EM&A manual for the Project were implemented in the reporting month. No compliant against the Project was received. No prosecution and summons was received for this Project in the reporting period.

The environmental performance of the Project was generally satisfactory.

Annex A Organization Chart

A1: Project Organisation Chart



A2: Environmental Team Organisation Chart

Improvement Dredging for Lamma Power Station Navigation Channel (EP-535/2017)

Environmental Team Organization Chart

Environmental Team Leader
Kenneth Fung Tel: 2843 3441 Email: kfung@hkelectric.com

Project/ Site Management
KT Hung
P.T. Yau
Wyman Diao
Raymond Ng
WK Wong

Environmental Management
TL Chu
YM Tsang
Chris Chan
David Tsang
Jing Lui
Eric Ku

Specialist Consultants (Mott MacDonold)
Julia Chan (Fisheries Specialist)
Heidi Yu (Qualified Ecologies)

Annex B Amount of Dredged and Dumped Marine Sediment

Date	Dredging Time	Dredged Marine Mud (bulk volume m^3)	Dumping Time	Dumped Marine Mud (bulk volume m^3)
1/02/2020	-	-	-	-
2/02/2020	-	-	-	-
3/02/2020	-	-	-	-
4/02/2020	-	-	-	-
5/02/2020	-	-	-	-
6/02/2020	-	-	-	-
7/02/2020	-	-	-	-
8/02/2020	-	-	-	-
9/02/2020	-	-	-	-
10/02/2020	-	-	-	-
11/02/2020	-	-	-	-
12/02/2020	-	-	-	-
13/02/2020	-	-	-	-
14/02/2020	-	-	-	-
15/02/2020	-	-	-	-
16/02/2020	-	-	-	-
17/02/2020	-	-	-	-
18/02/2020	07:30 – 23:35	115,500	08:50 – 22:15	115,500
19/02/2020	00:55 – 23:59	148,500	00:15 – 22:35	148,500
20/02/2020	00:00 – 23:15	148,500	00:20 – 00:00	148,500
21/02/2020	00:30 – 23:05	198,000	01:40 – 23:55	198,000
22/02/2020	00:30 – 23:25	181,500	01:40 – 22:05	181,500
23/02/2020	00:40 – 23:59	214,500	00:00 – 23:20	214,500
24/02/2020	00:00 – 22:35	198,000	01:00 – 23:25	198,000
25/02/2020	00:00 – 23:30	181,500	01:20 – 22:05	181,500
26/02/2020	00:50 – 23:55	165,000	00:10 – 22:50	165,000
27/02/2020	01:10 – 23:40	198,000	00:30 – 22:45	198,000
28/02/2020	01:30 – 23:59	198,000	00:15 – 23:00	198,000
29/02/2020	00:00 – 23:59	198,000	00:50 – 23:35	198,000
Total in the Month		2,145,000		2,145,000
Accumulated Total		2,145,000		2,145,000

Note:-
As the bulking factor (i.e. bulking factor of 4 for TSHD & 1.3 for Hopper Barge in accordance with assumptions in the approved dumping permit by EPD) of dredged marine mud is found varying considerably at different locations in the navigation channel depending on the depth of high spots to be removed, the final in-situ as-dredged volume will be determined by swath surveys of the navigation channel before and after the dredging work.

Annex C

Water Quality Monitoring Results for February 2020

MOTT MACDONALD

Improvement Dredging for Lamma Power Station Navigation Channel

Construction Phase Monthly Water Quality Monitoring Report No. 1 (February 2020)

March 2020

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The Hongkong Electric Company Limited

Improvement Dredging for Lamma Power Station Navigation Channel

Construction Phase Monthly Water Quality Monitoring Report No. 1 (February 2020)

March 2020

Mott MacDonald Hong Kong Limited
registered in Hong Kong no. 236497

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Executive summary

The Project “Improvement Dredging for Lamma Power Station Navigation Channel” commenced on 18 February 2020. This is the first monthly Water Quality Monitoring report for the Project. This report presents the results of impact monitoring on marine water quality for the Project in February 2020.

In this reporting month, a total of six days of marine water quality monitoring was carried out. The results were checked against the established Action/Limit/Alert levels and where necessary in cases of exceedance, the Event and Action Plan and Alert Action Plan were initiated.

The water quality monitoring results for all parameters, except suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels for sensitive receiver stations and within the Alert Levels for near stations as stipulated in the EM&A programme. Some of the SS results triggered the relevant Action or Limit Levels, and the corresponding investigations concluded that the cases were not related to the Project. To conclude, the dredging activities in the reporting period did not cause adverse impact to all water quality sensitive receivers.

1 Introduction

On 10 October 2017, the Environment Impact Assessment (EIA) Report (Register No.: AEIAR-212/2017) for the "Improvement Dredging for Lamma Power Station Navigation Channel" (the Project) was approved and an Environmental Permit (EP) (No. EP-535/2017) was issued for the construction and operation of the Project. Mott MacDonald Hong Kong Limited was commissioned by The Hongkong Electric Company, Limited to carry out the water quality monitoring works of the Project during the construction phase.

The purpose of the Project is to provide and maintain safe clearance for ocean-going marine vessels delivering coal to Lamma Power Station (LPS) via the Lamma Power Station Navigation Channel (the "Channel"), through the dredging of naturally accumulating sediment from the seabed. In order to meet the requirements for continued safe passage, the construction phase of the Project involves improvement dredging of the Channel to a target dredge depth[1] of -16.5 mPD.

The construction phase of the Project commenced on 18 February 2020. This Water Quality Monitoring Report summarizes the water quality monitoring as part of the EM&A programme for the Project for the month of February 2020.

[1] While the Project aims to dredge to a target depth of -16.5 mPD, some overdredge may occur due to the limited precision control of dredging depths in practice.

2 Monitoring Methodology

2.1 Monitoring Equipment and Methodology

Water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including dissolved oxygen (DO), dissolved oxygen saturation (DO%), pH, temperature, turbidity, salinity and water depth were collected using the equipment listed in **Table 2.1**. Water samples for suspended solids (SS) analysis were stored in high density polythene bottles, packed in ice (cooled to 4 ºC without being frozen), and delivered to a HOKLAS laboratory as soon as possible after collection.

Table 2.1: Water Quality Monitoring Equipment

Equipment	Brand and Model
Water Sampler	Van Dorn Water Sampler
Positioning Device (measurement of GPS)	Garmin eTrex Vista HCx
Water Depth Detector (measurement of water depth)	Lowrance Mark 5x
Multifunctional Meter (measurement of DO, DO%, pH, temperature, salinity and turbidity)	YSI ProDSS and YSI 6920V2

Calibration of In-situ Instruments

In-situ monitoring instruments for water quality parameters were checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before measurement on each monitoring day. 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.

Calibration certificates of the monitoring equipment used in the monitoring for water quality parameters are provided in **Appendix A**.

2.2 Laboratory Measurement / Analysis

Analysis of SS was carried out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at each of the SR stations and control stations for carrying out the laboratory SS determination.

The SS determination works started within 24 hours after collection of the water samples. The analysis followed the APHA 2540D analytical method. The quality assurance and quality control results are presented in **Appendix B**.

2.3 Monitoring Frequency and Duration

The water quality monitoring commenced on 18 February 2020 and was conducted three days per week for two weeks in February 2020 at mid-flood and mid-ebb tides, at 16 water quality monitoring stations. Samples were taken at three depths (at 1m below surface, at mid-depth, and at 1m above bottom) as all sampling locations had water depth >6m. Duplicate samples were taken and analysed.

The water quality monitoring schedule for the reporting period is provided in **Appendix C.1**. A tentative schedule of the planned water quality monitoring work in the next reporting period is provided in **Appendix C.2**.

2.4 Monitoring Locations

The monitoring was conducted at a total of 16 water quality monitoring stations, comprising eight SR stations, five near stations and three control stations. Details of the monitoring locations are shown in **Figure 2.1** and **Table 2.2**. It should be noted that the location of SR8 provided in **Table 2.2** is approximate due to changing location of fish rafts under different tidal and wind condition. Water quality monitoring at SR8 was conducted at the nearest safely accessible location to the Fish Culture Zone. Moreover, as specified in the Updated EM&A Manual, SR2 and SR3 should be monitored during March and October only. SR2 and SR3 are therefore not included in this report.

Table 2.2: Locations of Water Quality Monitoring Stations

ID	Station	Easting	Northing	Remarks
SR1	HK Electric Power Station Intake	829194	808600	Monitored for SS only
SR2	Hung Shing Yeh Beach	830200	808700	Monitored during bathing season only (March to October inclusive)
SR3	Lo So Shing Beach	830450	807300	Monitored during bathing season only (March to October inclusive)
SR4	Marine Ecological Habitat at Pak Kok	829600	811630	
SR5	Marine Ecological Habitat at Shek Kok Tsui	828560	811100	
SR6	Marine Ecological Habitat at Ha Mei Wan	829760	805520	
SR7	Marine Ecological Habitat at Southwest of Lamma	829590	804520	
SR8	Fish Culture Zone at Lo Tik Wan	831265	809115	
SR9	Fish Culture Zone at Sok Kwu Wan	831600	807765	
SR10	Fish Culture Zone at Cheung Sha Wan	819160	810780	
A1	Near station for Zone 1	828543	809573	For monitoring potential impacts to SR5 and SR4 during flood tide
A2	Near station for Zone 2	829053	807945	For monitoring potential impacts to SR1 and SR2 during flood tide
A3	Near station for Zone 3	829187	807100	For monitoring potential impacts to SR3 during both flood and ebb tide
A4	Near station for Zone 4 (east)	829427	805520	For monitoring potential impacts to SR6 during ebb tide
A5	Near station for Zone 4 (south)	829267	805134	For monitoring potential impacts to SR7 during ebb tide
C1	Control Station 1	828000	813500	
C2	Control Station 2	825000	808000	
C3	Control Station 3	829000	802000	

2.5 Monitoring Parameters

For the eight SR stations (SR1 and SR4 to SR10) and three control stations (C1 to C3), monitoring of DO, DO%, pH, temperature, turbidity, salinity, water depth and SS were undertaken. For monitoring of the five near stations (A1 to A5), only the in-situ parameters (DO, DO%, pH, temperature, turbidity, salinity and water depth) were recorded. Other relevant data were also recorded, including monitoring location, time, tidal stage, weather condition and sea condition.

3 Event and Action Plan for Sensitive Receiver Stations

3.1 Action and Limit Levels

The Action and Limit levels are summarised in **Table 3.1**.

Table 3.1: Calculated Action and Limit Levels

Parameters	Action Level		Limit Level	
SR1				
SS in mg/L	90		100	
SR2 to SR7				
DO in mg/L	Wet	Dry	Wet	Dry
Surface & Middle	3.1	5.6	2.6	4
Bottom	2.4	5.8	1.9	2
SS in mg/L	9.5 *OR* 120% of upstream control station(s) at the same tide of the same day, whichever is higher		12.3 *OR* 130% of upstream control station(s) at the same tide of the same day, whichever is higher	
Turbidity in NTU	9.7 *OR* 120% of upstream control station(s) at the same tide of the same day, whichever is higher		11.8 *OR* 130% of upstream control station(s) at the same tide of the same day, whichever is higher	
SR8 to SR10				
DO in mg/L	Wet	Dry	Wet	Dry
Surface & Middle	5	5.6	5	5
Bottom	2.4	5.8	2	2
SS in mg/L	9.5 *OR* 120% of upstream control station(s) at the same tide of the same day, whichever is higher		12.3 *OR* 130% of upstream control station(s) at the same tide of the same day, whichever is higher	
Turbidity in NTU	9.7 *OR* 120% of upstream control station(s) at the same tide of the same day, whichever is higher		11.8 *OR* 130% of upstream control station(s) at the same tide of the same day, whichever is higher	

Notes:

1. Wet season: April to September; Dry season: October to March.
2. For DO measurement, non-compliance occurs when the monitoring result is lower than the limits.
3. For parameters other than DO, non-compliance of water quality occurs when the monitoring result is higher than the limits.
4. Depth-averaged results are used unless specified otherwise.
5. SR1 is monitored for SS only.
6. All the figures given in the table are used for reference only and the EPD may amend the figures whenever it is considered as necessary.

3.2 Event and Action Plan

In the event of water quality monitoring results at SR stations exceeding the Action and/or Limit levels for water quality as defined in **Table 3.1**, the actions in accordance with the Event and Action Plan presented in **Table 3.2** shall be carried out.

Table 3.2: Event and Action Plan for Water Quality at SR Stations

	Action			
Event	**ET**	**IEC**	**Engineer**	**Contractor**
Action level being exceeded by one sampling day	1. Repeat in-situ measurements to confirm findings; 2. Inform IEC, Contractor and Engineer; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IEC, Engineer and Contractor; 5. Repeat in-situ measurement on next day of exceedance.	1. Discuss with ET, Engineer and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; 3. Verify the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, ET and Contractor on the mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Supervise the implemented of agreed mitigation measures.	1. Identify source(s) of impact; 2. Inform the Engineer and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ET, IEC and Engineer and propose mitigation measures; 7. Implement the agreed mitigation measures
Action Level being exceeded on more than one consecutive sampling day	1. Repeat in-situ measurement to confirm findings; 2. Inform IEC, Contractor and Engineer; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IEC, Engineer and Contractor; 5. Ensure mitigation measures are implemented; 6. Prepare to increase the monitoring frequency to daily; 7. Confirm the need for reducing dredging rates as per **Table 3.3**.	1. Discuss with ET, Engineer and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; 3. Verify the effectiveness of the implemented mitigation measures; 4. Verify the need for reducing dredging rates as per **Table 3.3**.	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented mitigation measures; 4. Instruct the Contractor to reduce dredging rates as per **Table 3.3** if confirmed by ET and verified by IEC.	1. Identify the source(s) of impact; 2. Inform the Engineer and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ET, IEC and Engineer and propose mitigation measures to Engineer and IEC within 3 working days of notification; 7. Implement the agreed mitigation measures; 8. As directed by the Engineer, reduce dredging

	Action			
Event	**ET**	**IEC**	**Engineer**	**Contractor**
				rates as per **Table 3.3**.
Limit Level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings; 2. Inform IEC, Contractor and Engineer; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IEC, Engineer and Contractor; 5. Ensure mitigation measures are implemented; 6. Increase the monitoring frequency to daily until no exceedance of limit level.	1. Discuss with ET, Engineer and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; 3. Verify the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented mitigation measures.	1. Identify the source(s) of impact; 2. Inform the Engineer and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ET, IEC and Engineer and propose mitigation measures to Engineer and IEC within 3 working days of notification; 7. Implement the agreed mitigation measures.
Limit Level being exceeded by more than one consecutive sampling days	1. Inform IEC, Contractor and Engineer; 2. Check monitoring data, all plant, equipment and Contractor's working methods; 3. Discuss mitigation measures with IEC, Engineer and Contractor; 4. Ensure mitigation measures are implemented; 5. Confirm the need for reducing dredging rates as per **Table 3.3**; 6. Increase the monitoring frequency to daily until no exceedance of limit level for two consecutive days.	1. Discuss with ET, Engineer and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; 3. Verify the effectiveness of the implemented mitigation measures; 4. Verify the need for reducing dredging rates as per **Table 3.3**.	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented mitigation measures; 5. Instruct the Contractor to reduce dredging rates as per **Table 3.3** if confirmed by ET and verified by IEC.	1. Identify the source(s) of impact; 1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET, IEC and Engineer and propose mitigation measures to Engineer and IEC within 3 working days of notification; 6. Implement the agreed mitigation measures; 7. As directed by the Engineer, reduce dredging rates as per **Table 3.3**.

3.3 Reduction of Maximum Allowable Dredging Rates

Where exceedances are identified and confirmed by the ET and verified by the IEC as project-related, the maximum allowable hourly dredging rates of the Project as specified in Table 2-7 of the updated EM&A Manual shall be reduced according to **Table 3.3**. The reduced rates for the respective zone(s) and season shall apply until completion of the dredging works for the affected zone(s) and season.

Table 3.3: Reduction of Maximum Allowable Hourly Dredging Rates due to Exceedances

Frequency of Exceedance	No. of Consecutive Sampling Days					
	Two	Three	Four	Five	Six	More than Six
Action Level	5%	10%	15%	20%	30%	40%
Limit Level	10%	20%	30%	40%	50%	Stop all dredging works for one week. Contractor to propose changes in dredging methods, dredging rates and mitigation measures for agreement with ET and IEC before re-initiating dredging works.

Note: Where action level followed by limit level is exceeded consecutively, the larger percentage reduction shall apply (e.g. if action level is exceeded for four consecutive days, followed immediately by two consecutive days of limit level exceedance, the percentage reduction to be applied between Day 2 and Day 6 shall be 5%, 10%, 15%, 20% and 30% respectively). Similarly, where limit level followed by action level is exceeded consecutively, the larger percentage reduction also applies as action level is inherently exceeded whenever limit level is exceeded.

4 Alert Action Plan for Near Stations

4.1 Alert Levels

The Initial Alert levels for water quality at near stations are presented in **Table 4.1**.

Table 4.1: Calculated Initial Alert Levels

Alert Level	A1	A2	A3	A4	A5
Turbidity (NTU)	30.1	18.4	38.8	32.0	24.3
DO (mg/L) – Depth-average, Dry Season	4	4	4	4	4
	OR 0.1 mg/L less than the same day control, whichever is lower				
DO (mg/L) – Bottom, Dry Season	2	2	2	2	2
	OR 0.1 mg/L less than the same day control, whichever is lower				
DO (mg/L) – Depth-average, Wet Season	3	3	3	3	3
	OR 0.1 mg/L less than the same day control, whichever is lower				
DO (mg/L) – Bottom, Wet Season	0.9	0.9	0.9	0.9	0.9
	OR 0.1 mg/L less than the same day control, whichever is lower				

Note: Wet season: April to September; Dry season: October to March.

4.2 Alert Action Plan

Upon identification of an exceedance of Alert level at the near stations (A1 to A5), the actions specified in **Table 4.2** shall be implemented. Where applicable, the alert related actions shall proceed in parallel with the Event and Action Plan in **Table 3.2**.

Table 4.2: Alert Action Plan for Water Quality at Near Stations

Action	Action By	Outcome	Follow Up Action	Follow Up Action By
1. Repeat in-situ measurement to confirm findings	ET	No exceedance in repeat measurement	No further action required	
		Exceedance identified in repeat measurement	*Proceed to Action 2*	
2. Check relevant SR station results	ET	a. No exceedance of Action or Limit Level	Notify IEC, Engineer and Contractor	ET
			Obtain and record Contractor's working methods and the status of existing mitigation measures implemented	ET
			Identify any unacceptable practice	ET, IEC, Engineer
			Rectify any unacceptable practice	Contractor
			Proceed to Action 3	

Action	Action By	Outcome	Follow Up Action	Follow Up Action By
		b. Exceedance of Action or Limit Level	Initiate Event and Action Plan in Table 2-4 of the EM&A Manual	ET, IEC, Engineer, Contractor
			Proceed to Action 3	
3. Check for repeated cases of Outcome 2a or 2b	ET	No consecutive repeats of Outcome 2a or 2b	No further action required	
		Consecutive repeats of Outcome 2a	Review Contractor's working methods / mitigation measures and discuss with IEC, Engineer and Contractor	ET
			Identify and agree on improvements such as changes in working methods and/or additional mitigation measures	ET, IEC, Engineer, Contractor
			Implement the recommended improvements	Contractor
		Consecutive repeats of Outcome 2b	Review Alert levels and propose revised Alert levels where necessary to prevent exceedances at SR stations (due to project activities)	ET
			Verify the revised Alert levels	IEC
			Notify and agree with EPD on revised Alert levels	ET, Project Proponent

5 Monitoring Results

Marine water quality monitoring was conducted as scheduled in the reporting month. All monitoring data and graphical presentation of the monitoring results are provided in **Appendix D** and **Appendix E**, respectively. According to the EM&A Manual, SR2 and SR3 would be monitored during bathing season only (March to October inclusive) and hence SR2 and SR3 are not included.

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

For SS, some of the testing results triggered the corresponding Action or Limit Levels, and investigations were conducted accordingly. **Table 5.1** presents the summary of the SS exceedances at SR stations during mid-ebb and mid-flood tide for the reporting period.

Table 5.1: Summary of SS Exceedances

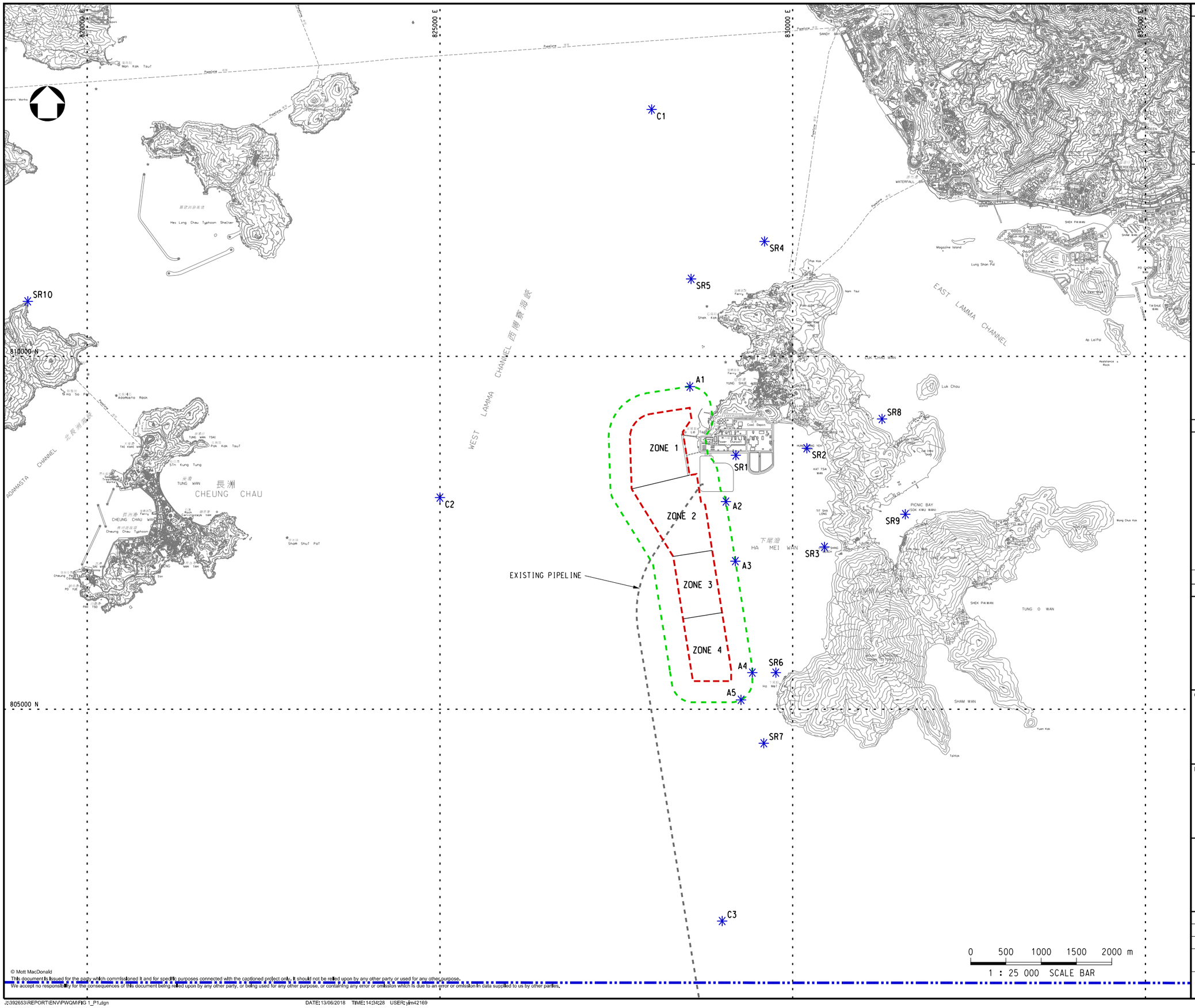
Date	Parameter(s)	Affected Station(s)	Tide	Exceedance Type
20 Feb	SS	SR5	Ebb tide	Limit Level
22 Feb	SS	SR5	Ebb tide	Action Level
24 Feb	SS	SR6	Flood tide	Action Level
28 Feb	SS	SR6	Flood tide	Limit Level
		SR7, SR10	Flood tide	Action Level

Action Levels and Limit Levels were triggered on 20, 22, 24 and 28 February 2020. All cases were investigated and the investigation found that the affected SR stations were either upstream of the Project during the corresponding tide or occurred at SR stations that are far away (>8km) from the Project with no evidence of effect from the Project. Therefore, the investigations concluded that the cases were not related to the Project.

6 Conclusion

Monitoring work for water quality was conducted during the reporting period in accordance with the EM&A Manual.

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within the corresponding Action, Limit or Alert Levels stipulated in the EM&A programme. For SS, some of the testing results triggered the relevant Action or Limit Levels, and investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities in the reporting period did not cause adverse impact to all water quality sensitive receivers.



Notes

Key to symbols

- HKSAR BOUNDARY
- PROJECT BOUNDARY
- 300m BUFFER
- WATER QUALITY MONITORING LOCATION

Reference drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	JUN 18	MING	FIRST ISSUE	DC	EC

MOTT MACDONALD

20/F AIA Kowloon Tower
Landmark East
100 How Ming Street
Kwun Tong, Kowloon
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T +852 2828 5757
F +852 2827 1823
W mottmac.com

Client

HK Electric 港燈

Project

IMPROVEMENT DREDGING FOR LAMMA POWER STATION NAVIGATION CHANNEL

Title

WATER QUALITY MONITORING LOCATIONS

Designed	DC		Eng check	DC	
Drawn	MING		Coordination	DC	
Dwg check	DC		Approved	EC	
Scale at A1	1:25000	Status	PRE	Rev	P1

Drawing Number

FIGURE 2.1

Appendices

A. Calibration Certificates

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI120101
Date of Issue : 24 December 2019

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Dec 23, 2019
Date of Calibration	:	Dec 23, 2019
Date of Next Calibration[a]	:	Mar 22, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
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	4.07	0.07	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.20	0.19	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
15.0	15.2	0.2	Satisfactory
30.0	30.1	0.1	Satisfactory
49.0	49.0	0.0	Satisfactory

Tolerance limit of temperature should be less than ±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*
[c] *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 referenced to YSI product specifications.*

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Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI120101
Date of Issue : 24 December 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.45	0.55	0.10	Satisfactory
4.27	4.30	0.03	Satisfactory
6.41	6.55	0.14	Satisfactory
8.20	8.31	0.11	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±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	154.1	4.90	Satisfactory
0.01	1412	1388	-1.70	Satisfactory
0.1	12890	12817	-0.57	Satisfactory
0.5	58670	59446	1.32	Satisfactory
1.0	111900	110937	-0.86	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.80	Satisfactory
20	20.18	0.90	Satisfactory
30	30.41	1.37	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.10	--	Satisfactory
10	10.08	0.8	Satisfactory
20	20.11	0.5	Satisfactory
100	100.37	0.4	Satisfactory
800	798.42	-0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

[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. : AI120102
Date of Issue : 24 December 2019

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Dec 23, 2019
Date of Calibration	:	Dec 23, 2019
Date of Next Calibration[a]	:	Mar 22, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
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	4.05	0.05	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.18	0.17	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
15.0	15.1	0.1	Satisfactory
30.0	30.1	0.1	Satisfactory
49.0	49.2	0.2	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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[b] *The results relate only to the calibrated equipment as received*
[c] *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 referenced to YSI product specifications.*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI120102
Date of Issue : 24 December 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.45	0.52	0.07	Satisfactory
4.27	4.22	-0.05	Satisfactory
6.41	6.56	0.15	Satisfactory
8.20	8.30	0.10	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±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	154.3	5.04	Satisfactory
0.01	1412	1459	3.33	Satisfactory
0.1	12890	12914	0.19	Satisfactory
0.5	58670	57886	-1.34	Satisfactory
1.0	111900	110832	-0.95	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.89	-1.10	Satisfactory
20	20.14	0.70	Satisfactory
30	30.33	1.10	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.09	--	Satisfactory
10	10.03	0.3	Satisfactory
20	20.16	0.8	Satisfactory
100	100.28	0.3	Satisfactory
800	798.47	-0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI120100
Date of Issue : 24 December 2019

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
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Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Dec 23, 2019
Date of Calibration	:	Dec 23, 2019
Date of Next Calibration[a]	:	Mar 22, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
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	4.03	0.03	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.17	0.16	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
15.0	14.9	-0.1	Satisfactory
30.0	30.0	0.0	Satisfactory
49.0	49.0	0.0	Satisfactory

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

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Remark(s): -

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(e) *The "Tolerance Limit" mentioned is referenced to YSI product specifications.*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI120100
Date of Issue : 24 December 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.45	0.58	0.13	Satisfactory
4.27	4.33	0.06	Satisfactory
6.41	6.51	0.10	Satisfactory
8.20	8.29	0.09	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±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	150.2	2.25	Satisfactory
0.01	1412	1369	-3.05	Satisfactory
0.1	12890	12928	0.29	Satisfactory
0.5	58670	58921	0.43	Satisfactory
1.0	111900	111994	0.08	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.88	-1.20	Satisfactory
20	19.92	-0.40	Satisfactory
30	29.58	-1.40	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.12	--	Satisfactory
10	9.98	-0.2	Satisfactory
20	19.88	-0.6	Satisfactory
100	100.33	0.3	Satisfactory
800	797.84	-0.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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(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. : AJ010131
Date of Issue : 24 January 2019

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	:	Jan 20, 2020
Date of Calibration	:	Jan 20, 2020
Date of Next Calibration[a]	:	Apr 20, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
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	3.99	-0.01	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.06	0.05	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
10.0	10.04	0.0	Satisfactory
20.0	20.05	0.1	Satisfactory
45.0	44.90	-0.1	Satisfactory

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

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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*
(c) *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 referenced to YSI product specifications.*

LEE Chun-ning, Desmond
Senior Chemist

專業化驗有限公司
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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
0.92	1.31	0.39	Satisfactory
4.68	4.68	0.00	Satisfactory
5.18	5.33	0.15	Satisfactory
8.84	8.98	0.14	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±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	153.4	4.42	Satisfactory
0.01	1412	1386	-1.84	Satisfactory
0.1	12890	12784	-0.82	Satisfactory
0.5	58670	57934	-1.25	Satisfactory
1.0	111900	110886	-0.91	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.20	Satisfactory
20	20.20	1.00	Satisfactory
30	30.42	1.40	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.2	--	Satisfactory
10	10.1	1.0	Satisfactory
20	19.8	-1.0	Satisfactory
100	98.7	-1.3	Satisfactory
800	788.4	-1.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

(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.

專業化驗有限公司
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ010132
Date of Issue : 24 January 2019

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	:	00019CB2
Date of Received	:	Jan 20, 2020
Date of Calibration	:	Jan 20, 2020
Date of Next Calibration[a]	:	Apr 20, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
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	4.01	0.01	Satisfactory
7.42	7.36	-0.06	Satisfactory
10.01	9.96	-0.05	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
10.0	10.03	0.0	Satisfactory
20.0	20.06	0.1	Satisfactory
45.0	44.90	-0.1	Satisfactory

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

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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
(c) 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 referenced to YSI product specifications.

LEE Chun-ning, Desmond
Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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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
0.92	1.22	0.30	Satisfactory
4.68	4.66	-0.02	Satisfactory
5.18	5.34	0.16	Satisfactory
8.84	8.96	0.12	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±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	152.9	4.08	Satisfactory
0.01	1412	1391	-1.49	Satisfactory
0.1	12890	12796	-0.73	Satisfactory
0.5	58670	57862	-1.38	Satisfactory
1.0	111900	110894	-0.90	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.05	0.50	Satisfactory
20	19.96	-0.20	Satisfactory
30	30.38	1.27	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	Satisfactory
10	9.9	-1.0	Satisfactory
20	19.8	-1.0	Satisfactory
100	98.6	-1.4	Satisfactory
800	789.3	-1.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

[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.

B. Quality Assurance and Quality Control Results

QA&QC Results on 18 February 20

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*
EA/ED: Physical and Aggregate Properties (QC Lot: 2869191)								
HK2002733-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.2	5.0	5.38
HK2002733-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	2.5	14.1
EA/ED: Physical and Aggregate Properties (QC Lot: 2869192)								
HK2002733-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.4	11.8
HK2002733-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.1	2.4	14.0
EA/ED: Physical and Aggregate Properties (QC Lot: 2869193)								
HK2002733-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.6	14.3
HK2002733-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	<1.0	<1.0	0.00
EA/ED: Physical and Aggregate Properties (QC Lot: 2869194)								
HK2002733-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.5	2.3	10.1
HK2002733-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.0	2.3	14.0
EA/ED: Physical and Aggregate Properties (QC Lot: 2869195)								
HK2002733-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.2	4.53
HK2002733-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.6	9.66
EA/ED: Physical and Aggregate Properties (QC Lot: 2869196)								
HK2002733-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.3	9.52
HK2002733-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.0	2.2	8.61
EA/ED: Physical and Aggregate Properties (QC Lot: 2869197)								
HK2002733-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	5.0	13.6

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	*CAS Number*	*LOR*	*Unit*	*Result*	*Concentration*	*LCS*	*DCS*	*Low*	*High*	*Value*	*Control Limit*
EA/ED: Physical and Aggregate Properties (QCLot: 2869191)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2869192)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2869193)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2869194)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2869195)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----

Matrix: **WATER**

		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2869196)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	109	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2869197)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.0	----	85.9	117	----	----

QA&QC Results on 20 February 20

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 2874031)								
HK2006023-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.4	4.9	9.71
HK2006023-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.5	6.9	5.68
EA/ED: Physical and Aggregate Properties (QC Lot: 2874032)								
HK2006023-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.3	10.0	7.07
HK2006023-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.8	6.02
EA/ED: Physical and Aggregate Properties (QC Lot: 2874033)								
HK2006023-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.1	5.5	8.66
HK2006023-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.7	4.0	8.78
EA/ED: Physical and Aggregate Properties (QC Lot: 2874034)								
HK2006023-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	4.1	2.98
HK2006023-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.9	0.00
EA/ED: Physical and Aggregate Properties (QC Lot: 2874035)								
HK2006023-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	5.6	9.17
HK2006023-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.1	5.5	9.69
EA/ED: Physical and Aggregate Properties (QC Lot: 2874036)								
HK2006023-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.9	6.3	7.55
HK2006023-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	4.0	8.92
EA/ED: Physical and Aggregate Properties (QC Lot: 2874037)								
HK2006023-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.7	6.5	3.02

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2874031)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2874032)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2874033)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2874034)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	93.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2874035)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----

Matrix: **WATER**

		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2874036)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2874037)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----

QA&QC Results on 22 February 20

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 2877026)								
HK2006024-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	3.2	9.15
HK2006024-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.5	2.6	0.00
EA/ED: Physical and Aggregate Properties (QC Lot: 2877027)								
HK2006024-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.1	6.0	0.00
HK2006024-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.2	2.9	10.6
EA/ED: Physical and Aggregate Properties (QC Lot: 2877028)								
HK2006024-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.4	3.1	10.5
HK2006024-071	SR8/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.5	1.6	0.00
EA/ED: Physical and Aggregate Properties (QC Lot: 2877029)								
HK2006024-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.5	11.7
HK2006024-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.8	1.6	13.2
EA/ED: Physical and Aggregate Properties (QC Lot: 2877030)								
HK2006024-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	5.0	5.78
HK2006024-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.6	9.66
EA/ED: Physical and Aggregate Properties (QC Lot: 2877031)								
HK2006024-131	SR8/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	3.6	11.1
HK2006024-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.4	3.7	7.82
EA/ED: Physical and Aggregate Properties (QC Lot: 2877032)								
HK2006024-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.4	2.6	6.40

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2877026)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2877027)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2877028)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2877029)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2877030)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.5	----	85.9	117	----	----

Matrix: **WATER**

		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2877031)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2877032)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.5	----	85.9	117	----	----

QA&QC Results on 24 February 20

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 2879091)								
HK2006036-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.8	4.0	5.18
HK2006036-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.4	8.2	2.16
EA/ED: Physical and Aggregate Properties (QC Lot: 2879092)								
HK2006036-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.8	6.2	6.36
HK2006036-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.7	4.0	7.79
EA/ED: Physical and Aggregate Properties (QC Lot: 2879093)								
HK2006036-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.8	4.3	11.8
HK2006036-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.9	4.3	13.4
EA/ED: Physical and Aggregate Properties (QC Lot: 2879094)								
HK2006036-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.0	6.9	1.44
HK2006036-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.5	7.9	5.22
EA/ED: Physical and Aggregate Properties (QC Lot: 2879095)								
HK2006036-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.2	8.5	3.35
HK2006036-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	13.9	13.9	0.00
EA/ED: Physical and Aggregate Properties (QC Lot: 2879096)								
HK2006036-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.6	9.4	8.42
HK2006036-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.6	5.9	10.2
EA/ED: Physical and Aggregate Properties (QC Lot: 2879097)								
HK2006036-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.1	7.8	4.01

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2879091)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2879092)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2879093)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	107	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2879094)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2879095)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.0	----	85.9	117	----	----

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2879096)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2879097)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	110	----	85.9	117	----	----

QA&QC Results on 26 February 20

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 2883947)								
HK2006404-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.0	2.3	12.8
HK2006404-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.1	2.9	7.26
EA/ED: Physical and Aggregate Properties (QC Lot: 2883948)								
HK2006404-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.3	4.4	2.30
HK2006404-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.5	13.5
EA/ED: Physical and Aggregate Properties (QC Lot: 2883949)								
HK2006404-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.1	9.26
HK2006404-071	SR8/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.4	5.78
EA/ED: Physical and Aggregate Properties (QC Lot: 2883950)								
HK2006404-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.3	5.87
HK2006404-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.3	12.1
EA/ED: Physical and Aggregate Properties (QC Lot: 2883951)								
HK2006404-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.1	4.7	7.80
HK2006404-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	2.4	10.9
EA/ED: Physical and Aggregate Properties (QC Lot: 2883952)								
HK2006404-131	SR8/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.0	4.8	3.65
HK2006404-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.2	6.45
EA/ED: Physical and Aggregate Properties (QC Lot: 2883953)								
HK2006404-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.1	4.1	0.00

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2883947)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	93.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2883948)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2883949)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	107	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2883950)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	112	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2883951)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----

Matrix: **WATER**

		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2883952)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	110	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2883953)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.5	----	85.9	117	----	----

QA&QC Results on 28 February 20

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 2887227)								
HK2006405-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.4	3.0	12.4
HK2006405-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.8	9.07
EA/ED: Physical and Aggregate Properties (QC Lot: 2887228)								
HK2006405-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.9	5.6	4.84
HK2006405-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.7	5.4	3.96
EA/ED: Physical and Aggregate Properties (QC Lot: 2887229)								
HK2006405-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.2	3.3	0.00
HK2006405-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.4	3.6	6.86
EA/ED: Physical and Aggregate Properties (QC Lot: 2887230)								
HK2006405-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.8	4.4	9.61
HK2006405-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.0	5.3	5.47
EA/ED: Physical and Aggregate Properties (QC Lot: 2887231)								
HK2006405-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.8	9.1	3.80
HK2006405-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	5.5	3.68
EA/ED: Physical and Aggregate Properties (QC Lot: 2887232)								
HK2006405-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	15.7	15.3	2.32
HK2006405-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.1	5.9	3.66
EA/ED: Physical and Aggregate Properties (QC Lot: 2887233)								
HK2006405-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.5	9.8	3.10

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2887227)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2887228)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2887229)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2887230)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	112	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2887231)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 2887232)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 2887233)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----

C. Monitoring Schedule

C.1 Monitoring Schedule of This Reporting Period

Feb-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18 Regular Monitoring mid-ebb: 21:37 mid-flood: 8:57	19	20 Regular Monitoring mid-ebb: 10:59 mid-flood: 15:51	21	22 Regular Monitoring mid-ebb: 12:18 mid-flood: 17:24
23	24 Regular Monitoring mid-ebb: 13:20 mid-flood: 7:47	25	26 Regular Monitoring mid-ebb: 14:09 mid-flood: 8:21	27	28 Regular Monitoring mid-ebb: 15:09 mid-flood: 9:03	29

C.2 Tentative Monitoring Schedule of Next Reporting Period

Mar-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	**2** Regular Monitoring mid-ebb: 17:22 mid-flood: 10:10	**3**	**4** Regular Monitoring mid-ebb: 20:26 mid-flood: 7:32	**5**	**6** Regular Monitoring mid-ebb: 22:12 mid-flood: 9:52	**7**
8	**9** Regular Monitoring mid-ebb: 12:19 mid-flood: 6:38	**10**	**11** Regular Monitoring mid-ebb: 13:35 mid-flood: 7:41	**12**	**13** Regular Monitoring mid-ebb: 14:57 mid-flood: 8:48	**14**
15	**16** Regular Monitoring mid-ebb: 17:58 mid-flood: 10:37	**17**	**18** Regular Monitoring mid-ebb: 20:56 mid-flood: 8:24	**19**	**20** Regular Monitoring mid-ebb: 10:51 mid-flood: 15:45	**21**
22	**23** Regular Monitoring mid-ebb: 12:23 mid-flood: 6:40	**24**	**25** Regular Monitoring mid-ebb: 13:10 mid-flood: 7:13	**26**	**27** Regular Monitoring mid-ebb: 14:06 mid-flood: 7:52	**28**
29	**30** Regular Monitoring mid-ebb: 15:35 mid-flood: 8:38	**31**				

D. Water Quality Monitoring Results

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 18 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Fine	Calm	21:58	15.3	Surface	1.0	17.9	17.9	8.3	8.3	32.8	32.8	99.4	99.4	7.7	7.7	7.7	1.0	1.0	1.8	5.2	5.7	4.2
						1.0	17.9		8.3		32.8		99.3		7.7			1.0			6.2		
					Middle	7.7	17.8	17.8	8.3	8.3	32.8	32.8	98.5	98.5	7.7	7.7		1.9	1.9		3.9	3.8	
						7.7	17.8		8.3		32.8		98.5		7.7			1.9			3.7		
					Bottom	14.3	17.8	17.8	8.3	8.3	32.8	32.8	99.0	99.1	7.7	7.7	7.7	2.5	2.5		3.5	3.0	
						14.3	17.8		8.3		32.8		99.1		7.7			2.6			2.5		
C2	Fine	Calm	20:33	10.0	Surface	1.0	17.8	17.8	8.3	8.3	32.8	32.8	98.9	99.0	7.7	7.7	7.7	1.7	1.8	2.0	4.5	4.6	3.6
						1.0	17.8		8.3		32.8		99.0		7.7			1.8			4.6		
					Middle	5.0	17.8	17.8	8.3	8.3	32.8	32.8	98.8	98.8	7.7	7.7		1.8	1.8		2.8	3.0	
						5.0	17.8		8.3		32.8		98.8		7.7			1.8			3.1		
					Bottom	9.0	17.5	17.6	8.3	8.3	32.8	32.8	98.8	98.9	7.8	7.8	7.8	2.5	2.5		2.9	3.2	
						9.0	17.6		8.3		32.8		98.9		7.8			2.4			3.4		
C3	Fine	Rough	20:21	20.5	Surface	1.0	17.6	17.6	8.3	8.3	32.9	32.9	99.2	99.2	7.8	7.8	7.8	1.4	1.4	2.1	2.5	2.8	2.5
						1.0	17.6		8.3		32.9		99.2		7.8			1.4			3.0		
					Middle	10.3	17.5	17.5	8.3	8.3	32.9	32.9	98.6	98.7	7.7	7.7		1.5	1.5		2.2	2.2	
						10.3	17.5		8.3		32.9		98.7		7.7			1.5			2.1		
					Bottom	19.5	17.5	17.5	8.3	8.3	33.0	33.0	98.2	98.3	7.7	7.7	7.7	3.3	3.4		2.7	2.5	
						19.5	17.5		8.3		33.0		98.3		7.7			3.4			2.3		
SR1	Fine	Calm	21:27	8.8	Surface	1.0	17.8	17.8	8.3	8.3	32.9	32.9	99.7	99.8	7.8	7.8	7.8	2.3	2.3	3.5	3.7	3.7	3.1
						1.0	17.8		8.3		32.9		99.8		7.8			2.3			3.7		
					Middle	4.4	17.7	17.7	8.3	8.3	32.9	32.9	99.5	99.5	7.8	7.8		3.1	3.2		3.0	2.7	
						4.4	17.7		8.3		32.9		99.4		7.8			3.3			2.4		
					Bottom	7.8	17.6	17.6	8.3	8.3	32.8	32.8	98.8	98.8	7.7	7.7	7.7	5.0	5.0		3.3	2.8	
						7.8	17.6		8.3		32.8		98.8		7.7			5.0			2.3		
SR4	Fine	Calm	21:04	15.0	Surface	1.0	18.0	18.0	8.3	8.3	32.8	32.8	99.5	99.5	7.7	7.7	7.7	1.4	1.4	1.9	2.8	2.6	2.3
						1.0	18.0		8.3		32.8		99.5		7.7			1.4			2.3		
					Middle	7.5	17.9	17.9	8.3	8.3	32.8	32.8	98.7	98.8	7.7	7.7		1.5	1.5		2.6	2.3	
						7.5	17.9		8.3		32.8		98.8		7.7			1.5			2.0		
					Bottom	14.0	17.8	17.8	8.3	8.3	32.8	32.8	99.0	99.1	7.7	7.7	7.7	2.7	2.8		2.1	2.1	
						14.0	17.8		8.3		32.8		99.1		7.7			2.9			2.1		
SR5	Fine	Calm	20:56	11.0	Surface	1.0	18.0	18.0	8.3	8.3	32.8	32.8	99.8	99.8	7.8	7.8	7.8	1.7	1.8	2.0	2.7	3.1	3.1
						1.0	18.0		8.3		32.8		99.8		7.8			1.8			3.4		
					Middle	5.5	17.8	17.8	8.3	8.3	32.8	32.8	100.2	100.2	7.8	7.8		1.8	1.8		2.4	2.8	
						5.5	17.8		8.3		32.8		100.2		7.8			1.8			3.1		
					Bottom	10.0	17.6	17.6	8.3	8.3	32.8	32.8	100.3	100.3	7.9	7.9	7.9	2.3	2.3		3.5	3.5	
						10.0	17.6		8.3		32.8		100.3		7.9			2.3			3.4		
SR6	Fine	Moderate	20:59	14.0	Surface	1.0	17.6	17.6	8.3	8.3	32.9	32.9	98.6	98.6	7.7	7.7	7.7	1.9	1.9	2.7	3.1	3.2	3.1
						1.0	17.6		8.3		32.9		98.5		7.7			1.9			3.3		
					Middle	7.0	17.5	17.5	8.3	8.3	32.9	32.9	98.1	98.1	7.7	7.7		2.0	2.0		2.7	3.1	
						7.0	17.5		8.3		32.9		98.0		7.7			2.1			3.5		
					Bottom	13.0	17.5	17.5	8.3	8.3	32.9	32.9	97.9	97.9	7.7	7.7	7.7	4.2	4.3		2.8	3.0	
						13.0	17.5		8.3		32.9		97.9		7.7			4.4			3.2		
SR7	Fine	Rough	20:38	20.0	Surface	1.0	17.6	17.6	8.3	8.3	32.9	32.9	99.1	99.1	7.8	7.8	7.8	1.5	1.5	2.3	3.1	3.2	2.9
						1.0	17.6		8.3		32.9		99.1		7.8			1.5			3.2		
					Middle	10.0	17.5	17.5	8.3	8.3	32.9	32.9	98.4	98.4	7.7	7.7		1.5	1.6		3.1	3.2	
						10.0	17.5		8.3		32.9		98.4		7.7			1.6			3.3		
					Bottom	19.0	17.5	17.5	8.3	8.3	33.0	33.0	97.6	97.6	7.7	7.7	7.7	3.9	3.9		2.7	2.4	
						19.0	17.5		8.3		33.0		97.6		7.7			3.9			2.1		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 18 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Fine	Calm	21:38	11.1	Surface	1.0	18.0	18.0	8.2	8.2	32.8	32.8	95.7	95.8	7.5	7.5	7.5	1.2	1.2	1.6	3.0	3.4	2.6
						1.0	18.0		8.2		32.8		95.8		7.5			1.2			3.7		
					Middle	5.6	17.9	17.9	8.2	8.2	32.8	32.8	96.3	96.3	7.5	7.5		1.3	1.4		2.4	2.4	
						5.6	17.9		8.2		32.8		96.3		7.5			1.5			2.4		
					Bottom	10.1	17.8	17.8	8.3	8.3	32.8	32.8	96.9	97.0	7.6	7.6	7.6	2.3	2.3		2.3	2.2	
						10.1	17.8		8.3		32.8		97.0		7.6			2.4			2.0		
SR9	Fine	Calm	21:23	11.2	Surface	1.0	18.0	18.0	8.2	8.2	32.8	32.8	99.2	99.2	7.7	7.7	7.7	1.7	1.7	2.7	1.3	1.6	1.5
						1.0	18.0		8.2		32.8		99.2		7.7			1.7			1.9		
					Middle	5.6	17.9	17.9	8.3	8.3	32.8	32.8	99.2	99.2	7.7	7.7		2.1	2.3		1.8	1.5	
						5.6	17.9		8.3		32.8		99.2		7.7			2.5			1.1		
					Bottom	10.2	17.9	17.9	8.3	8.3	32.8	32.8	99.8	99.9	7.8	7.8	7.8	4.2	4.2		<1.0	<1.0	
						10.2	17.9		8.3		32.8		100.0		7.8			4.3			<1.0		
SR10	Fine	Calm	20:02	6.8	Surface	1.0	17.9	17.9	8.2	8.2	32.5	32.5	95.4	95.4	7.5	7.5	7.5	2.8	2.8	3.2	3.1	3.6	4.0
						1.0	17.9		8.2		32.5		95.4		7.5			2.9			4.0		
					Middle	3.4	17.7	17.7	8.2	8.2	32.5	32.5	95.2	95.2	7.5	7.5		3.3	3.3		4.6	4.3	
						3.4	17.7		8.2		32.5		95.1		7.5			3.3			4.0		
					Bottom	5.8	17.4	17.4	8.2	8.2	32.5	32.5	94.2	94.3	7.4	7.4	7.4	3.4	3.4		4.4	4.0	
						5.8	17.4		8.2		32.5		94.3		7.4			3.5			3.6		
A1	Fine	Calm	20:48	9.0	Surface	1.0	18.3	18.3	8.3	8.3	32.8	32.8	100.8	100.8	7.8	7.8	7.7	2.8	2.8	4.3	-	N/A	N/A
						1.0	18.2		8.3		32.9		100.8		7.8			2.8			-		
					Middle	4.5	17.5	17.5	8.3	8.3	32.8	32.8	98.6	98.6	7.7	7.7		4.6	4.5		-	N/A	
						4.5	17.5		8.3		32.8		98.6		7.7			4.4			-		
					Bottom	8.0	17.4	17.4	8.3	8.3	32.8	32.8	97.9	98.0	7.7	7.7		5.6	5.5		-	N/A	
						8.0	17.4		8.3		32.8		98.0		7.7			5.5			-		
A2	Fine	Calm	19:52	10.5	Surface	1.0	17.7	17.7	8.3	8.3	32.8	32.8	101.5	101.5	7.9	7.9	7.9	2.0	1.9	3.0	-	N/A	N/A
						1.0	17.7		8.3		32.8		101.5		7.9			1.9			-		
					Middle	5.3	17.5	17.5	8.3	8.3	32.8	32.8	100.0	100.0	7.9	7.9		2.3	2.4		-	N/A	
						5.3	17.5		8.3		32.8		99.9		7.9			2.5			-		
					Bottom	9.5	17.5	17.5	8.3	8.3	32.8	32.8	99.7	99.8	7.8	7.9		4.6	4.6		-	N/A	
						9.5	17.4		8.3		32.8		99.8		7.9			4.6			-		
A3	Fine	Calm	19:59	10.5	Surface	1.0	17.6	17.6	8.3	8.3	32.9	32.9	100.5	100.5	7.9	7.9	7.8	1.4	1.4	2.9	-	N/A	N/A
						1.0	17.6		8.3		32.9		100.5		7.9			1.4			-		
					Middle	5.3	17.5	17.5	8.3	8.3	32.9	32.9	99.7	99.6	7.8	7.8		2.3	2.4		-	N/A	
						5.3	17.5		8.3		32.9		99.5		7.8			2.5			-		
					Bottom	9.5	17.4	17.4	8.3	8.3	32.9	32.9	98.5	98.6	7.8	7.8		4.8	4.8		-	N/A	
						9.5	17.4		8.3		32.9		98.6		7.8			4.9			-		
A4	Fine	Moderate	20:54	15.4	Surface	1.0	17.7	17.7	8.3	8.3	32.9	32.9	99.7	99.7	7.8	7.8	7.7	1.7	1.8	2.8	-	N/A	N/A
						1.0	17.7		8.3		32.9		99.7		7.8			1.8			-		
					Middle	7.7	17.5	17.5	8.3	8.3	32.9	32.9	98.2	98.2	7.7	7.7		2.3	2.4		-	N/A	
						7.7	17.5		8.3		32.9		98.2		7.7			2.6			-		
					Bottom	14.4	17.5	17.5	8.3	8.3	32.9	32.9	97.9	97.9	7.7	7.7		4.4	4.2		-	N/A	
						14.4	17.5		8.3		32.9		97.9		7.7			4.1			-		
A5	Fine	Moderate	20:47	21.0	Surface	1.0	17.6	17.6	8.3	8.3	32.9	32.9	99.4	99.4	7.8	7.8	7.7	1.4	1.4	2.3	-	N/A	N/A
						1.0	17.6		8.3		32.9		99.4		7.8			1.4			-		
					Middle	10.5	17.5	17.5	8.3	8.3	32.9	32.9	98.7	98.7	7.7	7.7		1.2	1.2		-	N/A	
						10.5	17.5		8.3		32.9		98.7		7.7			1.2			-		
					Bottom	20.0	17.5	17.5	8.3	8.3	33.0	33.0	98.1	98.1	7.7	7.7		4.1	4.1		-	N/A	
						20.0	17.5		8.3		33.0		98.1		7.7			4.2			-		

DA: Depth-averaged

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

Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 18 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Fine	Moderate	07:31	12.0	Surface	1.0	17.8	17.8	8.1	8.1	32.7	32.7	95.1	95.1	7.4	7.4	7.4	2.4	2.4	2.6	2.2	2.7	2.2
						1.0	17.8		8.1		32.7		95.1		7.4			2.4			3.1		
					Middle	6.0	17.8	17.8	8.1	8.1	32.7	32.7	95.1	95.1	7.4	7.4		2.3	2.3		2.5	2.3	
						6.0	17.8		8.1		32.7		95.1		7.4			2.4			2.1		
					Bottom	11.0	17.8	17.8	8.1	8.1	32.8	32.8	96.4	96.4	7.5	7.5	7.5	3.0	3.0		1.5	1.5	
						11.0	17.8		8.1		32.8		96.4		7.5			3.0			1.5		
C2	Fine	Moderate	08:59	10.0	Surface	1.0	17.8	17.8	8.2	8.2	32.8	32.8	98.0	98.0	7.7	7.7	7.7	2.2	2.2	2.7	3.0	3.4	3.5
						1.0	17.8		8.2		32.8		98.0		7.7			2.2			3.8		
					Middle	5.0	17.7	17.7	8.3	8.3	32.8	32.8	98.0	98.0	7.7	7.7		2.4	2.5		3.3	3.1	
						5.0	17.6		8.3		32.8		98.0		7.7			2.5			2.9		
					Bottom	9.0	17.5	17.5	8.3	8.3	32.8	32.8	98.5	98.5	7.7	7.7	7.7	3.5	3.5		3.5	3.9	
						9.0	17.5		8.3		32.8		98.5		7.7			3.4			4.3		
C3	Fine	Moderate	08:43	22.1	Surface	1.0	17.5	17.5	8.3	8.3	33.0	33.0	98.4	98.4	7.7	7.7	7.7	1.3	1.3	2.2	2.0	2.1	2.5
						1.0	17.5		8.3		33.0		98.4		7.7			1.4			2.1		
					Middle	11.1	17.5	17.5	8.3	8.3	33.0	33.0	97.9	97.9	7.7	7.7		1.7	1.7		2.9	2.7	
						11.1	17.5		8.3		33.0		97.9		7.7			1.7			2.5		
					Bottom	21.1	17.5	17.5	8.3	8.3	33.0	33.0	97.8	97.8	7.7	7.7	7.7	3.6	3.5		2.4	2.8	
						21.1	17.5		8.3		33.0		97.8		7.7			3.4			3.2		
SR1	Fine	Calm	07:35	8.4	Surface	1.0	17.5	17.5	8.3	8.3	32.8	32.8	98.3	98.5	7.7	7.7	7.8	2.0	2.0	2.9	2.7	3.2	3.2
						1.0	17.5		8.3		32.8		98.6		7.7			2.0			3.6		
					Middle	4.2	17.5	17.5	8.3	8.3	32.8	32.8	99.2	99.2	7.8	7.8		3.2	3.2		3.1	3.3	
						4.2	17.5		8.3		32.8		99.2		7.8			3.2			3.5		
					Bottom	7.4	17.4	17.4	8.3	8.3	32.8	32.8	99.8	100.0	7.9	7.9	7.9	3.3	3.5		3.0	3.1	
						7.4	17.4		8.3		32.8		100.1		7.9			3.7			3.2		
SR4	Fine	Calm	08:24	13.2	Surface	1.0	17.8	17.8	8.3	8.3	32.8	32.8	97.9	97.9	7.7	7.7	7.7	1.3	1.3	1.6	2.3	2.5	2.6
						1.0	17.8		8.3		32.8		97.9		7.7			1.3			2.6		
					Middle	6.6	17.8	17.8	8.3	8.3	32.8	32.8	97.8	97.9	7.6	7.7		1.5	1.5		3.0	2.7	
						6.6	17.8		8.3		32.8		97.9		7.7			1.5			2.4		
					Bottom	12.2	17.8	17.8	8.3	8.3	32.8	32.8	98.8	98.9	7.7	7.7	7.7	1.9	1.9		2.5	2.7	
						12.2	17.8		8.3		32.8		98.9		7.7			1.9			2.9		
SR5	Fine	Calm	08:32	11.0	Surface	1.0	17.7	17.7	8.3	8.3	32.8	32.8	98.3	98.3	7.7	7.7	7.7	1.7	1.7	2.3	2.8	2.9	2.8
						1.0	17.7		8.3		32.8		98.3		7.7			1.7			2.9		
					Middle	5.5	17.7	17.7	8.3	8.3	32.8	32.8	98.3	98.4	7.7	7.7		1.7	1.7		2.7	2.9	
						5.5	17.7		8.3		32.8		98.5		7.7			1.7			3.0		
					Bottom	10.0	17.6	17.6	8.3	8.3	32.8	32.8	99.8	99.8	7.8	7.8	7.8	3.7	3.6		2.4	2.6	
						10.0	17.6		8.3		32.8		99.8		7.8			3.6			2.7		
SR6	Fine	Calm	08:04	11.4	Surface	1.0	17.5	17.5	8.3	8.3	32.8	32.8	98.5	98.5	7.7	7.7	7.7	2.9	2.9	3.1	2.2	2.2	2.7
						1.0	17.5		8.3		32.8		98.4		7.7			2.9			2.2		
					Middle	5.7	17.5	17.5	8.3	8.3	32.8	32.8	98.4	98.5	7.7	7.7		2.6	2.6		3.4	2.9	
						5.7	17.5		8.3		32.8		98.5		7.7			2.5			2.4		
					Bottom	10.4	17.4	17.4	8.3	8.3	32.8	32.8	98.9	99.0	7.8	7.8	7.8	3.8	3.8		3.0	2.9	
						10.4	17.4		8.3		32.8		99.0		7.8			3.9			2.8		
SR7	Fine	Moderate	08:24	19.4	Surface	1.0	17.5	17.5	8.3	8.3	32.8	32.8	98.9	98.9	7.8	7.8	7.8	1.3	1.2	1.2	2.7	3.2	2.6
						1.0	17.5		8.3		32.8		98.9		7.8			1.2			3.6		
					Middle	9.7	17.5	17.5	8.3	8.3	32.9	32.9	98.6	98.6	7.8	7.8		1.0	0.9		2.6	2.4	
						9.7	17.5		8.3		32.9		98.6		7.8			0.9			2.1		
					Bottom	18.4	17.5	17.5	8.3	8.3	32.9	32.9	98.3	98.3	7.7	7.7	7.7	1.3	1.3		2.0	2.2	
						18.4	17.5		8.3		32.9		98.3		7.7			1.3			2.3		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 18 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Fine	Calm	07:49	10.8	Surface	1.0	17.7	17.7	8.3	8.3	32.8	32.8	97.3	97.3	7.6	7.6	7.6	1.7	1.7	2.0	2.3	2.2	2.0
						1.0	17.7		8.3		32.8		97.3		7.6			1.7			2.0		
					Middle	5.4	17.7	17.7	8.3	8.3	32.8	32.8	97.7	97.8	7.6	7.7		2.3	2.3		2.0	1.9	
						5.4	17.7		8.3		32.8		97.8		7.7			2.3			1.7		
					Bottom	9.8	17.7	17.7	8.3	8.3	32.8	32.8	98.6	98.7	7.7	7.7	7.7	1.8	1.8		2.1	1.9	
						9.8	17.7		8.3		32.8		98.8		7.7			1.9			1.6		
SR9	Fine	Calm	08:02	10.3	Surface	1.0	17.8	17.8	8.3	8.3	32.8	32.8	93.3	93.3	7.3	7.3	7.4	1.1	1.1	1.5	2.7	2.6	3.0
						1.0	17.8		8.3		32.8		93.3		7.3			1.1			2.4		
					Middle	5.2	17.8	17.8	8.3	8.3	32.8	32.8	94.3	94.4	7.4	7.4		1.1	1.2		2.9	3.1	
						5.2	17.8		8.3		32.8		94.5		7.4			1.3			3.2		
					Bottom	9.3	17.8	17.8	8.3	8.3	32.8	32.8	97.3	97.4	7.6	7.6	7.6	2.1	2.1		3.6	3.5	
						9.3	17.8		8.3		32.8		97.5		7.6			2.1			3.3		
SR10	Fine	Calm	09:24	7.0	Surface	1.0	17.7	17.7	8.2	8.2	32.5	32.5	95.1	95.1	7.5	7.5	7.5	2.8	2.8	2.8	4.4	4.7	4.1
						1.0	17.7		8.2		32.5		95.1		7.5			2.8			4.9		
					Middle	3.5	17.6	17.6	8.2	8.2	32.5	32.5	95.1	95.1	7.5	7.5		2.8	2.8		4.3	4.5	
						3.5	17.6		8.2		32.5		95.0		7.5			2.9			4.7		
					Bottom	6.0	17.5	17.5	8.2	8.2	32.5	32.5	95.8	96.0	7.5	7.6	7.6	2.9	2.9		3.5	3.1	
						6.0	17.5		8.2		32.5		96.2		7.6			2.9			2.6		
A1	Fine	Calm	08:41	8.8	Surface	1.0	17.7	17.7	8.3	8.3	32.8	32.8	98.7	98.7	7.7	7.7	7.7	2.7	2.7	3.5	-	N/A	N/A
						1.0	17.7		8.3		32.8		98.7		7.7			2.8			-		
					Middle	4.4	17.7	17.7	8.3	8.3	32.8	32.8	98.6	98.6	7.7	7.7		2.8	2.8		-	N/A	
						4.4	17.7		8.3		32.8		98.6		7.7			2.8			-		
					Bottom	7.8	17.5	17.5	8.3	8.3	32.8	32.8	98.5	98.5	7.7	7.7		5.0	5.1		-	N/A	
						7.8	17.5		8.3		32.8		98.5		7.7			5.1			-		
A2	Fine	Calm	09:15	9.9	Surface	1.0	17.4	17.4	8.3	8.3	32.8	32.8	100.0	100.0	7.9	7.9	7.9	2.0	2.0	2.7	-	N/A	N/A
						1.0	17.4		8.3		32.8		100.0		7.9			1.9			-		
					Middle	5.0	17.4	17.4	8.3	8.3	32.8	32.8	100.2	100.2	7.9	7.9		1.9	2.0		-	N/A	
						5.0	17.4		8.3		32.8		100.2		7.9			2.0			-		
					Bottom	8.9	17.4	17.4	8.3	8.3	32.8	32.8	101.3	101.5	8.0	8.0		4.2	4.3		-	N/A	
						8.9	17.4		8.3		32.8		101.6		8.0			4.4			-		
A3	Fine	Calm	09:04	10.2	Surface	1.0	17.4	17.4	8.3	8.3	32.8	32.8	99.3	99.3	7.8	7.8	7.8	1.6	1.6	2.5	-	N/A	N/A
						1.0	17.4		8.3		32.8		99.3		7.8			1.6			-		
					Middle	5.1	17.4	17.4	8.3	8.3	32.8	32.8	99.2	99.2	7.8	7.8		1.7	1.7		-	N/A	
						5.1	17.4		8.3		32.8		99.2		7.8			1.8			-		
					Bottom	9.2	17.4	17.4	8.3	8.3	32.8	32.8	99.1	99.1	7.8	7.8		4.0	4.0		-	N/A	
						9.2	17.4		8.3		32.8		99.1		7.8			4.1			-		
A4	Fine	Calm	08:09	15.0	Surface	1.0	17.5	17.5	8.3	8.3	32.8	32.8	98.8	98.8	7.8	7.8	7.7	1.2	1.2	1.9	-	N/A	N/A
						1.0	17.5		8.3		32.8		98.8		7.8			1.2			-		
					Middle	7.5	17.5	17.5	8.3	8.3	32.8	32.8	98.2	98.2	7.7	7.7		1.7	1.6		-	N/A	
						7.5	17.5		8.3		32.8		98.2		7.7			1.6			-		
					Bottom	14.0	17.5	17.5	8.3	8.3	32.9	32.8	98.0	98.0	7.7	7.7		2.8	2.8		-	N/A	
						14.0	17.5		8.3		32.8		98.0		7.7			2.9			-		
A5	Fine	Calm	08:14	15.3	Surface	1.0	17.5	17.5	8.3	8.3	32.9	32.9	99.1	99.1	7.8	7.8	7.8	1.2	1.2	1.1	-	N/A	N/A
						1.0	17.5		8.3		32.9		99.1		7.8			1.2			-		
					Middle	7.7	17.5	17.5	8.3	8.3	32.9	32.9	99.0	99.0	7.8	7.8		1.0	1.0		-	N/A	
						7.7	17.5		8.3		32.9		98.9		7.8			1.0			-		
					Bottom	14.3	17.4	17.4	8.3	8.3	32.9	32.9	98.9	99.0	7.8	7.8		1.1	1.2		-	N/A	
						14.3	17.4		8.3		32.9		99.0		7.8			1.2			-		

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 20 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Fine	Moderate	09:35	15.3	Surface	1.0	17.8	17.8	8.2	8.2	33.7	33.7	93.3	93.4	7.3	7.3	7.3	2.1	2.1	3.4	5.4	5.1	4.2
						1.0	17.8		8.2		33.7		93.4		7.3			2.2			4.7		
					Middle	7.7	17.8	17.8	8.2	8.2	33.8	33.8	94.0	94.0	7.3	7.3		3.8	3.7		3.9	4.0	
						7.7	17.8		8.2		33.8		94.0		7.3			3.7			4.1		
					Bottom	14.3	17.8	17.8	8.2	8.2	33.8	33.8	94.4	94.4	7.3	7.3	7.3	4.4	4.4		3.5	3.5	
						14.3	17.8		8.2		33.8		94.4		7.3			4.4			3.4		
C2	Fine	Rough	10:59	12.2	Surface	1.0	17.6	17.6	8.4	8.4	34.0	34.0	99.7	99.7	7.8	7.8	7.8	3.0	3.0	4.2	5.0	4.6	5.5
						1.0	17.6		8.4		34.0		99.7		7.8			3.0			4.1		
					Middle	6.1	17.6	17.6	8.4	8.4	34.0	34.0	99.2	99.2	7.7	7.7		3.2	3.2		4.5	5.0	
						6.1	17.6		8.4		34.0		99.1		7.7			3.2			5.5		
					Bottom	11.2	17.6	17.6	8.4	8.4	34.0	34.0	98.9	99.0	7.7	7.7	7.7	6.4	6.5		6.5	7.0	
						11.2	17.6		8.4		34.0		99.0		7.7			6.6			7.5		
C3	Fine	Moderate	11:07	18.0	Surface	1.0	17.4	17.4	8.4	8.4	33.9	33.9	99.0	99.0	7.7	7.7	7.7	1.8	1.8	1.9	3.5	3.9	3.7
						1.0	17.4		8.4		33.9		99.0		7.7			1.8			4.2		
					Middle	9.0	17.4	17.4	8.4	8.4	33.9	33.9	98.7	98.7	7.7	7.7		1.8	1.8		4.0	3.9	
						9.0	17.4		8.4		33.9		98.7		7.7			1.8			3.8		
					Bottom	17.0	17.5	17.5	8.4	8.4	34.0	33.9	99.5	99.6	7.8	7.8	7.8	2.1	2.1		3.7	3.4	
						17.0	17.5		8.4		33.9		99.7		7.8			2.1			3.0		
SR1	Fine	Calm	09:50	8.6	Surface	1.0	17.7	17.7	8.3	8.3	33.9	33.9	98.1	98.1	7.6	7.6	7.6	4.7	4.7	5.5	10.7	10.3	9.6
						1.0	17.7		8.3		33.9		98.1		7.6			4.7			9.8		
					Middle	4.3	17.7	17.7	8.3	8.3	33.9	33.9	98.2	98.3	7.6	7.6		5.0	5.1		9.3	9.5	
						4.3	17.7		8.3		33.9		98.3		7.6			5.1			9.6		
					Bottom	7.6	17.6	17.6	8.3	8.3	33.9	33.9	99.1	99.2	7.7	7.7	7.7	6.6	6.7		9.5	9.2	
						7.6	17.6		8.3		33.9		99.3		7.7			6.8			8.9		
SR4	Fine	Moderate	10:26	13.0	Surface	1.0	17.8	17.8	8.3	8.3	33.7	33.7	93.7	93.7	7.3	7.3	7.3	2.2	2.3	3.1	5.3	5.6	5.7
						1.0	17.8		8.3		33.7		93.7		7.3			2.3			5.9		
					Middle	6.5	17.8	17.8	8.3	8.3	33.7	33.7	94.1	94.1	7.3	7.3		2.2	2.2		5.2	5.6	
						6.5	17.8		8.3		33.7		94.1		7.3			2.3			6.0		
					Bottom	12.0	17.8	17.8	8.3	8.3	33.8	33.8	96.6	96.7	7.5	7.5	7.5	4.6	4.7		5.5	6.0	
						12.0	17.8		8.3		33.8		96.7		7.5			4.8			6.5		
SR5	Fine	Moderate	10:35	11.1	Surface	1.0	17.8	17.8	8.3	8.3	33.9	33.9	98.1	98.1	7.6	7.6	7.6	5.9	5.9	6.3	12.0	11.6	**12.7**
						1.0	17.8		8.3		33.9		98.0		7.6			5.9			11.2		
					Middle	5.6	17.8	17.8	8.3	8.3	33.9	33.9	97.3	97.3	7.6	7.6		6.0	6.0		13.5	13.2	
						5.6	17.8		8.3		33.9		97.3		7.6			6.0			12.8		
					Bottom	10.1	17.7	17.7	8.4	8.4	33.9	33.9	97.1	97.1	7.5	7.5	7.5	7.1	7.0		12.3	13.2	
						10.1	17.7		8.4		33.9		97.1		7.5			6.8			14.1		
SR6	Fine	Moderate	10:27	15.0	Surface	1.0	17.6	17.6	8.3	8.3	33.9	33.9	98.6	98.6	7.7	7.7	7.7	4.4	4.4	4.4	8.8	8.4	9.0
						1.0	17.6		8.3		33.9		98.6		7.7			4.4			8.0		
					Middle	7.5	17.6	17.6	8.3	8.3	34.0	34.0	98.4	98.4	7.7	7.7		4.4	4.4		9.4	9.3	
						7.5	17.6		8.3		34.0		98.4		7.7			4.4			9.2		
					Bottom	14.0	17.6	17.6	8.3	8.3	34.0	34.0	98.4	98.4	7.7	7.7	7.7	4.2	4.3		9.3	9.2	
						14.0	17.6		8.3		34.0		98.4		7.7			4.3			9.0		
SR7	Fine	Moderate	10:51	16.8	Surface	1.0	17.5	17.5	8.4	8.4	33.9	33.9	99.2	99.2	7.8	7.8	7.8	1.5	1.6	1.8	6.3	6.2	5.8
						1.0	17.5		8.4		33.9		99.2		7.8			1.6			6.1		
					Middle	8.4	17.5	17.5	8.4	8.4	33.9	33.9	98.8	98.8	7.7	7.7		1.8	1.8		5.5	5.5	
						8.4	17.5		8.4		33.9		98.8		7.7			1.8			5.4		
					Bottom	15.8	17.5	17.5	8.4	8.4	33.9	33.9	98.7	98.7	7.7	7.7	7.7	2.1	2.1		5.5	5.7	
						15.8	17.5		8.4		33.9		98.7		7.7			2.1			5.9		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 20 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Fine	Calm	09:53	11.0	Surface	1.0	17.8	17.8	8.3	8.3	33.8	33.8	95.9	95.9	7.5	7.5	7.5	5.7	5.6	4.4	5.1	5.0	5.9
						1.0	17.8		8.3		33.8		95.9		7.5			5.6			4.8		
					Middle	5.5	17.8	17.8	8.3	8.3	33.8	33.8	95.8	95.8	7.4	7.4		2.9	3.0		6.8	6.4	
						5.5	17.8		8.3		33.8		95.8		7.4			3.1			6.0		
					Bottom	10.0	17.7	17.7	8.3	8.3	33.9	33.9	96.2	96.3	7.5	7.5	7.5	4.6	4.6		6.7	6.4	
						10.0	17.7		8.3		33.9		96.3		7.5			4.5			6.1		
SR9	Fine	Calm	10:04	10.1	Surface	1.0	17.8	17.8	8.3	8.3	33.9	33.9	95.7	95.7	7.4	7.4	7.4	1.4	1.4	2.2	3.1	3.3	3.6
						1.0	17.8		8.3		33.9		95.7		7.4			1.4			3.5		
					Middle	5.1	17.8	17.8	8.3	8.3	33.9	33.9	95.7	95.7	7.4	7.4		1.5	1.6		3.4	3.7	
						5.1	17.8		8.3		33.9		95.7		7.4			1.6			4.0		
					Bottom	9.1	17.8	17.8	8.3	8.3	33.9	33.9	96.2	96.3	7.5	7.5	7.5	3.6	3.8		3.7	3.8	
						9.1	17.8		8.3		33.9		96.3		7.5			3.9			3.9		
SR10	Fine	Calm	11:24	7.0	Surface	1.0	17.9	17.9	8.3	8.3	33.6	33.6	96.7	96.7	7.5	7.5	7.5	3.1	3.1	4.5	4.9	5.4	8.4
						1.0	17.9		8.3		33.6		96.7		7.5			3.1			5.9		
					Middle	3.5	17.8	17.8	8.3	8.3	33.6	33.6	96.8	96.8	7.5	7.5		3.4	3.4		7.1	7.4	
						3.5	17.8		8.3		33.7		96.8		7.5			3.5			7.7		
					Bottom	6.0	17.7	17.7	8.3	8.3	33.7	33.7	97.7	97.8	7.6	7.6	7.6	6.8	6.9		13.1	12.4	
						6.0	17.7		8.3		33.7		97.9		7.6			7.1			11.7		
A1	Fine	Calm	10:43	9.1	Surface	1.0	18.0	18.0	8.3	8.3	33.9	33.9	98.7	98.8	7.6	7.6	7.7	5.6	5.8	6.8	-	N/A	N/A
						1.0	17.9		8.3		33.9		98.8		7.6			6.1			-		
					Middle	4.6	17.9	17.9	8.4	8.4	33.9	33.9	98.9	98.9	7.7	7.7		6.7	6.8		-	N/A	
						4.6	17.9		8.4		33.9		98.9		7.7			6.8			-		
					Bottom	8.1	17.7	17.7	8.4	8.4	33.9	33.9	98.8	98.9	7.7	7.7		7.8	7.9		-	N/A	
						8.1	17.7		8.4		33.9		98.9		7.7			7.9			-		
A2	Fine	Calm	11:36	9.0	Surface	1.0	17.6	17.6	8.4	8.4	33.9	33.9	99.1	99.1	7.7	7.7	7.7	4.1	4.1	4.8	-	N/A	N/A
						1.0	17.6		8.4		33.9		99.1		7.7			4.1			-		
					Middle	4.5	17.6	17.6	8.4	8.4	34.0	34.0	99.2	99.2	7.7	7.7		4.3	4.4		-	N/A	
						4.5	17.6		8.4		34.0		99.2		7.7			4.4			-		
					Bottom	8.0	17.5	17.5	8.4	8.4	34.0	34.0	99.8	99.9	7.8	7.8		6.0	6.0		-	N/A	
						8.0	17.5		8.4		34.0		99.9		7.8			5.9			-		
A3	Fine	Moderate	11:30	13.0	Surface	1.0	17.6	17.6	8.3	8.3	33.9	33.9	98.5	98.5	7.7	7.7	7.6	4.3	4.3	5.8	-	N/A	N/A
						1.0	17.6		8.3		33.9		98.5		7.7			4.3			-		
					Middle	6.5	17.6	17.6	8.3	8.3	33.9	33.9	98.2	98.2	7.6	7.6		4.8	4.9		-	N/A	
						6.5	17.6		8.3		33.9		98.2		7.6			4.9			-		
					Bottom	12.0	17.6	17.6	8.3	8.3	34.0	34.0	98.1	98.1	7.6	7.6		8.3	8.3		-	N/A	
						12.0	17.6		8.3		34.0		98.1		7.6			8.4			-		
A4	Fine	Moderate	10:34	16.1	Surface	1.0	17.6	17.6	8.3	8.3	33.9	33.9	98.9	98.9	7.7	7.7	7.7	3.8	3.8	3.2	-	N/A	N/A
						1.0	17.6		8.3		33.9		98.9		7.7			3.8			-		
					Middle	8.1	17.6	17.6	8.3	8.3	34.0	34.0	98.7	98.7	7.7	7.7		3.2	3.1		-	N/A	
						8.1	17.6		8.3		34.0		98.7		7.7			3.1			-		
					Bottom	15.1	17.5	17.5	8.3	8.3	34.0	34.0	98.8	98.9	7.7	7.7		2.8	2.8		-	N/A	
						15.1	17.5		8.3		34.0		98.9		7.7			2.8			-		
A5	Fine	Moderate	10:42	17.5	Surface	1.0	17.6	17.6	8.3	8.3	34.0	34.0	98.9	98.9	7.7	7.7	7.7	3.5	3.4	3.1	-	N/A	N/A
						1.0	17.6		8.3		34.0		98.9		7.7			3.4			-		
					Middle	8.8	17.6	17.6	8.3	8.3	34.0	34.0	98.7	98.7	7.7	7.7		3.1	3.1		-	N/A	
						8.8	17.6		8.3		34.0		98.7		7.7			3.1			-		
					Bottom	16.5	17.5	17.5	8.3	8.3	34.0	34.0	99.0	99.1	7.7	7.7		2.8	2.8		-	N/A	
						16.5	17.5		8.3		34.0		99.1		7.7			2.8			-		

DA: Depth-averaged
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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 20 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Fine	Moderate	16:13	14.9	Surface	1.0	18.4	18.4	8.3	8.3	33.7	33.7	95.3	95.3	7.3	7.3	7.4	1.4	1.4	2.8	3.9	4.1	3.7
						1.0	18.3		8.3		33.7		95.2		7.3			1.4			4.3		
					Middle	7.5	17.8	17.8	8.3	8.3	33.8	33.8	95.9	95.9	7.4	7.4		2.1	2.3		4.0	3.9	
						7.5	17.8		8.3		33.8		95.9		7.4			2.5			3.7		
					Bottom	13.9	17.8	17.8	8.3	8.3	33.8	33.8	96.2	96.3	7.5	7.5	7.5	4.8	4.7		3.4	3.2	
						13.9	17.8		8.3		33.8		96.3		7.5			4.7			3.0		
C2	Fine	Moderate	14:41	12.0	Surface	1.0	17.7	17.7	8.4	8.4	33.9	33.9	100.1	100.0	7.8	7.8	7.7	2.3	2.4	5.4	5.8	6.3	7.0
						1.0	17.7		8.4		33.9		99.9		7.8			2.5			6.7		
					Middle	6.0	17.6	17.6	8.4	8.4	34.0	34.0	98.2	98.2	7.7	7.7		5.5	5.8		6.7	7.2	
						6.0	17.6		8.4		34.0		98.2		7.6			6.1			7.6		
					Bottom	11.0	17.6	17.6	8.4	8.4	34.0	34.0	98.6	98.7	7.7	7.7	7.7	8.1	7.9		7.2	7.5	
						11.0	17.6		8.4		34.0		98.8		7.7			7.7			7.7		
C3	Fine	Moderate	14:54	17.1	Surface	1.0	17.6	17.6	8.4	8.4	33.9	33.9	100.2	100.2	7.8	7.8	7.8	1.3	1.3	2.0	3.9	3.8	4.6
						1.0	17.6		8.4		33.9		100.1		7.8			1.3			3.7		
					Middle	8.6	17.6	17.6	8.4	8.4	34.0	34.0	99.0	99.0	7.7	7.7		1.5	1.6		3.5	3.3	
						8.6	17.6		8.4		34.0		98.9		7.7			1.6			3.0		
					Bottom	16.1	17.6	17.6	8.4	8.4	34.0	34.0	99.0	99.1	7.7	7.7	7.7	3.1	3.1		2.9	6.7	
						16.1	17.6		8.4		34.0		99.2		7.7			3.0			10.5		
SR1	Fine	Calm	16:11	8.4	Surface	1.0	17.9	17.9	8.4	8.4	34.0	34.0	99.9	99.9	7.7	7.7	7.7	3.5	3.5	5.0	6.8	6.3	6.3
						1.0	17.9		8.4		34.0		99.9		7.7			3.5			5.8		
					Middle	4.2	17.9	17.9	8.4	8.4	34.0	34.0	99.7	99.7	7.7	7.7		3.5	3.5		6.3	6.5	
						4.2	17.9		8.4		34.0		99.6		7.7			3.5			6.6		
					Bottom	7.4	17.6	17.6	8.4	8.4	34.0	34.0	98.4	98.5	7.7	7.7	7.7	8.1	7.9		6.2	6.1	
						7.4	17.6		8.4		34.0		98.5		7.7			7.7			6.0		
SR4	Fine	Calm	15:17	12.5	Surface	1.0	18.1	18.1	8.3	8.3	33.8	33.8	97.8	97.8	7.6	7.6	7.6	2.5	2.5	2.5	4.4	4.9	5.5
						1.0	18.1		8.3		33.8		97.8		7.6			2.6			5.3		
					Middle	6.3	18.1	18.1	8.3	8.3	33.8	33.8	98.1	98.1	7.6	7.6		2.5	2.5		6.0	5.5	
						6.3	18.0		8.3		33.8		98.1		7.6			2.5			5.0		
					Bottom	11.5	18.0	18.0	8.3	8.3	33.8	33.8	99.2	99.3	7.7	7.7	7.7	2.5	2.5		6.5	6.2	
						11.5	18.0		8.3		33.8		99.4		7.7			2.5			5.9		
SR5	Fine	Calm	15:06	11.0	Surface	1.0	18.1	18.1	8.3	8.3	33.8	33.8	99.1	99.1	7.7	7.7	7.7	2.1	2.1	3.8	6.1	5.6	4.9
						1.0	18.1		8.3		33.8		99.1		7.7			2.1			5.0		
					Middle	5.5	17.9	17.9	8.3	8.3	33.8	33.8	98.8	98.8	7.7	7.7		2.5	2.5		4.4	4.9	
						5.5	17.9		8.3		33.8		98.8		7.7			2.5			5.3		
					Bottom	10.0	17.7	17.7	8.3	8.3	33.9	33.9	98.5	98.6	7.7	7.7	7.7	6.8	6.8		4.5	4.3	
						10.0	17.7		8.3		33.9		98.6		7.7			6.8			4.0		
SR6	Fine	Moderate	15:28	14.4	Surface	1.0	17.9	17.9	8.4	8.4	34.0	34.0	100.0	100.0	7.7	7.8	7.7	3.3	3.2	4.0	4.3	4.8	6.0
						1.0	17.9		8.4		34.0		100.0		7.8			3.2			5.3		
					Middle	7.2	17.6	17.6	8.4	8.4	34.0	34.0	99.1	99.1	7.7	7.7		3.1	3.1		6.5	6.7	
						7.2	17.6		8.4		34.0		99.1		7.7			3.1			6.9		
					Bottom	13.4	17.6	17.6	8.3	8.3	34.0	34.0	98.7	98.7	7.7	7.7	7.7	5.4	5.5		5.9	6.4	
						13.4	17.6		8.3		34.0		98.7		7.7			5.6			6.8		
SR7	Fine	Moderate	15:11	16.9	Surface	1.0	17.7	17.7	8.4	8.4	34.0	34.0	99.2	99.2	7.7	7.7	7.7	3.7	3.7	3.3	6.6	6.5	7.2
						1.0	17.7		8.4		34.0		99.2		7.7			3.7			6.4		
					Middle	8.5	17.6	17.6	8.4	8.4	34.0	34.0	98.7	98.7	7.7	7.7		3.7	3.6		7.0	7.2	
						8.5	17.6		8.4		34.0		98.7		7.7			3.6			7.4		
					Bottom	15.9	17.6	17.6	8.3	8.3	34.0	34.0	98.5	98.5	7.7	7.7	7.7	2.7	2.7		7.6	7.8	
						15.9	17.6		8.3		34.0		98.5		7.7			2.7			8.0		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 20 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Fine	Calm	15:49	10.5	Surface	1.0	18.0	18.0	8.3	8.3	33.8	33.8	97.8	97.8	7.6	7.6	7.6	1.7	1.7	2.0	3.5	4.0	3.5
						1.0	18.0		8.3		33.8		97.7		7.6			1.7			4.4		
					Middle	5.3	17.9	17.9	8.3	8.3	33.8	33.8	97.2	97.2	7.5	7.5		2.0	2.0		3.6	3.3	
						5.3	17.9		8.3		33.8		97.2		7.5			2.0			3.0		
					Bottom	9.5	17.8	17.8	8.3	8.3	33.8	33.8	97.7	97.9	7.6	7.6		2.3	2.3		2.7	3.2	
						9.5	17.8		8.3		33.8		98.0		7.6			2.3			3.7		
SR9	Fine	Calm	15:36	10.0	Surface	1.0	18.0	18.0	8.3	8.3	33.8	33.8	98.2	98.2	7.6	7.6	7.6	1.3	1.3	1.6	2.0	2.3	2.6
						1.0	18.0		8.3		33.8		98.2		7.6			1.4			2.6		
					Middle	5.0	18.0	18.0	8.3	8.3	33.8	33.8	98.0	98.0	7.6	7.6		1.4	1.4		2.2	2.2	
						5.0	18.0		8.3		33.8		97.9		7.6			1.4			2.1		
					Bottom	9.0	17.9	17.9	8.3	8.3	33.9	33.9	96.9	96.9	7.5	7.5	7.5	2.0	2.0		3.7	3.5	
						9.0	17.8		8.3		33.9		96.8		7.5			2.0			3.2		
SR10	Fine	Moderate	14:15	7.2	Surface	1.0	18.0	18.0	8.3	8.3	33.7	33.7	98.6	98.6	7.6	7.6	7.6	2.6	2.6	2.9	6.7	6.5	5.7
						1.0	18.0		8.3		33.7		98.5		7.6			2.6			6.3		
					Middle	3.6	17.9	17.9	8.3	8.3	33.7	33.7	98.2	98.2	7.6	7.6		3.0	3.0		5.7	5.8	
						3.6	17.9		8.3		33.7		98.2		7.6			3.0			5.9		
					Bottom	6.2	17.8	17.8	8.3	8.3	33.7	33.7	97.7	97.8	7.6	7.6	7.6	3.1	3.1		5.0	4.9	
						6.2	17.8		8.3		33.7		97.8		7.6			3.2			4.7		
A1	Fine	Calm	14:59	8.6	Surface	1.0	18.2	18.2	8.3	8.3	33.9	33.9	99.9	99.9	7.7	7.7	7.7	4.3	4.4	5.0	-	N/A	N/A
						1.0	18.1		8.3		33.9		99.9		7.7			4.4			-		
					Middle	4.3	17.9	17.9	8.3	8.3	33.9	33.9	99.4	99.4	7.7	7.7		5.8	5.9		-	N/A	
						4.3	17.9		8.3		33.9		99.4		7.7			6.0			-		
					Bottom	7.6	17.6	17.6	8.3	8.3	34.0	34.0	99.1	99.2	7.7	7.7		4.7	4.7		-	N/A	
						7.6	17.6		8.3		34.0		99.2		7.7			4.6			-		
A2	Fine	Calm	14:24	8.8	Surface	1.0	17.9	17.9	8.3	8.3	34.0	34.0	99.1	99.1	7.7	7.7	7.7	5.4	5.4	5.9	-	N/A	N/A
						1.0	17.9		8.3		34.0		99.0		7.7			5.4			-		
					Middle	4.4	17.8	17.8	8.3	8.3	34.0	34.0	98.7	98.7	7.7	7.7		5.4	5.4		-	N/A	
						4.4	17.7		8.3		34.0		98.7		7.7			5.4			-		
					Bottom	7.8	17.6	17.6	8.4	8.4	34.0	34.0	98.4	98.5	7.7	7.7		7.0	7.0		-	N/A	
						7.8	17.6		8.4		34.0		98.5		7.7			7.1			-		
A3	Fine	Moderate	14:32	9.0	Surface	1.0	17.8	17.8	8.4	8.4	34.0	34.0	100.3	100.3	7.8	7.8	7.7	5.3	5.3	4.6	-	N/A	N/A
						1.0	17.8		8.4		34.0		100.3		7.8			5.3			-		
					Middle	4.5	17.7	17.7	8.4	8.4	34.0	34.0	99.6	99.6	7.7	7.7		2.7	2.9		-	N/A	
						4.5	17.7		8.4		34.0		99.5		7.7			3.0			-		
					Bottom	8.0	17.6	17.6	8.3	8.3	34.0	34.0	98.7	98.7	7.7	7.7		5.6	5.6		-	N/A	
						8.0	17.6		8.3		34.0		98.7		7.7			5.7			-		
A4	Fine	Moderate	15:23	16.0	Surface	1.0	17.8	17.8	8.4	8.4	34.0	34.0	100.2	100.1	7.8	7.8	7.7	2.7	2.6	3.0	-	N/A	N/A
						1.0	17.8		8.4		34.0		100.0		7.8			2.6			-		
					Middle	8.0	17.6	17.6	8.4	8.4	34.0	34.0	99.1	99.1	7.7	7.7		2.2	2.2		-	N/A	
						8.0	17.6		8.4		34.0		99.1		7.7			2.2			-		
					Bottom	15.0	17.6	17.6	8.4	8.4	34.0	34.0	99.1	99.2	7.7	7.7		4.3	4.2		-	N/A	
						15.0	17.6		8.4		34.0		99.2		7.7			4.2			-		
A5	Fine	Moderate	15:18	17.3	Surface	1.0	17.8	17.8	8.4	8.4	34.0	34.0	99.8	99.8	7.7	7.7	7.7	3.3	3.3	2.7	-	N/A	N/A
						1.0	17.8		8.4		34.0		99.8		7.7			3.3			-		
					Middle	8.7	17.6	17.6	8.4	8.4	34.0	34.0	99.1	99.1	7.7	7.7		2.6	2.6		-	N/A	
						8.7	17.6		8.4		34.0		99.1		7.7			2.6			-		
					Bottom	16.3	17.6	17.6	8.4	8.4	34.0	34.0	99.5	99.6	7.8	7.8		2.3	2.3		-	N/A	
						16.3	17.6		8.4		34.0		99.7		7.8			2.3			-		

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**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 22 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Cloudy	Moderate	10:34	15.2	Surface	1.0	18.0	18.0	8.0	8.0	33.6	33.6	90.1	90.1	7.0	7.0	7.0	1.9	1.8	3.3	2.9	3.0	3.5
						1.0	18.0		8.0		33.6		90.1		7.0			1.8			3.1		
					Middle	7.6	18.0	18.0	8.0	8.0	33.7	33.7	90.1	90.2	7.0	7.0		2.1	2.2		3.6	3.7	
						7.6	18.0		8.0		33.7		90.2		7.0			2.2			3.8		
					Bottom	14.2	18.0	18.0	8.0	8.0	33.7	33.7	90.3	90.4	7.0	7.0		5.5	5.9		3.8	3.7	
						14.2	18.0		8.0		33.7		90.4		7.0			6.3			3.5		
C2	Cloudy	Moderate	11:57	10.6	Surface	1.0	17.8	17.8	8.2	8.2	33.9	33.9	99.8	99.8	7.7	7.7	7.7	2.7	2.7	3.1	3.0	3.1	2.9
						1.0	17.8		8.2		33.9		99.7		7.7			2.7			3.1		
					Middle	5.3	17.7	17.7	8.2	8.2	33.9	33.9	99.1	99.1	7.7	7.7		3.2	3.2		3.2	3.1	
						5.3	17.7		8.2		33.9		99.1		7.7			3.2			3.0		
					Bottom	9.6	17.8	17.8	8.2	8.2	33.9	33.9	98.6	98.6	7.7	7.7	7.7	3.4	3.3		2.5	2.7	
						9.6	17.8		8.2		33.9		98.5		7.7			3.3			2.8		
C3	Cloudy	Moderate	11:49	22.1	Surface	1.0	17.9	17.9	8.1	8.1	33.9	33.9	99.8	99.8	7.7	7.7	7.7	1.6	1.6	2.4	1.4	1.3	1.6
						1.0	17.9		8.1		33.9		99.8		7.7			1.6			1.2		
					Middle	11.1	17.7	17.7	8.2	8.2	33.9	33.9	98.3	98.3	7.6	7.6		2.8	2.8		1.6	1.7	
						11.1	17.7		8.2		33.9		98.2		7.6			2.9			1.7		
					Bottom	21.1	17.7	17.7	8.2	8.2	33.9	33.9	98.0	98.0	7.6	7.6	7.6	2.7	2.7		1.6	1.8	
						21.1	17.7		8.2		33.9		97.9		7.6			2.7			1.9		
SR1	Cloudy	Moderate	10:45	9.2	Surface	1.0	18.0	18.0	8.1	8.1	33.9	33.9	99.1	99.1	7.7	7.7	7.7	4.3	4.3	5.7	7.0	7.0	5.9
						1.0	18.0		8.1		33.9		99.1		7.7			4.3			7.0		
					Middle	4.6	18.0	18.0	8.1	8.1	33.9	33.9	98.8	98.8	7.6	7.6		5.2	5.3		6.1	6.0	
						4.6	18.0		8.1		33.9		98.8		7.6			5.4			5.8		
					Bottom	8.2	17.9	17.9	8.1	8.1	33.9	33.9	98.6	98.6	7.6	7.6	7.6	7.5	7.5		4.8	4.9	
						8.2	17.9		8.1		33.9		98.6		7.6			7.5			4.9		
SR4	Cloudy	Moderate	11:26	13.8	Surface	1.0	18.0	18.0	8.1	8.1	33.7	33.7	92.3	92.4	7.2	7.2	7.2	2.2	2.2	3.4	2.9	2.8	3.0
						1.0	18.0		8.1		33.7		92.4		7.2			2.3			2.7		
					Middle	6.9	18.0	18.0	8.1	8.1	33.7	33.7	93.3	93.4	7.2	7.2		2.6	2.6		2.7	2.9	
						6.9	18.0		8.1		33.7		93.4		7.2			2.7			3.1		
					Bottom	12.8	17.9	17.9	8.1	8.1	33.8	33.8	94.6	94.6	7.3	7.3	7.3	5.2	5.2		3.2	3.4	
						12.8	17.9		8.1		33.8		94.6		7.3			5.3			3.5		
SR5	Cloudy	Moderate	11:33	11.0	Surface	1.0	18.2	18.2	8.1	8.1	33.9	33.9	98.4	98.4	7.6	7.6	7.6	9.0	8.7	8.4	11.1	11.3	11.9
						1.0	18.2		8.1		33.9		98.3		7.6			8.3			11.5		
					Middle	5.5	18.1	18.1	8.1	8.1	33.9	33.9	97.6	97.6	7.5	7.5		7.8	8.3		11.5	11.6	
						5.5	18.1		8.1		33.9		97.6		7.5			8.7			11.6		
					Bottom	10.0	18.0	18.0	8.1	8.1	33.9	33.9	97.6	97.6	7.5	7.5	7.5	8.4	8.2		12.5	12.7	
						10.0	18.0		8.1		33.9		97.6		7.5			8.1			12.9		
SR6	Cloudy	Moderate	11:19	11.6	Surface	1.0	18.2	18.2	8.1	8.1	33.9	33.9	99.7	99.7	7.7	7.7	7.7	4.7	4.6	5.5	7.1	7.1	7.6
						1.0	18.1		8.1		33.9		99.7		7.7			4.6			7.1		
					Middle	5.8	17.8	17.8	8.1	8.1	33.9	33.9	99.2	99.2	7.7	7.7		3.8	3.8		7.7	7.6	
						5.8	17.8		8.1		33.9		99.2		7.7			3.8			7.5		
					Bottom	10.6	17.7	17.7	8.2	8.2	33.9	33.9	98.9	98.9	7.7	7.7	7.7	8.1	8.1		8.2	8.2	
						10.6	17.7		8.2		33.9		98.9		7.7			8.2			8.2		
SR7	Cloudy	Moderate	11:36	21.9	Surface	1.0	17.8	17.8	8.2	8.2	33.9	33.9	99.5	99.4	7.7	7.7	7.7	2.3	2.3	3.2	3.4	3.5	2.5
						1.0	17.8		8.2		33.9		99.3		7.7			2.3			3.6		
					Middle	11.0	17.7	17.7	8.2	8.2	33.9	33.9	98.8	98.8	7.7	7.7		3.3	3.3		2.2	2.2	
						11.0	17.7		8.2		33.9		98.8		7.7			3.3			2.1		
					Bottom	20.9	17.7	17.7	8.2	8.2	33.9	33.9	99.0	99.1	7.7	7.7	7.7	4.0	3.9		1.6	1.7	
						20.9	17.7		8.2		33.9		99.1		7.7			3.9			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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 22 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Cloudy	Moderate	10:57	10.3	Surface	1.0	18.0	18.0	8.1	8.1	33.7	33.7	93.4	93.5	7.2	7.2	7.3	2.0	2.0	2.3	3.4	3.4	3.2
						1.0	18.0		8.1		33.7		93.5		7.2			2.0			3.3		
					Middle	5.2	18.0	18.0	8.1	8.1	33.8	33.8	94.2	94.3	7.3	7.3		2.0	2.0		3.5	3.3	
						5.2	18.0		8.1		33.8		94.3		7.3			2.1			3.1		
					Bottom	9.3	17.9	17.9	8.1	8.1	33.8	33.8	95.7	95.7	7.4	7.4	7.4	2.9	2.9		2.9	3.0	
						9.3	17.9		8.1		33.8		95.7		7.4			2.9			3.1		
SR9	Cloudy	Moderate	11:07	10.4	Surface	1.0	18.0	18.0	8.1	8.1	33.9	33.9	95.3	95.3	7.4	7.4	7.4	1.1	1.1	1.8	1.1	1.3	1.5
						1.0	18.0		8.1		33.9		95.3		7.4			1.1			1.4		
					Middle	5.2	18.0	18.0	8.1	8.1	33.9	33.9	95.8	95.9	7.4	7.4		1.4	1.4		1.6	1.6	
						5.2	17.9		8.1		33.9		95.9		7.4			1.5			1.6		
					Bottom	9.4	17.9	17.9	8.1	8.1	33.9	33.9	96.2	96.2	7.5	7.5	7.5	2.9	3.0		1.5	1.6	
						9.4	17.9		8.1		33.9		96.2		7.5			3.1			1.7		
SR10	Cloudy	Moderate	12:29	6.8	Surface	1.0	18.0	18.0	8.1	8.1	33.9	33.9	100.4	100.4	7.8	7.8	7.8	2.5	2.5	2.8	2.5	2.4	2.2
						1.0	18.0		8.1		33.9		100.4		7.8			2.5			2.2		
					Middle	3.4	17.8	17.8	8.2	8.2	33.9	33.9	99.5	99.5	7.7	7.7		3.0	3.0		2.4	2.3	
						3.4	17.8		8.2		33.9		99.4		7.7			3.0			2.2		
					Bottom	5.8	17.8	17.8	8.2	8.2	33.9	33.9	99.5	99.5	7.7	7.7	7.7	3.0	2.9		1.9	1.8	
						5.8	17.8		8.2		33.9		99.5		7.7			2.9			1.7		
A1	Cloudy	Moderate	11:39	10.0	Surface	1.0	18.2	18.2	8.1	8.1	34.0	34.0	99.6	99.6	7.7	7.7	7.6	9.7	9.4	8.1	-	N/A	N/A
						1.0	18.2		8.1		34.0		99.5		7.7			9.1			-		
					Middle	5.0	17.8	17.8	8.1	8.1	33.9	33.9	97.7	97.7	7.6	7.6		6.5	6.4		-	N/A	
						5.0	17.8		8.1		33.9		97.7		7.6			6.4			-		
					Bottom	9.0	17.8	17.8	8.1	8.1	33.9	33.9	97.3	97.3	7.5	7.5		8.4	8.4		-	N/A	
						9.0	17.8		8.1		33.9		97.3		7.5			8.5			-		
A2	Cloudy	Moderate	12:20	9.6	Surface	1.0	17.9	17.9	8.1	8.1	33.9	33.9	99.3	99.3	7.7	7.7	7.7	5.7	5.6	5.7	-	N/A	N/A
						1.0	17.9		8.1		33.9		99.3		7.7			5.5			-		
					Middle	4.8	17.8	17.8	8.1	8.1	33.9	33.9	99.0	99.0	7.7	7.7		4.1	4.1		-	N/A	
						4.8	17.8		8.1		33.9		99.0		7.7			4.1			-		
					Bottom	8.6	17.7	17.7	8.2	8.2	33.9	33.9	98.8	98.8	7.7	7.7		7.3	7.4		-	N/A	
						8.6	17.7		8.2		33.9		98.8		7.7			7.4			-		
A3	Cloudy	Moderate	12:12	9.6	Surface	1.0	17.8	17.8	8.1	8.1	33.9	33.9	99.9	99.9	7.7	7.7	7.7	3.2	3.2	5.3	-	N/A	N/A
						1.0	17.8		8.1		33.9		99.9		7.7			3.3			-		
					Middle	4.8	17.7	17.7	8.1	8.1	33.9	33.9	99.2	99.2	7.7	7.7		5.7	5.8		-	N/A	
						4.8	17.7		8.1		33.9		99.2		7.7			5.9			-		
					Bottom	8.6	17.7	17.7	8.1	8.1	33.9	33.9	99.3	99.3	7.7	7.7		6.8	6.8		-	N/A	
						8.6	17.7		8.1		33.9		99.3		7.7			6.8			-		
A4	Cloudy	Moderate	11:26	16.1	Surface	1.0	18.1	18.1	8.1	8.1	33.9	33.9	99.8	99.8	7.7	7.7	7.7	3.8	3.8	6.9	-	N/A	N/A
						1.0	18.0		8.1		33.9		99.8		7.7			3.8			-		
					Middle	8.1	17.7	17.7	8.1	8.1	33.9	33.9	98.7	98.7	7.7	7.7		6.8	6.9		-	N/A	
						8.1	17.7		8.1		33.9		98.7		7.7			7.0			-		
					Bottom	15.1	17.7	17.7	8.1	8.1	33.9	33.9	98.8	98.8	7.7	7.7		9.9	9.9		-	N/A	
						15.1	17.7		8.1		33.9		98.8		7.7			9.9			-		
A5	Cloudy	Moderate	11:31	19.8	Surface	1.0	18.0	18.0	8.1	8.1	33.9	33.9	98.5	98.6	7.6	7.6	7.7	4.5	4.6	3.7	-	N/A	N/A
						1.0	18.0		8.1		33.9		98.6		7.6			4.6			-		
					Middle	9.9	17.7	17.7	8.1	8.1	33.9	33.9	98.9	98.9	7.7	7.7		3.4	3.4		-	N/A	
						9.9	17.7		8.1		33.9		98.9		7.7			3.4			-		
					Bottom	18.8	17.7	17.7	8.1	8.1	33.9	33.9	98.7	98.7	7.7	7.7		3.2	3.3		-	N/A	
						18.8	17.7		8.1		33.9		98.7		7.7			3.3			-		

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**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 22 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Cloudy	Moderate	17:54	15.8	Surface	1.0	18.8	18.8	8.1	8.1	33.5	33.5	93.9	93.9	7.2	7.2	7.2	1.6	1.6	3.4	2.1	2.1	2.0
						1.0	18.8		8.1		33.5		93.9		7.2			1.6			2.0		
					Middle	7.9	18.1	18.1	8.1	8.1	33.6	33.6	92.1	92.2	7.1	7.1		2.2	2.2		2.3	2.2	
						7.9	18.1		8.1		33.6		92.2		7.1			2.2			2.0		
					Bottom	14.8	18.0	18.0	8.1	8.1	33.8	33.8	93.4	93.4	7.2	7.2	7.2	6.4	6.5		1.7	1.8	
						14.8	18.0		8.1		33.8		93.4		7.2			6.6			1.9		
C2	Cloudy	Moderate	16:13	10.6	Surface	1.0	18.5	18.5	8.1	8.1	33.9	33.9	102.2	102.2	7.8	7.8	7.8	1.3	1.3	1.6	2.7	2.9	2.5
						1.0	18.5		8.1		33.9		102.2		7.8			1.3			3.0		
					Middle	5.3	17.8	17.8	8.1	8.1	33.9	33.9	100.1	100.1	7.8	7.8		1.6	1.6		2.5	2.4	
						5.3	17.8		8.1		33.9		100.1		7.8			1.6			2.3		
					Bottom	9.6	17.7	17.7	8.1	8.1	33.9	33.9	99.6	99.7	7.7	7.7	7.7	1.8	1.8		2.1	2.1	
						9.6	17.7		8.1		33.9		99.7		7.7			1.8			2.1		
C3	Cloudy	Moderate	16:10	22.8	Surface	1.0	18.4	18.4	8.1	8.1	33.9	33.9	101.6	101.6	7.8	7.8	7.8	1.4	1.4	1.9	1.8	1.8	2.6
						1.0	18.3		8.1		33.9		101.5		7.8			1.4			1.7		
					Middle	11.4	17.7	17.7	8.1	8.1	33.9	33.9	98.7	98.7	7.7	7.7		2.2	2.2		2.2	2.4	
						11.4	17.7		8.1		33.9		98.6		7.7			2.2			2.5		
					Bottom	21.8	17.7	17.7	8.1	8.1	33.9	33.9	99.0	99.1	7.7	7.7	7.7	2.1	2.0		3.8	3.8	
						21.8	17.7		8.1		33.9		99.1		7.7			2.0			3.7		
SR1	Cloudy	Moderate	17:19	8.0	Surface	1.0	18.7	18.7	8.2	8.2	33.9	33.9	101.3	101.3	7.7	7.7	7.7	3.4	3.4	5.6	4.5	4.4	4.8
						1.0	18.6		8.2		33.9		101.3		7.7			3.5			4.3		
					Middle	4.0	17.9	17.9	8.2	8.2	33.9	33.9	99.0	99.0	7.7	7.7		5.6	5.7		4.9	4.8	
						4.0	17.8		8.2		33.9		98.9		7.7			5.8			4.6		
					Bottom	7.0	17.8	17.8	8.2	8.2	33.9	33.9	98.8	98.8	7.7	7.7	7.7	7.7	7.8		5.3	5.2	
						7.0	17.8		8.2		33.9		98.8		7.7			7.9			5.0		
SR4	Cloudy	Moderate	16:52	13.2	Surface	1.0	18.3	18.3	8.1	8.1	33.8	33.8	96.2	96.2	7.4	7.4	7.4	3.8	3.9	5.8	2.8	3.1	3.0
						1.0	18.3		8.1		33.8		96.2		7.4			3.9			3.4		
					Middle	6.6	18.1	18.1	8.1	8.1	33.8	33.8	96.1	96.1	7.4	7.4		6.2	6.3		3.2	3.1	
						6.6	18.1		8.1		33.8		96.1		7.4			6.5			2.9		
					Bottom	12.2	18.1	18.1	8.1	8.1	33.8	33.8	96.1	96.1	7.4	7.4	7.4	7.2	7.2		2.8	3.0	
						12.2	18.1		8.1		33.8		96.1		7.4			7.2			3.1		
SR5	Cloudy	Moderate	16:41	10.8	Surface	1.0	18.7	18.7	8.1	8.1	33.7	33.7	97.0	97.0	7.4	7.4	7.5	2.3	2.4	6.4	2.8	3.0	3.7
						1.0	18.7		8.1		33.7		97.0		7.4			2.4			3.2		
					Middle	5.4	18.1	18.1	8.1	8.1	33.8	33.8	97.1	97.1	7.5	7.5		6.7	7.0		3.5	3.7	
						5.4	18.1		8.1		33.8		97.1		7.5			7.2			3.9		
					Bottom	9.8	18.0	18.0	8.1	8.1	33.9	33.9	97.0	97.0	7.5	7.5	7.5	9.9	9.7		4.2	4.4	
						9.8	18.0		8.1		33.9		97.0		7.5			9.6			4.5		
SR6	Cloudy	Moderate	16:49	11.6	Surface	1.0	18.2	18.2	8.1	8.1	33.9	33.9	100.8	100.8	7.8	7.8	7.8	3.0	3.0	4.4	5.1	5.2	4.3
						1.0	18.1		8.1		33.9		100.8		7.8			3.0			5.2		
					Middle	5.8	17.8	17.8	8.1	8.1	33.9	33.9	99.5	99.5	7.7	7.7		4.3	4.4		4.1	3.9	
						5.8	17.8		8.1		33.9		99.4		7.7			4.6			3.7		
					Bottom	10.6	17.8	17.8	8.1	8.1	33.9	33.9	99.1	99.1	7.7	7.7	7.7	5.6	5.6		4.0	3.8	
						10.6	17.8		8.1		33.9		99.0		7.7			5.7			3.6		
SR7	Cloudy	Moderate	16:26	21.9	Surface	1.0	17.9	17.9	8.1	8.1	33.9	33.9	99.6	99.6	7.7	7.7	7.7	3.1	3.1	3.1	4.6	4.4	4.5
						1.0	17.9		8.1		33.9		99.6		7.7			3.1			4.2		
					Middle	11.0	17.8	17.8	8.2	8.2	33.9	33.9	99.1	99.1	7.7	7.7		2.9	2.9		4.6	4.7	
						11.0	17.8		8.2		33.9		99.1		7.7			2.9			4.8		
					Bottom	20.9	17.8	17.8	8.2	8.2	33.9	33.9	98.9	98.9	7.7	7.7	7.7	3.5	3.5		4.5	4.5	
						20.9	17.8		8.2		33.9		98.9		7.7			3.4			4.5		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 22 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Cloudy	Moderate	17:28	10.3	Surface	1.0	18.4	18.4	8.1	8.1	33.8	33.8	96.0	96.0	7.4	7.4	7.4	1.6	1.7	3.7	3.9	3.8	3.6
						1.0	18.4		8.1		33.8		95.9		7.4			1.7			3.6		
					Middle	5.2	18.1	18.1	8.1	8.1	33.8	33.8	95.6	95.7	7.4	7.4		3.5	3.6		3.4	3.5	
						5.2	18.1		8.1		33.8		95.7		7.4			3.8			3.6		
					Bottom	9.3	18.0	18.1	8.1	8.1	33.8	33.8	95.7	95.7	7.4	7.4		5.6	5.8		3.7	3.6	
						9.3	18.1		8.1		33.8		95.7		7.4			5.9			3.4		
SR9	Cloudy	Moderate	17:17	10.4	Surface	1.0	18.7	18.7	8.1	8.1	33.8	33.8	99.4	99.4	7.6	7.6	7.6	1.3	1.3	2.4	3.4	3.3	3.5
						1.0	18.7		8.1		33.8		99.3		7.6			1.3			3.2		
					Middle	5.2	18.1	18.1	8.1	8.1	33.8	33.8	98.0	98.0	7.6	7.6		2.2	2.3		3.4	3.5	
						5.2	18.1		8.1		33.9		97.9		7.6			2.4			3.5		
					Bottom	9.4	18.0	18.0	8.1	8.1	33.9	33.9	97.4	97.4	7.5	7.5	7.5	3.5	3.5		3.5	3.6	
						9.4	18.0		8.1		33.9		97.4		7.5			3.4			3.7		
SR10	Cloudy	Moderate	15:41	6.6	Surface	1.0	18.1	18.1	8.1	8.1	33.9	33.9	101.4	101.4	7.8	7.8	7.8	1.4	1.4	1.5	2.4	2.3	2.5
						1.0	18.1		8.1		33.9		101.3		7.8			1.4			2.1		
					Middle	3.3	17.8	17.8	8.1	8.1	33.9	33.9	100.3	100.3	7.8	7.8		1.6	1.6		2.3	2.4	
						3.3	17.8		8.1		33.9		100.3		7.8			1.6			2.5		
					Bottom	5.6	17.8	17.8	8.1	8.1	33.9	33.9	100.1	100.1	7.8	7.8	7.8	1.6	1.6		2.9	2.8	
						5.6	17.8		8.1		33.9		100.1		7.8			1.6			2.6		
A1	Cloudy	Moderate	16:30	8.9	Surface	1.0	19.2	19.2	8.1	8.1	33.8	33.8	99.7	99.8	7.5	7.6	7.6	1.9	1.9	6.1	-	N/A	N/A
						1.0	19.2		8.1		33.8		99.9		7.6			1.9			-		
					Middle	4.5	18.1	18.1	8.2	8.2	33.9	33.9	98.4	98.4	7.6	7.6		6.7	6.8		-	N/A	
						4.5	18.1		8.2		33.9		98.3		7.6			6.9			-		
					Bottom	7.9	17.9	17.9	8.2	8.2	33.9	33.9	97.5	97.5	7.6	7.6		9.7	9.7		-	N/A	
						7.9	17.9		8.2		33.9		97.5		7.6			9.8			-		
A2	Cloudy	Moderate	15:41	9.3	Surface	1.0	18.1	18.1	8.2	8.2	33.9	33.9	99.3	99.3	7.7	7.7	7.7	5.3	5.3	6.9	-	N/A	N/A
						1.0	18.0		8.2		33.9		99.2		7.7			5.3			-		
					Middle	4.7	17.8	17.8	8.2	8.2	33.9	33.9	98.7	98.7	7.7	7.7		5.5	5.4		-	N/A	
						4.7	17.8		8.2		33.9		98.7		7.7			5.4			-		
					Bottom	8.3	17.8	17.8	8.2	8.2	33.9	33.9	98.5	98.5	7.7	7.7		10.1	10.1		-	N/A	
						8.3	17.8		8.2		33.9		98.5		7.6			10.1			-		
A3	Cloudy	Moderate	15:47	11.6	Surface	1.0	18.1	18.1	8.2	8.2	33.9	33.9	100.8	100.8	7.8	7.8	7.7	3.4	3.5	5.2	-	N/A	N/A
						1.0	18.1		8.2		33.9		100.7		7.8			3.5			-		
					Middle	5.8	17.9	17.9	8.2	8.2	33.9	33.9	99.6	99.6	7.7	7.7		3.7	3.7		-	N/A	
						5.8	17.9		8.2		33.9		99.5		7.7			3.7			-		
					Bottom	10.6	17.7	17.7	8.2	8.2	33.9	33.9	98.4	98.4	7.6	7.6		8.3	8.6		-	N/A	
						10.6	17.7		8.2		33.9		98.4		7.6			8.8			-		
A4	Cloudy	Moderate	16:41	16.0	Surface	1.0	18.8	18.8	8.1	8.1	33.5	33.5	101.4	101.4	7.7	7.7	7.7	3.1	3.2	4.5	-	N/A	N/A
						1.0	18.8		8.1		33.5		101.4		7.7			3.2			-		
					Middle	8.0	17.7	17.7	8.1	8.1	33.9	33.9	98.9	98.9	7.7	7.7		4.3	4.4		-	N/A	
						8.0	17.7		8.1		33.9		98.9		7.7			4.4			-		
					Bottom	15.0	17.7	17.7	8.1	8.1	33.9	33.9	98.4	98.4	7.6	7.6		5.9	5.9		-	N/A	
						15.0	17.7		8.1		33.9		98.4		7.6			5.9			-		
A5	Cloudy	Moderate	16:32	21.5	Surface	1.0	18.2	18.2	8.1	8.1	33.9	33.9	100.6	100.5	7.7	7.7	7.7	3.1	3.1	4.0	-	N/A	N/A
						1.0	18.1		8.1		33.9		100.3		7.7			3.1			-		
					Middle	10.8	17.8	17.8	8.1	8.1	33.9	33.9	99.0	99.0	7.7	7.7		4.0	4.0		-	N/A	
						10.8	17.8		8.1		33.9		98.9		7.7			4.0			-		
					Bottom	20.5	17.8	17.8	8.1	8.1	33.9	33.9	98.0	98.0	7.6	7.6		4.9	4.8		-	N/A	
						20.5	17.8		8.1		33.9		97.9		7.6			4.7			-		

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**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 24 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Cloudy	Moderate	13:37	11.0	Surface	1.0	18.5	18.5	8.3	8.3	33.4	33.4	92.2	92.3	7.1	7.1	7.1	1.9	1.9	2.9	3.8	4.2	4.0
						1.0	18.5		8.3		33.4		92.3		7.1			1.9			4.6		
					Middle	5.5	18.4	18.4	8.3	8.3	33.5	33.5	92.3	92.4	7.1	7.1		2.9	2.8		3.5	3.9	
						5.5	18.4		8.3		33.5		92.4		7.1			2.8			4.3		
					Bottom	10.0	18.3	18.3	8.3	8.3	33.5	33.5	92.6	92.6	7.1	7.1	7.1	4.1	4.1		3.9	4.0	
						10.0	18.3		8.3		33.5		92.6		7.1			4.1			4.1		
C2	Cloudy	Rough	12:07	11.0	Surface	1.0	18.9	18.9	8.3	8.3	33.7	33.7	99.7	99.7	7.6	7.6	7.6	3.8	3.8	6.1	9.3	8.9	8.8
						1.0	18.9		8.3		33.7		99.7		7.6			3.8			8.5		
					Middle	5.5	18.3	18.3	8.4	8.4	33.8	33.8	97.8	97.8	7.5	7.5		5.2	5.3		9.0	8.9	
						5.5	18.3		8.4		33.8		97.8		7.5			5.4			8.7		
					Bottom	10.0	18.2	18.2	8.4	8.4	33.8	33.8	97.5	97.5	7.5	7.5	7.5	9.1	9.1		8.4	8.7	
						10.0	18.2		8.4		33.8		97.5		7.5			9.1			8.9		
C3	Cloudy	Rough	12:15	22.9	Surface	1.0	18.6	18.6	8.4	8.4	34.2	34.2	99.9	99.9	7.6	7.6	7.6	4.0	4.0	6.8	8.2	8.6	9.7
						1.0	18.6		8.4		34.2		99.9		7.6			4.0			8.9		
					Middle	11.5	18.4	18.4	8.4	8.4	34.3	34.3	98.7	98.7	7.6	7.6		4.8	4.8		9.6	9.6	
						11.5	18.4		8.4		34.3		98.7		7.5			4.8			9.5		
					Bottom	21.9	18.4	18.4	8.4	8.4	34.3	34.3	98.1	98.1	7.5	7.5	7.5	11.8	11.8		10.9	11.1	
						21.9	18.4		8.4		34.3		98.1		7.5			11.8			11.3		
SR1	Cloudy	Calm	13:29	8.0	Surface	1.0	18.8	18.8	8.4	8.4	34.0	34.0	101.2	101.2	7.7	7.7	7.7	3.4	3.5	4.8	5.3	8.3	6.1
						1.0	18.8		8.4		34.0		101.2		7.7			3.5			11.2		
					Middle	4.0	18.8	18.8	8.4	8.4	34.0	34.0	100.5	100.5	7.7	7.7		3.7	3.7		5.8	6.4	
						4.0	18.8		8.4		34.0		100.5		7.6			3.7			6.9		
					Bottom	7.0	18.4	18.4	8.4	8.4	34.3	34.3	98.0	98.0	7.5	7.5	7.5	7.1	7.3		3.9	3.7	
						7.0	18.4		8.4		34.3		98.0		7.5			7.4			3.5		
SR4	Cloudy	Moderate	12:46	13.7	Surface	1.0	18.7	18.7	8.3	8.3	33.2	33.2	93.6	93.6	7.2	7.2	7.2	1.7	1.8	4.2	3.8	3.4	3.5
						1.0	18.7		8.3		33.2		93.5		7.2			1.8			3.0		
					Middle	6.9	18.5	18.5	8.3	8.3	33.3	33.3	92.8	92.8	7.1	7.1		2.5	2.5		3.3	3.5	
						6.9	18.5		8.3		33.3		92.8		7.1			2.5			3.6		
					Bottom	12.7	18.4	18.4	8.3	8.3	33.5	33.5	94.0	94.1	7.2	7.2	7.2	8.2	8.4		3.7	3.7	
						12.7	18.4		8.3		33.5		94.1		7.2			8.6			3.6		
SR5	Cloudy	Moderate	12:38	9.8	Surface	1.0	18.9	18.9	8.3	8.3	33.2	33.2	93.7	93.7	7.2	7.2	7.2	1.6	1.6	2.8	3.8	3.5	4.2
						1.0	18.9		8.3		33.2		93.7		7.2			1.6			3.2		
					Middle	4.9	18.3	18.3	8.3	8.3	33.4	33.4	93.0	93.1	7.2	7.2		3.2	3.2		4.6	4.6	
						4.9	18.3		8.3		33.5		93.2		7.2			3.3			4.5		
					Bottom	8.8	18.3	18.3	8.3	8.3	33.6	33.6	94.0	94.0	7.2	7.2	7.2	3.7	3.7		4.1	4.5	
						8.8	18.3		8.3		33.6		94.0		7.2			3.7			4.8		
SR6	Cloudy	Moderate	12:55	14.4	Surface	1.0	18.7	18.7	8.4	8.4	34.2	34.2	99.7	99.7	7.6	7.6	7.6	4.9	5.0	7.6	7.0	6.8	7.6
						1.0	18.6		8.4		34.2		99.6		7.6			5.2			6.5		
					Middle	7.2	18.5	18.5	8.4	8.4	34.4	34.4	98.7	98.7	7.5	7.5		8.0	8.0		7.9	7.7	
						7.2	18.5		8.4		34.4		98.6		7.5			8.1			7.5		
					Bottom	13.4	18.5	18.5	8.4	8.4	34.4	34.4	98.5	98.6	7.5	7.5	7.5	9.7	9.7		8.4	8.2	
						13.4	18.5		8.4		34.4		98.6		7.5			9.7			8.0		
SR7	Cloudy	Rough	12:31	21.9	Surface	1.0	18.7	18.7	8.4	8.4	34.3	34.3	100.3	100.3	7.6	7.6	7.6	4.5	4.5	4.4	8.5	8.2	7.2
						1.0	18.7		8.4		34.3		100.3		7.6			4.5			7.9		
					Middle	11.0	18.7	18.7	8.4	8.4	34.3	34.3	99.9	99.9	7.6	7.6		4.3	4.3		7.7	7.3	
						11.0	18.7		8.4		34.3		99.9		7.6			4.3			6.9		
					Bottom	20.9	18.7	18.7	8.4	8.4	34.3	34.3	99.9	99.9	7.6	7.6	7.6	4.3	4.4		6.5	6.0	
						20.9	18.7		8.4		34.3		99.9		7.6			4.4			5.5		

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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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 24 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Cloudy	Moderate	13:19	10.1	Surface	1.0	18.7	18.7	8.3	8.3	33.7	33.7	97.0	97.0	7.4	7.4	7.4	1.8	1.8	3.5	3.8	4.2	4.0
						1.0	18.7		8.3		33.7		97.0		7.4			1.8			4.5		
					Middle	5.1	18.6	18.6	8.3	8.3	33.8	33.8	96.0	96.0	7.4	7.4		1.9	1.9		4.0	4.3	
						5.1	18.6		8.3		33.8		96.0		7.3			1.9			4.6		
					Bottom	9.1	18.3	18.3	8.3	8.3	33.8	33.8	94.8	94.9	7.3	7.3	7.3	6.9	6.7		3.9	3.6	
						9.1	18.3		8.3		33.8		94.9		7.3			6.5			3.3		
SR9	Cloudy	Moderate	13:09	9.9	Surface	1.0	18.5	18.5	8.3	8.3	33.8	33.8	98.2	98.2	7.5	7.5	7.5	2.2	2.2	2.2	4.5	5.0	5.2
						1.0	18.5		8.3		33.8		98.2		7.5			2.2			5.4		
					Middle	5.0	18.5	18.5	8.4	8.4	33.9	33.9	97.9	97.9	7.5	7.5		2.2	2.2		5.7	5.2	
						5.0	18.5		8.4		33.9		97.8		7.5			2.2			4.7		
					Bottom	8.9	18.4	18.5	8.4	8.4	33.9	33.9	97.7	97.8	7.5	7.5	7.5	2.2	2.2		4.9	5.4	
						8.9	18.5		8.4		33.9		97.9		7.5			2.2			5.9		
SR10	Cloudy	Rough	11:39	6.2	Surface	1.0	18.9	18.9	8.3	8.3	33.6	33.6	98.7	98.7	7.5	7.5	7.5	3.6	3.6	3.7	7.9	8.4	8.0
						1.0	18.9		8.3		33.6		98.7		7.5			3.6			8.9		
					Middle	3.1	18.9	18.9	8.3	8.3	33.5	33.5	98.5	98.5	7.5	7.5		3.6	3.6		7.2	7.7	
						3.1	18.9		8.3		33.5		98.5		7.5			3.6			8.1		
					Bottom	5.2	18.8	18.8	8.3	8.3	33.5	33.5	98.2	98.2	7.5	7.5	7.5	3.9	3.9		8.1	8.0	
						5.2	18.8		8.3		33.5		98.2		7.5			3.9			7.8		
A1	Cloudy	Moderate	12:28	7.1	Surface	1.0	18.6	18.6	8.3	8.3	33.4	33.4	94.2	94.3	7.2	7.2	7.3	2.0	2.0	2.8	-	N/A	N/A
						1.0	18.6		8.3		33.4		94.3		7.2			2.0			-		
					Middle	3.6	18.4	18.4	8.3	8.3	33.4	33.4	95.0	95.1	7.3	7.3		2.5	2.5		-	N/A	
						3.6	18.4		8.3		33.5		95.2		7.3			2.6			-		
					Bottom	6.1	18.5	18.5	8.3	8.3	33.8	33.8	97.1	97.1	7.4	7.4		4.0	4.0		-	N/A	
						6.1	18.5		8.3		33.8		97.0		7.4			4.0			-		
A2	Cloudy	Moderate	11:45	9.3	Surface	1.0	18.8	18.8	8.4	8.4	34.0	34.0	100.9	100.9	7.7	7.7	7.6	3.8	3.8	9.0	-	N/A	N/A
						1.0	18.8		8.4		34.0		100.9		7.7			3.8			-		
					Middle	4.7	18.4	18.4	8.4	8.4	34.2	34.2	98.1	98.2	7.5	7.5		8.5	8.6		-	N/A	
						4.7	18.4		8.4		34.2		98.2		7.5			8.6			-		
					Bottom	8.3	18.4	18.4	8.4	8.4	34.3	34.3	98.1	98.2	7.5	7.5		14.6	14.5		-	N/A	
						8.3	18.4		8.4		34.3		98.2		7.5			14.4			-		
A3	Cloudy	Moderate	11:52	10.4	Surface	1.0	19.0	19.0	8.4	8.4	33.9	33.9	100.0	100.0	7.6	7.6	7.5	5.5	5.4	11.0	-	N/A	N/A
						1.0	19.0		8.4		33.9		100.0		7.6			5.4			-		
					Middle	5.2	18.5	18.5	8.4	8.4	34.1	34.1	98.2	98.2	7.5	7.5		14.0	14.0		-	N/A	
						5.2	18.5		8.4		34.1		98.2		7.5			13.9			-		
					Bottom	9.4	18.4	18.4	8.4	8.4	34.2	34.2	97.9	97.9	7.5	7.5		13.5	13.5		-	N/A	
						9.4	18.4		8.4		34.2		97.9		7.5			13.5			-		
A4	Cloudy	Rough	12:48	15.7	Surface	1.0	18.7	18.7	8.4	8.4	34.2	34.2	100.6	100.6	7.7	7.7	7.6	4.2	4.2	5.4	-	N/A	N/A
						1.0	18.7		8.4		34.2		100.6		7.7			4.2			-		
					Middle	7.9	18.7	18.7	8.4	8.4	34.3	34.3	99.8	99.8	7.6	7.6		4.5	4.5		-	N/A	
						7.9	18.7		8.4		34.3		99.7		7.6			4.5			-		
					Bottom	14.7	18.5	18.5	8.4	8.4	34.3	34.3	98.5	98.7	7.5	7.6		7.3	7.4		-	N/A	
						14.7	18.5		8.4		34.3		98.9		7.6			7.4			-		
A5	Cloudy	Rough	12:40	21.2	Surface	1.0	18.7	18.7	8.4	8.4	34.2	34.2	100.5	100.5	7.7	7.7	7.6	4.2	4.2	4.4	-	N/A	N/A
						1.0	18.7		8.4		34.2		100.5		7.7			4.2			-		
					Middle	10.6	18.7	18.7	8.4	8.4	34.3	34.3	99.8	99.8	7.6	7.6		4.1	4.1		-	N/A	
						10.6	18.7		8.4		34.3		99.7		7.6			4.1			-		
					Bottom	20.2	18.6	18.6	8.4	8.4	34.3	34.3	99.4	99.5	7.6	7.6		4.8	4.8		-	N/A	
						20.2	18.6		8.4		34.3		99.5		7.6			4.8			-		

DA: Depth-averaged
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Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 24 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Cloudy	Rough	06:20	10.7	Surface	1.0	18.3	18.3	8.2	8.2	33.1	33.1	90.7	90.7	7.0	7.0	7.0	2.4	2.4	3.2	7.5	7.8	7.3
						1.0	18.3		8.2		33.1		90.7		7.0			2.4			8.0		
					Middle	5.4	18.3	18.3	8.2	8.2	33.2	33.2	90.7	90.7	7.0	7.0		3.1	3.1		7.0	7.2	
						5.4	18.3		8.2		33.2		90.7		7.0			3.2			7.3		
					Bottom	9.7	18.3	18.3	8.2	8.2	33.2	33.2	91.4	91.6	7.1	7.1	7.1	4.2	4.2		6.8	7.0	
						9.7	18.3		8.2		33.2		91.7		7.1			4.2			7.1		
C2	Cloudy	Moderate	07:46	11.2	Surface	1.0	18.4	18.4	8.3	8.3	33.8	33.8	98.1	98.1	7.5	7.5	7.5	6.2	6.4	9.5	10.3	10.1	9.5
						1.0	18.4		8.3		33.8		98.0		7.5			6.6			9.9		
					Middle	5.6	18.3	18.3	8.3	8.3	33.8	33.8	97.6	97.6	7.5	7.5		9.2	9.1		9.7	9.4	
						5.6	18.3		8.3		33.8		97.6		7.5			9.1			9.0		
					Bottom	10.2	18.3	18.3	8.3	8.3	33.8	33.8	97.5	97.5	7.5	7.5	7.5	12.4	12.8		8.9	9.1	
						10.2	18.3		8.3		33.8		97.5		7.5			13.1			9.3		
C3	Cloudy	Rough	07:27	23.1	Surface	1.0	18.5	18.5	8.4	8.4	34.3	34.3	100.2	100.2	7.7	7.7	7.7	2.9	3.0	4.3	7.5	7.5	7.6
						1.0	18.5		8.4		34.3		100.2		7.7			3.0			7.4		
					Middle	11.6	18.5	18.5	8.4	8.4	34.3	34.3	99.6	99.6	7.6	7.6		4.5	4.5		6.8	6.6	
						11.6	18.5		8.4		34.3		99.5		7.6			4.5			6.3		
					Bottom	22.1	18.5	18.5	8.4	8.4	34.4	34.3	99.5	99.5	7.6	7.6	7.6	5.4	5.3		8.2	8.7	
						22.1	18.5		8.4		34.3		99.5		7.6			5.2			9.1		
SR1	Cloudy	Calm	06:21	8.3	Surface	1.0	18.2	18.2	8.4	8.4	34.0	34.0	98.6	98.6	7.6	7.6	7.6	5.5	5.5	6.9	9.9	9.4	9.0
						1.0	18.1		8.4		34.0		98.5		7.6			5.6			8.9		
					Middle	4.2	18.1	18.1	8.4	8.4	33.9	33.9	98.5	98.5	7.6	7.6		6.1	6.1		9.0	8.9	
						4.2	18.1		8.4		33.9		98.5		7.6			6.1			8.7		
					Bottom	7.3	18.0	18.0	8.4	8.4	34.0	34.0	100.6	100.7	7.8	7.8	7.8	9.2	9.1		8.2	8.7	
						7.3	18.0		8.4		34.1		100.7		7.8			9.1			9.2		
SR4	Cloudy	Moderate	07:14	13.6	Surface	1.0	18.2	18.2	8.3	8.3	33.5	33.5	93.3	93.4	7.2	7.2	7.3	2.6	2.7	5.7	6.4	6.2	5.3
						1.0	18.2		8.3		33.6		93.4		7.2			2.8			6.0		
					Middle	6.8	18.2	18.2	8.3	8.3	33.7	33.7	94.8	94.9	7.3	7.3		4.6	4.7		5.6	5.7	
						6.8	18.2		8.3		33.7		95.0		7.3			4.9			5.8		
					Bottom	12.6	18.2	18.2	8.4	8.4	34.0	34.0	96.2	96.2	7.4	7.4	7.4	9.6	9.7		3.4	3.9	
						12.6	18.2		8.4		34.0		96.2		7.4			9.7			4.4		
SR5	Cloudy	Moderate	07:21	9.5	Surface	1.0	18.3	18.3	8.4	8.4	33.9	33.9	97.9	97.9	7.5	7.5	7.5	7.7	7.7	10.4	13.9	13.2	11.0
						1.0	18.3		8.4		33.9		97.9		7.5			7.7			12.4		
					Middle	4.8	18.2	18.2	8.4	8.4	33.9	33.9	97.3	97.3	7.5	7.5		9.9	10.0		10.1	10.9	
						4.8	18.2		8.4		33.9		97.3		7.5			10.0			11.6		
					Bottom	8.5	18.1	18.1	8.4	8.4	33.9	33.9	97.2	97.2	7.5	7.5	7.5	13.5	13.4		9.3	8.9	
						8.5	18.1		8.4		33.9		97.2		7.5			13.4			8.4		
SR6	Cloudy	Moderate	06:49	14.6	Surface	1.0	18.3	18.3	8.4	8.4	34.1	34.1	99.0	99.0	7.6	7.6	7.6	5.8	5.8	8.1	10.9	10.5	9.7
						1.0	18.3		8.4		34.1		99.0		7.6			5.9			10.0		
					Middle	7.3	18.3	18.3	8.4	8.4	34.3	34.3	98.6	98.6	7.6	7.6		8.3	8.3		9.9	9.8	
						7.3	18.3		8.4		34.3		98.6		7.6			8.3			9.6		
					Bottom	13.6	18.4	18.4	8.4	8.4	34.3	34.3	98.6	98.6	7.6	7.6	7.6	10.2	10.2		8.6	8.8	
						13.6	18.4		8.4		34.3		98.6		7.6			10.2			9.0		
SR7	Cloudy	Rough	07:08	21.8	Surface	1.0	18.5	18.5	8.4	8.4	34.3	34.3	100.3	100.3	7.7	7.7	7.7	2.4	2.4	3.0	6.2	6.7	6.5
						1.0	18.5		8.4		34.3		100.3		7.7			2.4			7.1		
					Middle	10.9	18.5	18.5	8.4	8.4	34.4	34.4	99.7	99.7	7.6	7.6		3.2	3.2		7.0	6.8	
						10.9	18.5		8.4		34.4		99.7		7.6			3.3			6.5		
					Bottom	20.8	18.5	18.5	8.4	8.4	34.4	34.4	100.4	100.5	7.7	7.7	7.7	3.5	3.4		6.3	6.0	
						20.8	18.5		8.4		34.4		100.6		7.7			3.4			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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 24 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Cloudy	Calm	06:43	10.3	Surface	1.0	18.2	18.2	8.3	8.3	33.7	33.7	95.1	95.1	7.3	7.3	7.4	2.6	2.6	3.1	5.7	5.7	6.2
						1.0	18.2		8.3		33.7		95.1		7.3			2.6			5.6		
					Middle	5.2	18.2	18.2	8.3	8.3	33.8	33.8	95.3	95.4	7.4	7.4		2.7	2.7		6.6	6.5	
						5.2	18.2		8.3		33.8		95.4		7.4			2.7			6.4		
					Bottom	9.3	18.2	18.2	8.3	8.3	33.8	33.8	96.3	96.4	7.4	7.4	7.4	4.1	4.0		6.9	6.5	
						9.3	18.2		8.3		33.8		96.4		7.4			4.0			6.0		
SR9	Cloudy	Calm	06:56	9.8	Surface	1.0	18.4	18.4	8.3	8.3	33.8	33.8	95.6	95.6	7.3	7.3	7.3	1.4	1.5	1.9	2.8	2.9	3.8
						1.0	18.4		8.3		33.9		95.5		7.3			1.5			3.0		
					Middle	4.9	18.3	18.3	8.3	8.3	33.9	33.9	95.1	95.1	7.3	7.3		1.9	2.0		3.1	3.5	
						4.9	18.3		8.3		33.9		95.0		7.3			2.0			3.9		
					Bottom	8.8	18.2	18.2	8.3	8.3	33.9	33.9	95.3	95.4	7.3	7.3	7.3	2.3	2.4		5.2	5.1	
						8.8	18.2		8.3		33.9		95.4		7.3			2.4			5.0		
SR10	Cloudy	Moderate	08:10	6.3	Surface	1.0	18.8	18.9	8.3	8.3	33.5	33.5	97.3	97.4	7.4	7.4	7.4	3.3	3.3	3.4	8.1	7.8	7.2
						1.0	18.9		8.3		33.5		97.4		7.4			3.3			7.5		
					Middle	3.2	18.9	18.9	8.3	8.3	33.6	33.6	97.7	97.7	7.4	7.4		3.0	3.1		7.2	7.6	
						3.2	18.9		8.3		33.6		97.7		7.4			3.1			8.0		
					Bottom	5.3	19.0	19.0	8.3	8.3	33.6	33.6	97.7	97.7	7.4	7.4	7.4	3.8	3.8		6.0	6.3	
						5.3	19.0		8.3		33.6		97.7		7.4			3.8			6.6		
A1	Cloudy	Moderate	07:29	6.6	Surface	1.0	18.6	18.6	8.3	8.3	33.9	33.9	98.5	98.5	7.5	7.5	7.5	6.7	6.9	24.2	-	N/A	N/A
						1.0	18.6		8.3		33.9		98.4		7.5			7.1			-		
					Middle	3.3	18.3	18.3	8.4	8.4	34.0	34.0	97.3	97.3	7.5	7.5		12.2	12.4		-	N/A	
						3.3	18.3		8.4		34.0		97.2		7.5			12.7			-		
					Bottom	5.6	18.2	18.2	8.4	8.4	34.1	34.1	96.6	96.6	7.4	7.4		55.3	53.3		-	N/A	
						5.6	18.2		8.4		34.1		96.6		7.4			51.3			-		
A2	Cloudy	Moderate	07:56	9.5	Surface	1.0	18.2	18.2	8.4	8.4	33.9	33.9	98.3	98.3	7.6	7.6	7.6	7.5	7.4	10.2	-	N/A	N/A
						1.0	18.2		8.4		33.9		98.3		7.6			7.4			-		
					Middle	4.8	18.3	18.3	8.4	8.4	34.1	34.1	98.5	98.5	7.6	7.6		9.1	9.2		-	N/A	
						4.8	18.3		8.4		34.1		98.5		7.6			9.3			-		
					Bottom	8.5	18.4	18.4	8.4	8.4	34.3	34.3	98.7	98.7	7.6	7.6		14.1	13.9		-	N/A	
						8.5	18.4		8.4		34.3		98.7		7.6			13.7			-		
A3	Cloudy	Moderate	07:48	10.2	Surface	1.0	18.6	18.6	8.4	8.4	34.4	34.4	99.9	99.9	7.6	7.6	7.6	6.0	6.1	8.5	-	N/A	N/A
						1.0	18.6		8.4		34.4		99.9		7.6			6.1			-		
					Middle	5.1	18.5	18.5	8.4	8.4	34.4	34.4	99.6	99.6	7.6	7.6		6.3	6.3		-	N/A	
						5.1	18.5		8.4		34.4		99.6		7.6			6.3			-		
					Bottom	9.2	18.5	18.5	8.4	8.4	34.4	34.4	99.3	99.3	7.6	7.6		13.1	13.1		-	N/A	
						9.2	18.5		8.4		34.4		99.3		7.6			13.0			-		
A4	Cloudy	Moderate	06:55	15.5	Surface	1.0	18.3	18.3	8.4	8.4	34.1	34.1	99.4	99.4	7.6	7.6	7.6	5.3	5.3	6.8	-	N/A	N/A
						1.0	18.3		8.4		34.1		99.4		7.6			5.3			-		
					Middle	7.8	18.4	18.4	8.4	8.4	34.3	34.3	99.3	99.3	7.6	7.6		6.1	6.2		-	N/A	
						7.8	18.4		8.4		34.3		99.3		7.6			6.3			-		
					Bottom	14.5	18.5	18.5	8.4	8.4	34.4	34.4	99.2	99.3	7.6	7.6		8.9	8.9		-	N/A	
						14.5	18.5		8.4		34.4		99.3		7.6			8.8			-		
A5	Cloudy	Rough	07:02	21.0	Surface	1.0	18.3	18.3	8.4	8.4	34.2	34.2	99.2	99.2	7.6	7.6	7.6	5.8	5.8	6.5	-	N/A	N/A
						1.0	18.3		8.4		34.2		99.1		7.6			5.9			-		
					Middle	10.5	18.5	18.5	8.4	8.4	34.4	34.4	99.1	99.1	7.6	7.6		6.7	6.7		-	N/A	
						10.5	18.5		8.4		34.4		99.1		7.6			6.8			-		
					Bottom	20.0	18.5	18.5	8.4	8.4	34.4	34.4	99.7	99.8	7.6	7.6		6.8	6.8		-	N/A	
						20.0	18.5		8.4		34.4		99.8		7.6			6.8			-		

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**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 26 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Sunny	Moderate	14:44	11.1	Surface	1.0	19.8	19.8	8.1	8.1	32.0	32.0	95.0	94.8	7.2	7.2	7.1	0.7	0.7	1.0	2.0	2.0	2.5
						1.0	19.8		8.1		32.0		94.6		7.2			0.7			2.0		
					Middle	5.6	19.0	19.0	8.2	8.2	32.7	32.7	91.7	91.9	7.0	7.0		1.0	1.1		2.4	2.3	
						5.6	19.0		8.2		32.7		92.0		7.0			1.1			2.2		
					Bottom	10.1	18.9	18.9	8.2	8.2	32.9	32.9	93.6	93.7	7.2	7.2	7.2	1.3	1.3		2.9	3.1	
						10.1	18.9		8.2		32.9		93.7		7.2			1.3			3.2		
C2	Sunny	Moderate	13:11	10.9	Surface	1.0	20.7	20.7	8.1	8.1	33.2	33.2	100.3	100.2	7.4	7.4	7.3	1.5	1.6	4.1	2.3	2.4	2.6
						1.0	20.7		8.1		33.2		100.1		7.4			1.6			2.4		
					Middle	5.5	18.8	18.7	8.2	8.2	34.0	34.0	93.6	93.6	7.1	7.1		5.0	5.1		2.1	2.3	
						5.5	18.7		8.2		34.0		93.5		7.1			5.1			2.4		
					Bottom	9.9	18.7	18.7	8.3	8.3	34.0	34.0	94.3	94.6	7.2	7.2	7.2	5.7	5.7		3.1	3.3	
						9.9	18.7		8.3		34.0		94.9		7.2			5.6			3.5		
C3	Sunny	Moderate	12:58	21.8	Surface	1.0	20.0	20.0	8.2	8.2	33.8	33.8	103.3	103.3	7.7	7.7	7.5	1.5	1.5	2.5	2.4	2.5	3.0
						1.0	20.0		8.2		33.9		103.3		7.7			1.5			2.6		
					Middle	10.9	18.8	18.8	8.3	8.3	34.2	34.2	96.6	96.5	7.3	7.3		2.7	2.8		3.0	2.9	
						10.9	18.8		8.3		34.2		96.3		7.3			2.8			2.7		
					Bottom	20.8	18.8	18.8	8.3	8.3	34.2	34.2	96.7	96.8	7.4	7.4	7.4	3.4	3.4		3.4	3.6	
						20.8	18.8		8.3		34.2		96.9		7.4			3.3			3.7		
SR1	Sunny	Moderate	13:58	8.1	Surface	1.0	20.3	20.3	8.1	8.1	33.8	33.8	102.0	101.8	7.6	7.6	7.5	2.7	2.8	3.6	5.0	5.0	4.4
						1.0	20.3		8.2		33.7		101.5		7.5			2.9			5.0		
					Middle	4.1	18.9	18.9	8.2	8.2	34.0	34.0	99.2	99.1	7.5	7.5		3.6	3.7		4.3	4.2	
						4.1	18.9		8.2		34.0		99.0		7.5			3.8			4.1		
					Bottom	7.1	18.8	18.8	8.2	8.2	34.0	34.0	98.5	98.5	7.5	7.5	7.5	4.3	4.4		3.8	4.0	
						7.1	18.8		8.2		34.0		98.4		7.5			4.4			4.1		
SR4	Sunny	Moderate	13:45	13.5	Surface	1.0	20.1	20.1	8.0	8.0	32.2	32.2	96.8	96.9	7.3	7.3	7.3	0.6	0.7	2.4	1.7	1.8	2.4
						1.0	20.1		8.0		32.2		96.9		7.3			0.7			1.9		
					Middle	6.8	19.0	19.0	8.1	8.1	32.9	32.9	94.6	94.9	7.2	7.3		2.0	2.1		2.7	2.6	
						6.8	19.0		8.1		32.9		95.1		7.3			2.2			2.4		
					Bottom	12.5	19.0	19.0	8.1	8.1	33.5	33.5	94.9	95.0	7.2	7.2	7.2	4.5	4.4		2.8	3.0	
						12.5	19.0		8.1		33.5		95.0		7.2			4.3			3.1		
SR5	Sunny	Moderate	13:38	9.7	Surface	1.0	20.4	20.4	8.1	8.1	32.3	32.3	98.2	98.3	7.3	7.3	7.4	1.1	1.2	2.1	2.7	2.9	3.3
						1.0	20.4		8.1		32.3		98.3		7.3			1.2			3.1		
					Middle	4.9	19.0	19.0	8.2	8.2	33.2	33.2	97.5	97.6	7.4	7.4		2.3	2.4		3.4	3.3	
						4.9	19.0		8.2		33.2		97.7		7.4			2.4			3.2		
					Bottom	8.7	19.2	19.2	8.2	8.2	33.5	33.5	97.2	97.2	7.4	7.4	7.4	2.9	2.9		3.6	3.8	
						8.7	19.2		8.2		33.5		97.1		7.4			2.9			4.0		
SR6	Sunny	Moderate	13:28	14.2	Surface	1.0	19.8	19.7	8.0	8.0	33.9	33.9	100.1	100.0	7.5	7.5	7.4	2.7	2.8	5.1	5.0	5.1	5.4
						1.0	19.6		8.0		34.0		99.9		7.5			2.8			5.2		
					Middle	7.1	18.8	18.8	8.1	8.1	34.1	34.1	96.1	96.1	7.3	7.3		4.4	4.4		4.9	5.2	
						7.1	18.8		8.1		34.1		96.0		7.3			4.4			5.4		
					Bottom	13.2	18.8	18.8	8.1	8.1	34.1	34.1	96.7	96.7	7.4	7.4	7.4	8.1	8.1		5.8	6.0	
						13.2	18.8		8.1		34.1		96.7		7.4			8.1			6.2		
SR7	Sunny	Moderate	13:11	22.0	Surface	1.0	19.2	19.2	8.1	8.1	34.0	34.0	100.6	100.5	7.6	7.6	7.5	2.8	2.8	3.8	2.8	2.7	3.7
						1.0	19.2		8.1		34.0		100.4		7.6			2.8			2.5		
					Middle	11.0	18.8	18.8	8.1	8.1	34.1	34.1	97.9	97.9	7.4	7.4		3.8	3.8		3.7	3.9	
						11.0	18.8		8.1		34.1		97.9		7.4			3.8			4.1		
					Bottom	21.0	18.8	18.8	8.1	8.1	34.1	34.1	97.3	97.3	7.4	7.4	7.4	4.8	4.9		4.5	4.6	
						21.0	18.8		8.1		34.1		97.3		7.4			4.9			4.6		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 26 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Sunny	Moderate	14:16	10.2	Surface	1.0	20.2	20.1	8.2	8.2	33.2	33.2	98.3	98.4	7.3	7.3	7.3	1.2	1.3	3.4	2.3	2.4	2.5
						1.0	20.1		8.2		33.2		98.4		7.3			1.3			2.5		
					Middle	5.1	19.0	19.0	8.2	8.2	33.4	33.4	95.2	95.2	7.3	7.3		3.2	3.4		2.4	2.5	
						5.1	19.0		8.2		33.4		95.1		7.2			3.6			2.6		
					Bottom	9.2	18.8	18.8	8.2	8.2	33.6	33.6	94.8	94.8	7.2	7.2	7.2	5.6	5.6		2.4	2.6	
						9.2	18.8		8.2		33.6		94.8		7.2			5.5			2.7		
SR9	Sunny	Moderate	14:05	9.8	Surface	1.0	19.5	19.5	8.2	8.2	33.0	33.0	98.2	98.2	7.4	7.4	7.3	1.4	1.6	2.5	2.3	2.4	3.1
						1.0	19.4		8.2		33.1		98.2		7.4			1.7			2.5		
					Middle	4.9	19.1	19.0	8.2	8.2	33.5	33.5	94.5	94.6	7.2	7.2		2.9	3.0		3.0	3.2	
						4.9	19.0		8.2		33.5		94.6		7.2			3.0			3.3		
					Bottom	8.8	19.0	19.0	8.2	8.2	33.5	33.5	94.8	95.0	7.2	7.2	7.2	3.1	3.1		3.6	3.7	
						8.8	19.0		8.2		33.5		95.2		7.2			3.0			3.7		
SR10	Sunny	Moderate	12:47	6.5	Surface	1.0	20.0	19.9	8.2	8.2	33.1	33.2	97.7	97.5	7.3	7.3	7.2	2.3	2.4	3.3	7.5	7.4	6.0
						1.0	19.9		8.2		33.2		97.2		7.3			2.5			7.3		
					Middle	3.3	19.2	19.2	8.3	8.3	33.1	33.1	93.2	93.2	7.1	7.1		3.5	3.6		5.5	5.7	
						3.3	19.2		8.3		33.1		93.1		7.1			3.7			5.8		
					Bottom	5.5	19.2	19.2	8.3	8.3	33.1	33.1	94.6	94.4	7.2	7.2	7.2	4.1	4.0		4.7	4.9	
						5.5	19.2		8.3		33.1		94.2		7.2			3.9			5.0		
A1	Sunny	Moderate	13:29	7.0	Surface	1.0	19.8	19.8	8.0	8.0	32.8	32.8	99.6	99.8	7.5	7.5	7.5	2.5	2.6	3.7	-	N/A	N/A
						1.0	19.8		8.0		32.9		99.9		7.5			2.7			-		
					Middle	3.5	19.7	19.7	8.0	8.0	33.7	33.7	100.0	100.0	7.5	7.5		3.8	3.9		-	N/A	
						3.5	19.6		8.0		33.7		99.9		7.5			4.0			-		
					Bottom	6.0	19.3	19.3	7.9	7.9	33.7	33.7	98.4	98.4	7.4	7.4		4.7	4.7		-	N/A	
						6.0	19.4		7.9		33.7		98.4		7.4			4.7			-		
A2	Sunny	Moderate	12:28	9.2	Surface	1.0	19.7	19.7	8.1	8.1	33.9	33.9	100.5	100.6	7.5	7.5	7.4	7.7	7.8	7.9	-	N/A	N/A
						1.0	19.7		8.1		33.9		100.6		7.5			7.9			-		
					Middle	4.6	18.9	18.9	8.1	8.1	34.0	34.0	97.6	97.6	7.4	7.4		6.6	6.4		-	N/A	
						4.6	18.9		8.1		34.0		97.5		7.4			6.2			-		
					Bottom	8.2	18.9	18.9	8.2	8.2	34.0	34.0	97.9	97.9	7.4	7.4		9.5	9.6		-	N/A	
						8.2	18.9		8.2		34.0		97.8		7.4			9.6			-		
A3	Sunny	Moderate	12:37	10.5	Surface	1.0	19.8	19.8	8.1	8.1	33.9	34.0	102.5	102.2	7.7	7.7	7.5	5.1	5.6	6.3	-	N/A	N/A
						1.0	19.7		8.1		34.0		101.8		7.6			6.0			-		
					Middle	5.3	19.0	18.9	8.1	8.1	34.0	34.0	98.0	98.0	7.4	7.4		7.9	7.7		-	N/A	
						5.3	18.9		8.1		34.0		98.0		7.4			7.4			-		
					Bottom	9.5	18.8	18.8	8.1	8.1	34.1	34.0	97.4	97.6	7.4	7.4		5.5	5.7		-	N/A	
						9.5	18.8		8.1		34.0		97.7		7.4			5.8			-		
A4	Sunny	Moderate	13:24	15.4	Surface	1.0	20.0	20.0	8.1	8.1	33.8	33.8	101.9	101.9	7.6	7.6	7.4	3.1	3.1	4.5	-	N/A	N/A
						1.0	20.0		8.1		33.8		101.8		7.6			3.1			-		
					Middle	7.7	18.9	18.9	8.1	8.1	34.1	34.1	96.7	96.7	7.3	7.3		4.2	4.3		-	N/A	
						7.7	18.9		8.1		34.1		96.7		7.3			4.3			-		
					Bottom	14.4	18.8	18.8	8.1	8.1	34.1	34.1	97.6	97.5	7.4	7.4		6.1	6.2		-	N/A	
						14.4	18.8		8.1		34.1		97.4		7.4			6.3			-		
A5	Sunny	Moderate	13:18	21.1	Surface	1.0	20.0	20.0	8.0	8.0	33.8	33.8	103.0	102.9	7.7	7.7	7.6	2.5	2.5	3.6	-	N/A	N/A
						1.0	19.9		8.0		33.8		102.7		7.7			2.5			-		
					Middle	10.6	18.9	18.9	8.1	8.1	34.1	34.1	98.3	98.3	7.5	7.5		3.0	3.1		-	N/A	
						10.6	18.9		8.1		34.1		98.3		7.5			3.2			-		
					Bottom	20.1	18.8	18.8	8.1	8.1	34.1	34.1	98.3	98.4	7.5	7.5		5.1	5.1		-	N/A	
						20.1	18.8		8.1		34.1		98.4		7.5			5.0			-		

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**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 26 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Cloudy	Rough	06:51	10.8	Surface	1.0	18.9	18.9	8.1	8.1	32.0	32.0	91.3	91.3	7.0	7.0	6.9	1.3	1.4	1.8	4.0	4.1	4.2
						1.0	18.9		8.1		32.0		91.2		7.0			1.4			4.2		
					Middle	5.4	18.7	18.7	8.1	8.1	32.6	32.6	89.1	89.1	6.8	6.9		2.0	2.0		4.6	4.5	
						5.4	18.7		8.1		32.6		89.1		6.9			2.0			4.3		
					Bottom	9.8	18.7	18.7	8.1	8.1	33.1	33.1	89.9	90.0	6.9	6.9	6.9	2.0	2.0		4.1	3.9	
						9.8	18.7		8.1		33.1		90.0		6.9			2.0			3.7		
C2	Sunny	Moderate	08:17	11.3	Surface	1.0	19.0	19.0	8.3	8.3	33.3	33.3	99.7	99.7	7.6	7.6	7.5	1.8	1.8	3.2	3.9	3.8	3.2
						1.0	19.0		8.3		33.3		99.7		7.6			1.8			3.7		
					Middle	5.7	18.8	18.8	8.3	8.3	33.9	33.9	96.4	96.4	7.3	7.3		2.9	3.0		3.2	3.0	
						5.7	18.8		8.3		33.9		96.3		7.3			3.0			2.8		
					Bottom	10.3	18.8	18.8	8.3	8.3	34.1	34.1	96.9	97.0	7.4	7.4	7.4	4.8	4.8		2.6	2.7	
						10.3	18.8		8.3		34.1		97.1		7.4			4.8			2.8		
C3	Sunny	Rough	07:47	23.0	Surface	1.0	19.2	19.2	8.2	8.2	34.0	34.0	103.7	103.6	7.8	7.8	7.7	0.6	0.6	1.8	3.0	3.2	2.9
						1.0	19.2		8.2		34.0		103.5		7.8			0.6			3.3		
					Middle	11.5	19.1	19.1	8.2	8.2	34.3	34.3	100.4	100.1	7.6	7.6		1.0	1.1		2.9	2.8	
						11.5	19.1		8.2		34.3		99.8		7.5			1.1			2.7		
					Bottom	22.0	18.9	18.9	8.2	8.2	34.3	34.3	98.9	99.0	7.5	7.5	7.5	3.7	3.7		2.6	2.6	
						22.0	18.9		8.2		34.3		99.0		7.5			3.7			2.6		
SR1	Sunny	Calm	06:43	8.4	Surface	1.0	19.1	19.1	8.2	8.2	33.8	33.8	99.9	99.8	7.6	7.6	7.6	2.8	2.8	3.4	2.5	2.7	3.8
						1.0	19.1		8.2		33.8		99.7		7.6			2.8			2.8		
					Middle	4.2	19.0	19.0	8.2	8.2	33.8	33.8	98.9	99.0	7.5	7.5		3.1	3.2		3.2	3.3	
						4.2	19.0		8.2		33.8		99.0		7.5			3.2			3.4		
					Bottom	7.4	18.9	18.9	8.2	8.2	33.9	33.9	97.6	97.6	7.4	7.4	7.4	4.3	4.2		5.1	5.3	
						7.4	18.9		8.2		33.9		97.5		7.4			4.0			5.5		
SR4	Sunny	Moderate	07:44	13.5	Surface	1.0	18.9	18.9	8.1	8.1	32.8	32.8	93.4	93.5	7.2	7.2	7.2	1.7	1.8	4.0	4.7	4.8	4.9
						1.0	18.9		8.1		32.8		93.5		7.2			1.8			4.9		
					Middle	6.8	18.8	18.8	8.2	8.2	33.2	33.2	94.4	94.5	7.2	7.2		4.5	4.7		4.9	4.9	
						6.8	18.8		8.2		33.2		94.5		7.2			4.8			4.8		
					Bottom	12.5	18.7	18.7	8.2	8.2	33.6	33.6	94.6	94.6	7.2	7.2	7.2	5.6	5.6		5.0	5.2	
						12.5	18.7		8.2		33.6		94.6		7.2			5.5			5.3		
SR5	Sunny	Moderate	07:53	9.6	Surface	1.0	19.0	19.0	8.1	8.1	32.9	32.9	95.0	95.0	7.3	7.3	7.3	2.3	2.4	6.0	2.7	2.8	3.8
						1.0	19.0		8.1		32.9		95.0		7.3			2.4			2.9		
					Middle	4.8	18.9	18.9	8.1	8.1	33.1	33.1	94.0	94.1	7.2	7.2		4.6	4.9		4.3	4.3	
						4.8	18.9		8.1		33.1		94.2		7.2			5.1			4.2		
					Bottom	8.6	18.9	18.9	8.1	8.1	33.8	33.8	95.2	95.3	7.3	7.3	7.3	10.8	10.8		4.2	4.3	
						8.6	18.9		8.1		33.8		95.3		7.3			10.7			4.4		
SR6	Sunny	Moderate	07:15	13.4	Surface	1.0	19.1	19.1	8.2	8.2	33.7	33.7	99.3	99.3	7.5	7.5	7.5	4.5	4.6	7.5	4.1	4.3	4.8
						1.0	19.1		8.2		33.7		99.2		7.5			4.7			4.4		
					Middle	6.7	18.8	18.8	8.2	8.2	34.1	34.1	97.9	97.9	7.5	7.5		8.5	8.6		5.2	5.0	
						6.7	18.8		8.2		34.1		97.9		7.5			8.6			4.8		
					Bottom	12.4	18.7	18.7	8.2	8.2	34.1	34.1	97.7	97.8	7.4	7.5	7.5	9.6	9.3		5.0	5.2	
						12.4	18.7		8.2		34.1		97.8		7.5			9.0			5.3		
SR7	Sunny	Rough	07:34	21.9	Surface	1.0	19.7	19.7	8.2	8.2	34.1	34.1	100.9	100.9	7.6	7.6	7.6	2.3	2.3	2.6	4.1	4.3	4.8
						1.0	19.7		8.2		34.1		100.9		7.6			2.3			4.5		
					Middle	11.0	18.8	18.8	8.2	8.2	34.1	34.1	98.1	98.1	7.5	7.5		2.4	2.4		4.2	4.4	
						11.0	18.8		8.2		34.1		98.1		7.5			2.4			4.5		
					Bottom	20.9	18.8	18.8	8.2	8.2	34.2	34.2	97.4	97.5	7.4	7.4	7.4	3.1	3.0		5.7	5.6	
						20.9	18.8		8.2		34.2		97.5		7.4			2.8			5.5		

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**

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 26 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Sunny	Calm	07:09	10.2	Surface	1.0	18.8	18.8	8.2	8.2	32.9	32.9	93.9	93.9	7.2	7.2	7.2	1.0	1.1	1.5	2.4	2.4	3.1
						1.0	18.8		8.2		32.9		93.9		7.2			1.1			2.3		
					Middle	5.1	18.8	18.8	8.2	8.2	33.1	33.1	93.8	93.8	7.2	7.2		1.3	1.4		3.0	2.9	
						5.1	18.8		8.2		33.1		93.7		7.2			1.4			2.7		
					Bottom	9.2	18.8	18.8	8.2	8.2	33.2	33.2	93.5	93.6	7.2	7.2	7.2	2.2	2.2		4.1	4.2	
						9.2	18.8		8.2		33.2		93.7		7.2			2.2			4.3		
SR9	Sunny	Calm	07:22	9.7	Surface	1.0	18.9	18.9	8.1	8.1	33.3	33.3	93.9	93.9	7.2	7.2	7.2	0.6	0.7	0.8	3.4	3.6	4.3
						1.0	18.9		8.1		33.3		93.9		7.2			0.7			3.7		
					Middle	4.9	18.9	18.9	8.1	8.1	33.4	33.4	93.8	93.8	7.1	7.2		0.7	0.7		4.2	4.1	
						4.9	18.9		8.1		33.4		93.8		7.2			0.7			3.9		
					Bottom	8.7	18.6	18.6	8.1	8.1	33.7	33.7	93.9	93.9	7.2	7.2	7.2	1.1	1.1		5.4	5.3	
						8.7	18.6		8.1		33.7		93.9		7.2			1.1			5.1		
SR10	Sunny	Moderate	08:42	6.2	Surface	1.0	19.6	19.6	8.2	8.2	33.1	33.1	98.1	98.1	7.4	7.4	7.4	3.1	3.2	3.5	4.1	4.4	6.1
						1.0	19.6		8.2		33.1		98.1		7.4			3.2			4.7		
					Middle	3.1	19.6	19.6	8.2	8.2	33.1	33.1	96.3	96.3	7.3	7.3		3.6	3.6		6.2	6.1	
						3.1	19.6		8.2		33.1		96.2		7.3			3.6			5.9		
					Bottom	5.2	19.5	19.5	8.2	8.2	33.1	33.1	96.9	96.9	7.3	7.3	7.3	3.6	3.7		7.9	7.8	
						5.2	19.5		8.2		33.1		96.9		7.3			3.7			7.7		
A1	Sunny	Moderate	07:59	6.5	Surface	1.0	19.2	19.2	8.1	8.1	32.9	32.9	96.4	96.5	7.3	7.4	7.3	3.9	4.1	9.1	-	N/A	N/A
						1.0	19.2		8.1		32.9		96.6		7.4			4.3			-		
					Middle	3.3	19.4	19.4	8.1	8.1	33.7	33.7	96.8	96.9	7.3	7.3		10.5	10.6		-	N/A	
						3.3	19.4		8.1		33.7		96.9		7.3			10.7			-		
					Bottom	5.5	19.2	19.2	8.1	8.1	33.8	33.8	96.4	96.6	7.3	7.3		12.6	12.6		-	N/A	
						5.5	19.2		8.1		33.8		96.7		7.3			12.6			-		
A2	Sunny	Moderate	08:24	9.4	Surface	1.0	19.4	19.4	8.2	8.2	33.7	33.7	97.2	97.2	7.3	7.3	7.3	3.8	3.9	5.9	-	N/A	N/A
						1.0	19.3		8.2		33.7		97.2		7.3			4.0			-		
					Middle	4.7	18.9	18.9	8.2	8.2	33.9	33.9	95.6	95.6	7.3	7.3		6.2	6.3		-	N/A	
						4.7	18.9		8.2		33.9		95.5		7.3			6.3			-		
					Bottom	8.4	18.7	18.7	8.2	8.1	33.9	33.9	96.7	96.7	7.4	7.4		7.7	7.6		-	N/A	
						8.4	18.7		8.1		33.9		96.6		7.4			7.4			-		
A3	Sunny	Moderate	08:13	10.1	Surface	1.0	19.5	19.5	8.2	8.2	33.7	33.7	99.9	100.1	7.5	7.5	7.5	2.9	2.9	5.5	-	N/A	N/A
						1.0	19.6		8.2		33.7		100.2		7.5			2.9			-		
					Middle	5.1	18.8	18.8	8.2	8.2	34.1	34.1	97.8	97.8	7.4	7.4		6.0	6.1		-	N/A	
						5.1	18.8		8.2		34.1		97.7		7.4			6.2			-		
					Bottom	9.1	18.8	18.8	8.2	8.2	34.1	34.1	98.2	98.3	7.5	7.5		7.4	7.4		-	N/A	
						9.1	18.8		8.2		34.1		98.3		7.5			7.4			-		
A4	Sunny	Moderate	07:20	15.6	Surface	1.0	19.3	19.3	8.1	8.1	33.9	33.9	100.1	100.0	7.5	7.5	7.5	4.4	4.6	7.1	-	N/A	N/A
						1.0	19.3		8.2		33.9		99.9		7.5			4.8			-		
					Middle	7.8	18.8	18.8	8.2	8.2	34.1	34.0	98.0	98.0	7.5	7.5		6.9	7.1		-	N/A	
						7.8	18.8		8.2		34.0		97.9		7.5			7.3			-		
					Bottom	14.6	18.8	18.8	8.2	8.2	34.1	34.1	97.6	97.7	7.4	7.4		9.6	9.7		-	N/A	
						14.6	18.8		8.2		34.1		97.7		7.4			9.8			-		
A5	Sunny	Moderate	07:27	21.1	Surface	1.0	18.8	18.8	8.2	8.2	33.9	33.9	98.9	98.9	7.5	7.5	7.4	4.2	4.2	6.2	-	N/A	N/A
						1.0	18.8		8.2		33.9		98.9		7.5			4.2			-		
					Middle	10.6	18.8	18.8	8.2	8.2	34.1	34.1	97.7	97.8	7.4	7.4		7.0	7.0		-	N/A	
						10.6	18.8		8.2		34.1		97.8		7.4			7.0			-		
					Bottom	20.1	18.8	18.8	8.2	8.2	34.2	34.2	97.1	97.1	7.4	7.4		7.4	7.5		-	N/A	
						20.1	18.8		8.2		34.2		97.1		7.4			7.6			-		

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**; Value exceeding Alert Level is double underlined

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 28 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Fine	Moderate	15:48	11.0	Surface	1.0	19.4	19.4	8.3	8.3	33.3	33.3	93.1	93.1	7.0	7.0	7.1	2.6	2.6	3.8	3.4	3.5	4.4
						1.0	19.4		8.3		33.3		93.0		7.0			2.6			3.6		
					Middle	5.5	19.1	19.1	8.3	8.3	33.4	33.4	93.6	93.8	7.1	7.1		2.7	2.7		4.6	4.4	
						5.5	19.1		8.3		33.4		93.9		7.1			2.8			4.2		
					Bottom	10.0	18.9	18.9	8.4	8.4	34.2	34.2	95.4	95.4	7.2	7.2	7.2	6.0	6.0		5.2	5.3	
						10.0	18.9		8.4		34.2		95.4		7.2			6.0			5.4		
C2	Fine	Rough	14:15	11.2	Surface	1.0	19.0	19.0	8.4	8.4	34.5	34.5	101.2	101.1	7.7	7.7	7.6	2.4	2.4	3.0	5.8	5.6	4.9
						1.0	19.0		8.4		34.5		101.0		7.6			2.4			5.4		
					Middle	5.6	18.9	18.9	8.4	8.4	34.5	34.5	100.4	100.4	7.6	7.6		2.9	2.9		4.4	4.7	
						5.6	18.9		8.4		34.5		100.3		7.6			3.0			4.9		
					Bottom	10.2	18.9	18.9	8.4	8.4	34.5	34.5	99.7	99.7	7.6	7.6	7.6	3.6	3.6		4.4	4.6	
						10.2	18.9		8.4		34.5		99.6		7.6			3.6			4.7		
C3	Fine	Rough	14:08	22.4	Surface	1.0	19.0	19.0	8.4	8.4	34.5	34.5	101.0	101.0	7.6	7.6	7.6	2.7	2.7	2.9	4.1	4.0	5.7
						1.0	19.0		8.4		34.5		100.9		7.6			2.7			3.9		
					Middle	11.2	18.9	18.9	8.4	8.4	34.5	34.5	99.7	99.7	7.6	7.6		2.9	2.9		5.9	5.7	
						11.2	18.9		8.4		34.5		99.7		7.6			2.9			5.4		
					Bottom	21.4	18.9	18.9	8.4	8.4	34.5	34.5	99.0	98.9	7.5	7.5	7.5	3.3	3.3		7.4	7.3	
						21.4	18.9		8.4		34.5		98.8		7.5			3.3			7.2		
SR1	Fine	Calm	15:12	8.2	Surface	1.0	19.3	19.3	8.4	8.4	34.4	34.4	100.3	100.3	7.5	7.5	7.5	4.1	4.1	4.8	4.2	4.1	6.3
						1.0	19.2		8.4		34.5		100.2		7.5			4.1			3.9		
					Middle	4.1	19.0	19.0	8.4	8.4	34.5	34.5	99.1	99.1	7.5	7.5		4.8	4.8		5.9	6.0	
						4.1	19.0		8.4		34.5		99.0		7.5			4.8			6.1		
					Bottom	7.2	19.0	19.0	8.4	8.4	34.5	34.5	98.9	98.9	7.5	7.5	7.5	5.5	5.5		8.6	8.7	
						7.2	19.0		8.4		34.5		98.9		7.5			5.6			8.8		
SR4	Fine	Calm	14:54	13.0	Surface	1.0	20.2	20.2	8.4	8.4	34.0	34.0	101.2	101.2	7.5	7.5	7.5	3.5	3.5	5.6	7.2	6.7	6.5
						1.0	20.2		8.4		34.0		101.2		7.5			3.5			6.1		
					Middle	6.5	19.2	19.2	8.4	8.4	34.3	34.3	97.4	97.4	7.4	7.4		5.7	5.5		6.6	6.8	
						6.5	19.2		8.4		34.3		97.4		7.4			5.4			7.0		
					Bottom	12.0	19.1	19.1	8.4	8.4	34.4	34.4	97.4	97.5	7.4	7.4	7.4	7.8	7.6		5.7	5.9	
						12.0	19.1		8.4		34.4		97.5		7.4			7.5			6.1		
SR5	Fine	Calm	14:44	9.2	Surface	1.0	19.3	19.3	8.4	8.4	34.2	34.3	98.2	98.2	7.4	7.4	7.4	6.0	6.2	8.0	5.4	5.6	5.8
						1.0	19.2		8.4		34.3		98.1		7.4			6.4			5.8		
					Middle	4.6	19.1	19.1	8.4	8.4	34.4	34.4	97.5	97.5	7.4	7.4		8.2	8.4		5.7	5.8	
						4.6	19.1		8.4		34.4		97.5		7.4			8.7			5.9		
					Bottom	8.2	19.1	19.1	8.4	8.4	34.4	34.4	97.6	97.7	7.4	7.4	7.4	9.5	9.3		6.1	6.1	
						8.2	19.1		8.4		34.4		97.7		7.4			9.1			6.0		
SR6	Fine	Moderate	14:40	14.1	Surface	1.0	19.2	19.2	8.4	8.4	34.5	34.5	100.4	100.3	7.6	7.6	7.6	3.5	3.5	5.8	4.7	4.8	5.7
						1.0	19.2		8.4		34.5		100.2		7.6			3.5			4.9		
					Middle	7.1	19.0	19.0	8.4	8.4	34.5	34.5	98.8	98.8	7.5	7.5		4.8	5.0		5.5	5.8	
						7.1	19.0		8.4		34.5		98.7		7.5			5.1			6.0		
					Bottom	13.1	18.9	18.9	8.4	8.4	34.5	34.5	98.4	98.4	7.5	7.5	7.5	9.1	9.0		6.7	6.6	
						13.1	18.9		8.4		34.5		98.4		7.5			8.9			6.4		
SR7	Fine	Rough	14:23	22.4	Surface	1.0	19.2	19.2	8.4	8.4	34.5	34.5	101.7	101.8	7.7	7.7	7.7	2.5	2.5	2.5	5.4	5.2	6.1
						1.0	19.2		8.4		34.5		101.8		7.7			2.4			5.0		
					Middle	11.2	18.9	18.9	8.4	8.4	34.5	34.5	100.3	100.3	7.6	7.6		2.4	2.4		5.9	5.8	
						11.2	18.9		8.4		34.5		100.3		7.6			2.4			5.7		
					Bottom	21.4	18.9	18.9	8.4	8.4	34.5	34.5	100.1	100.1	7.6	7.6	7.6	2.7	2.7		7.6	7.4	
						21.4	18.9		8.4		34.5		100.1		7.6			2.7			7.2		

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Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 28 February 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Fine	Calm	15:30	10.2	Surface	1.0	19.6	19.6	8.4	8.4	34.0	34.0	100.5	100.4	7.5	7.5	7.5	2.3	2.3	2.9	3.2	3.1	3.8
						1.0	19.5		8.4		34.1		100.2		7.5			2.3			3.0		
					Middle	5.1	19.0	19.0	8.4	8.4	34.2	34.2	98.1	98.0	7.4	7.4		2.9	2.9		3.8	3.7	
						5.1	19.0		8.4		34.2		97.9		7.4			2.9			3.6		
					Bottom	9.2	19.0	19.0	8.4	8.4	34.3	34.3	97.3	97.3	7.4	7.4	7.4	3.5	3.5		4.9	4.7	
						9.2	19.0		8.4		34.3		97.3		7.4			3.5			4.5		
SR9	Fine	Calm	15:18	10.1	Surface	1.0	19.3	19.3	8.4	8.4	33.7	33.7	99.8	99.8	7.5	7.5	7.5	1.4	1.5	1.6	3.3	3.2	3.3
						1.0	19.3		8.4		33.7		99.8		7.5			1.5			3.0		
					Middle	5.1	19.0	19.0	8.4	8.4	34.2	34.2	98.8	98.8	7.5	7.5		1.9	1.8		3.2	3.3	
						5.1	19.0		8.4		34.3		98.7		7.5			1.8			3.4		
					Bottom	9.1	19.0	19.0	8.4	8.4	34.3	34.3	98.2	98.1	7.4	7.4	7.4	1.6	1.6		3.4	3.5	
						9.1	19.0		8.4		34.3		97.9		7.4			1.7			3.6		
SR10	Fine	Moderate	13:46	6.4	Surface	1.0	19.1	19.1	8.4	8.4	34.4	34.4	101.0	100.9	7.6	7.6	7.6	2.4	2.5	2.8	4.3	4.4	5.4
						1.0	19.1		8.4		34.4		100.8		7.6			2.5			4.5		
					Middle	3.2	19.0	19.0	8.4	8.4	34.4	34.4	99.9	99.8	7.6	7.6		2.9	2.9		5.8	5.7	
						3.2	19.0		8.4		34.4		99.7		7.5			2.9			5.5		
					Bottom	5.4	19.1	19.1	8.5	8.5	34.4	34.4	98.2	98.0	7.4	7.4	7.4	3.0	3.0		6.0	6.1	
						5.4	19.1		8.5		34.4		97.7		7.4			3.0			6.2		
A1	Fine	Calm	14:34	9.0	Surface	1.0	19.5	19.5	8.4	8.4	34.1	34.2	99.8	99.8	7.5	7.5	7.4	5.2	5.5	6.9	-	N/A	N/A
						1.0	19.5		8.4		34.2		99.7		7.5			5.8			-		
					Middle	4.5	19.1	19.1	8.4	8.4	34.5	34.5	98.6	98.6	7.4	7.4		6.4	6.4		-	N/A	
						4.5	19.1		8.4		34.5		98.5		7.4			6.4			-		
					Bottom	8.0	19.1	19.1	8.4	8.4	34.4	34.4	98.0	98.0	7.4	7.4		8.5	8.7		-	N/A	
						8.0	19.1		8.4		34.4		98.0		7.4			8.9			-		
A2	Fine	Calm	13:41	9.3	Surface	1.0	19.1	19.1	8.4	8.4	34.5	34.5	100.9	100.9	7.6	7.6	7.5	3.4	3.5	4.3	-	N/A	N/A
						1.0	19.1		8.4		34.5		100.9		7.6			3.5			-		
					Middle	4.7	19.0	19.0	8.4	8.4	34.5	34.5	99.8	99.8	7.5	7.5		4.6	4.6		-	N/A	
						4.7	19.0		8.4		34.5		99.7		7.5			4.7			-		
					Bottom	8.3	19.0	19.0	8.4	8.4	34.5	34.5	99.4	99.4	7.5	7.5		4.8	4.9		-	N/A	
						8.3	19.0		8.4		34.5		99.4		7.5			5.0			-		
A3	Fine	Moderate	13:47	10.0	Surface	1.0	19.3	19.3	8.4	8.4	34.5	34.5	101.7	101.7	7.7	7.7	7.6	3.2	3.2	4.6	-	N/A	N/A
						1.0	19.3		8.4		34.5		101.6		7.6			3.2			-		
					Middle	5.0	18.9	18.9	8.4	8.4	34.5	34.5	99.5	99.5	7.5	7.5		5.0	5.0		-	N/A	
						5.0	18.9		8.4		34.5		99.5		7.5			5.1			-		
					Bottom	9.0	18.9	18.9	8.4	8.4	34.5	34.5	99.3	99.4	7.5	7.5		5.6	5.7		-	N/A	
						9.0	18.9		8.4		34.5		99.4		7.5			5.7			-		
A4	Fine	Moderate	14:36	15.3	Surface	1.0	19.4	19.4	8.4	8.4	34.5	34.5	100.9	100.7	7.6	7.6	7.5	3.6	3.7	4.5	-	N/A	N/A
						1.0	19.3		8.4		34.5		100.5		7.6			3.9			-		
					Middle	7.7	18.9	18.9	8.4	8.4	34.5	34.5	99.0	99.0	7.5	7.5		4.6	4.6		-	N/A	
						7.7	18.9		8.4		34.5		98.9		7.5			4.6			-		
					Bottom	14.3	18.9	18.9	8.4	8.4	34.5	34.5	98.6	98.6	7.5	7.5		5.2	5.1		-	N/A	
						14.3	18.9		8.4		34.5		98.6		7.5			5.1			-		
A5	Fine	Rough	14:29	20.5	Surface	1.0	19.3	19.3	8.4	8.4	34.5	34.5	100.7	100.7	7.6	7.6	7.5	3.6	3.7	5.1	-	N/A	N/A
						1.0	19.3		8.4		34.5		100.6		7.6			3.7			-		
					Middle	10.3	18.9	18.9	8.4	8.4	34.5	34.5	98.6	98.6	7.5	7.5		5.7	5.8		-	N/A	
						10.3	18.9		8.4		34.5		98.6		7.5			5.9			-		
					Bottom	19.5	18.9	18.9	8.4	8.4	34.5	34.5	98.6	98.7	7.5	7.5		6.0	6.0		-	N/A	
						19.5	18.9		8.4		34.5		98.7		7.5			5.9			-		

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Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 28 February 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Cloudy	Rough	07:36	14.8	Surface	1.0	19.1	19.1	8.3	8.3	33.0	33.0	91.2	91.3	7.0	7.0	7.0	2.3	2.3	3.8	3.8	3.7	4.6
						1.0	19.1		8.3		33.0		91.3		7.0			2.4			3.5		
					Middle	7.4	19.1	19.1	8.3	8.3	33.3	33.3	91.5	91.5	7.0	7.0		3.2	3.2		4.8	4.7	
						7.4	19.1		8.3		33.3		91.4		7.0			3.2			4.6		
					Bottom	13.8	19.1	19.1	8.3	8.3	33.4	33.4	91.2	91.2	6.9	6.9	6.9	5.9	6.0		5.6	5.5	
						13.8	19.1		8.3		33.4		91.2		6.9			6.1			5.4		
C2	Cloudy	Rough	09:02	9.1	Surface	1.0	19.1	19.1	8.4	8.4	34.4	34.4	100.9	100.9	7.6	7.6	7.6	2.6	2.6	2.9	6.0	6.1	6.6
						1.0	19.1		8.4		34.4		100.9		7.6			2.7			6.1		
					Middle	4.6	19.0	19.0	8.4	8.4	34.4	34.4	100.7	100.7	7.6	7.6		2.9	2.9		6.6	6.8	
						4.6	19.0		8.4		34.4		100.7		7.6			2.9			6.9		
					Bottom	8.1	19.0	19.0	8.4	8.4	34.4	34.4	100.6	100.6	7.6	7.6	7.6	3.2	3.2		6.8	7.0	
						8.1	19.0		8.4		34.4		100.6		7.6			3.2			7.2		
C3	Cloudy	Rough	08:25	21.5	Surface	1.0	19.0	19.0	8.4	8.4	34.4	34.4	100.9	100.9	7.6	7.6	7.6	2.3	2.3	2.6	5.0	4.8	5.1
						1.0	19.0		8.4		34.4		100.9		7.6			2.3			4.6		
					Middle	10.8	19.0	19.0	8.4	8.4	34.4	34.4	100.3	100.3	7.6	7.6		2.7	2.7		5.0	4.9	
						10.8	19.0		8.4		34.4		100.3		7.6			2.6			4.8		
					Bottom	20.5	19.0	19.0	8.4	8.4	34.4	34.4	100.4	100.5	7.6	7.6	7.6	3.0	2.9		5.4	5.6	
						20.5	19.0		8.4		34.4		100.5		7.6			2.9			5.8		
SR1	Cloudy	Calm	07:22	9.0	Surface	1.0	19.1	19.1	8.4	8.4	34.4	34.4	99.3	99.3	7.5	7.5	7.5	4.1	4.1	4.5	6.9	7.1	8.1
						1.0	19.1		8.4		34.4		99.3		7.5			4.1			7.3		
					Middle	4.5	19.1	19.1	8.4	8.4	34.4	34.4	99.2	99.2	7.5	7.5		4.4	4.5		8.4	8.2	
						4.5	19.1		8.4		34.4		99.1		7.5			4.5			8.0		
					Bottom	8.0	19.1	19.1	8.4	8.4	34.4	34.4	99.3	99.4	7.5	7.5	7.5	4.8	4.8		8.8	8.9	
						8.0	19.1		8.4		34.4		99.4		7.5			4.8			9.0		
SR4	Cloudy	Moderate	08:28	12.0	Surface	1.0	19.0	19.0	8.3	8.3	33.7	33.7	94.8	95.0	7.2	7.2	7.3	2.7	2.8	5.9	2.3	2.5	4.2
						1.0	19.0		8.3		33.7		95.1		7.2			2.8			2.6		
					Middle	6.0	19.0	19.0	8.4	8.4	33.9	33.9	96.1	96.2	7.3	7.3		6.0	6.3		3.5	3.7	
						6.0	19.0		8.4		33.9		96.2		7.3			6.6			3.9		
					Bottom	11.0	19.0	19.0	8.4	8.4	34.1	34.1	96.4	96.4	7.3	7.3	7.3	8.7	8.7		6.1	6.3	
						11.0	19.0		8.4		34.1		96.4		7.3			8.6			6.5		
SR5	Cloudy	Moderate	08:35	11.1	Surface	1.0	19.1	19.1	8.3	8.3	33.4	33.4	92.0	92.1	7.0	7.0	7.0	3.3	3.4	5.8	5.3	5.5	6.6
						1.0	19.1		8.3		33.4		92.1		7.0			3.5			5.6		
					Middle	5.6	19.1	19.1	8.3	8.3	33.5	33.5	92.8	92.9	7.0	7.1		4.6	4.5		6.8	6.7	
						5.6	19.1		8.3		33.5		92.9		7.1			4.5			6.5		
					Bottom	10.1	19.1	19.1	8.3	8.3	33.6	33.6	94.5	94.5	7.2	7.2	7.2	9.5	9.6		7.7	7.6	
						10.1	19.1		8.3		33.6		94.5		7.2			9.6			7.5		
SR6	Cloudy	Rough	07:52	12.0	Surface	1.0	19.0	19.0	8.4	8.4	34.4	34.4	99.2	99.2	7.5	7.5	7.5	5.5	5.6	6.9	11.9	12.1	**13.5**
						1.0	19.0		8.4		34.4		99.2		7.5			5.6			12.2		
					Middle	6.0	19.0	19.0	8.4	8.4	34.4	34.4	98.9	98.9	7.5	7.5		6.3	6.3		12.8	12.9	
						6.0	19.0		8.4		34.4		98.9		7.5			6.3			13.0		
					Bottom	11.0	19.0	19.0	8.4	8.4	34.4	34.4	98.7	98.7	7.5	7.5	7.5	8.5	8.7		15.7	15.5	
						11.0	19.0		8.4		34.4		98.7		7.5			9.0			15.2		
SR7	Cloudy	Rough	08:12	24.0	Surface	1.0	19.0	19.0	8.4	8.4	34.4	34.4	100.1	100.1	7.6	7.6	7.6	4.7	4.7	5.2	9.7	9.7	11.0
						1.0	19.0		8.4		34.4		100.1		7.6			4.7			9.7		
					Middle	12.0	19.0	19.0	8.4	8.4	34.4	34.4	99.6	99.6	7.5	7.5		4.9	5.0		11.6	10.9	
						12.0	19.0		8.4		34.4		99.6		7.5			5.0			10.2		
					Bottom	23.0	19.0	19.0	8.4	8.4	34.4	34.4	99.7	99.8	7.5	7.6	7.6	5.9	5.9		12.2	12.5	
						23.0	19.0		8.4		34.4		99.8		7.6			5.9			12.7		

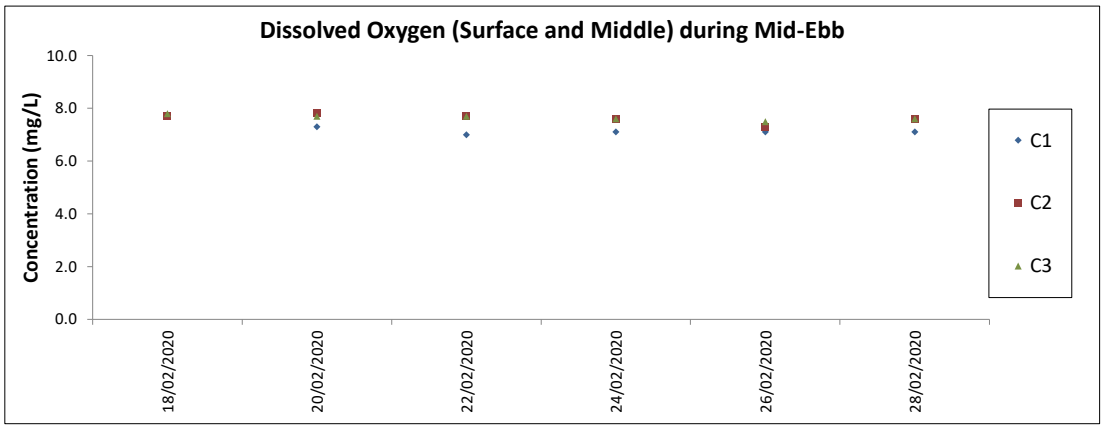
DA: Depth-averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

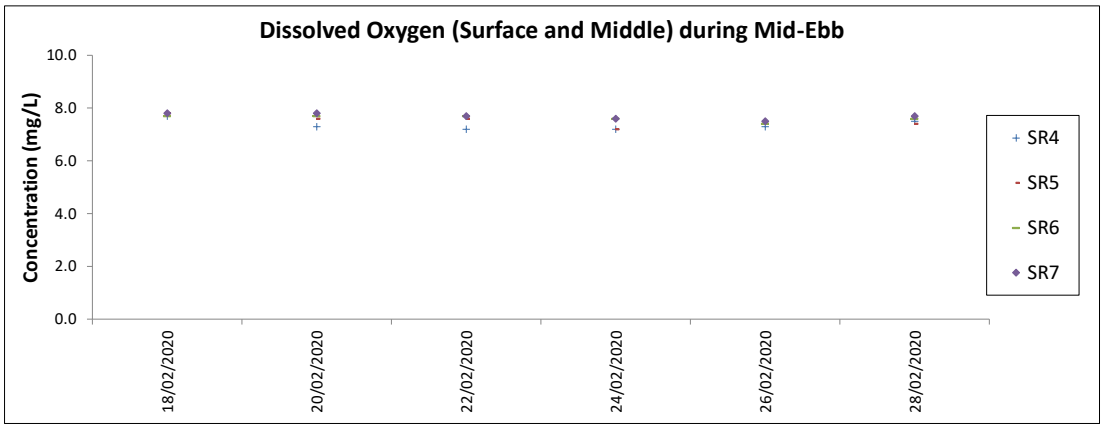
Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring
Water Quality Monitoring Results on 28 February 20 during Mid-Flood Tide

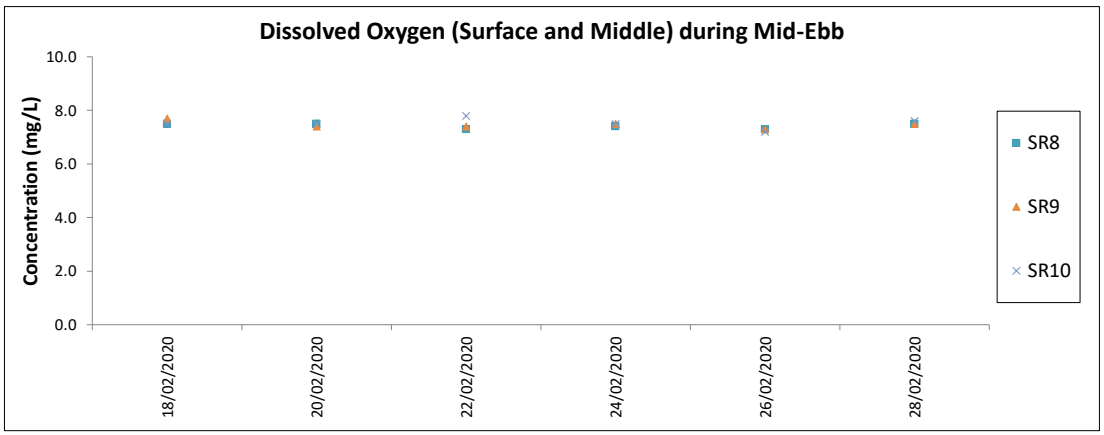
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA
SR8	Cloudy	Moderate	07:59	10.6	Surface	1.0	19.0	19.0	8.4	8.4	34.0	34.0	97.8	97.9	7.4	7.4	7.4	2.8	2.8	3.6	5.5	5.4	5.9
						1.0	19.0		8.4		34.0		97.9		7.4			2.9			5.3		
					Middle	5.3	19.0	19.0	8.4	8.4	34.1	34.1	98.1	98.1	7.4	7.4		3.1	3.2		6.1	5.9	
						5.3	19.0		8.4		34.1		98.1		7.4			3.2			5.7		
					Bottom	9.6	19.0	19.0	8.4	8.4	34.1	34.1	98.4	98.5	7.5	7.5	7.5	4.8	4.9		6.4	6.3	
						9.6	19.0		8.4		34.1		98.5		7.5			4.9			6.1		
SR9	Cloudy	Moderate	08:10	11.4	Surface	1.0	19.1	19.1	8.3	8.3	33.5	33.5	96.4	96.6	7.3	7.3	7.4	1.3	1.3	1.7	3.4	3.7	4.8
						1.0	19.1		8.3		33.6		96.7		7.3			1.3			3.9		
					Middle	5.7	19.0	19.0	8.4	8.4	34.2	34.2	99.1	99.1	7.5	7.5		1.9	1.8		4.8	4.6	
						5.7	19.0		8.4		34.2		99.1		7.5			1.8			4.3		
					Bottom	10.4	19.0	19.0	8.4	8.4	34.2	34.2	99.3	99.3	7.5	7.5	7.5	2.0	2.0		5.9	6.1	
						10.4	19.0		8.4		34.2		99.3		7.5			2.0			6.2		
SR10	Cloudy	Moderate	09:26	6.6	Surface	1.0	19.3	19.3	8.4	8.4	34.3	34.3	99.1	99.1	7.5	7.5	7.5	6.6	6.6	7.5	9.5	9.7	11.2
						1.0	19.3		8.4		34.3		99.1		7.5			6.6			9.9		
					Middle	3.3	19.3	19.3	8.4	8.4	34.3	34.3	99.0	99.1	7.5	7.5		7.0	7.0		11.4	11.2	
						3.3	19.3		8.4		34.3		99.1		7.5			6.9			11.0		
					Bottom	5.6	19.2	19.2	8.4	8.4	34.3	34.3	98.6	98.6	7.4	7.4	7.4	8.7	8.8		12.3	12.6	
						5.6	19.2		8.4		34.3		98.6		7.4			9.0			12.8		
A1	Cloudy	Moderate	08:44	10.2	Surface	1.0	19.3	19.3	8.4	8.4	34.0	34.0	98.5	98.5	7.4	7.4	7.4	5.1	5.4	7.3	-	N/A	N/A
						1.0	19.3		8.4		34.1		98.4		7.4			5.7			-		
					Middle	5.1	19.2	19.2	8.4	8.4	34.3	34.3	98.3	98.3	7.4	7.4		7.8	7.9		-	N/A	
						5.1	19.2		8.4		34.3		98.2		7.4			8.0			-		
					Bottom	9.2	19.2	19.2	8.4	8.4	34.3	34.3	98.1	98.2	7.4	7.4		8.8	8.7		-	N/A	
						9.2	19.2		8.4		34.3		98.2		7.4			8.5			-		
A2	Cloudy	Moderate	08:52	9.8	Surface	1.0	19.3	19.3	8.4	8.4	34.3	34.3	99.1	99.1	7.5	7.5	7.5	5.6	5.6	5.6	-	N/A	N/A
						1.0	19.2		8.4		34.3		99.1		7.5			5.6			-		
					Middle	4.9	19.2	19.2	8.4	8.4	34.3	34.3	99.2	99.2	7.5	7.5		5.5	5.5		-	N/A	
						4.9	19.2		8.4		34.4		99.2		7.5			5.6			-		
					Bottom	8.8	19.1	19.1	8.4	8.4	34.4	34.4	99.2	99.2	7.5	7.5		5.4	5.6		-	N/A	
						8.8	19.1		8.4		34.4		99.2		7.5			5.7			-		
A3	Cloudy	Rough	08:46	10.1	Surface	1.0	19.0	19.0	8.4	8.4	34.4	34.4	99.3	99.3	7.5	7.5	7.5	8.3	8.4	8.7	-	N/A	N/A
						1.0	19.0		8.4		34.4		99.2		7.5			8.4			-		
					Middle	5.1	19.0	19.0	8.4	8.4	34.4	34.4	99.0	99.0	7.5	7.5		8.5	8.7		-	N/A	
						5.1	19.0		8.4		34.4		99.0		7.5			8.8			-		
					Bottom	9.1	19.0	19.0	8.4	8.4	34.4	34.4	99.0	99.0	7.5	7.5		9.0	9.1		-	N/A	
						9.1	19.0		8.4		34.4		99.0		7.5			9.2			-		
A4	Cloudy	Rough	08:00	14.9	Surface	1.0	19.0	19.0	8.4	8.4	34.4	34.4	99.7	99.7	7.5	7.5	7.5	5.3	5.3	6.5	-	N/A	N/A
						1.0	19.0		8.4		34.4		99.7		7.5			5.4			-		
					Middle	7.5	19.0	19.0	8.4	8.4	34.4	34.4	99.4	99.4	7.5	7.5		5.8	5.9		-	N/A	
						7.5	19.0		8.4		34.4		99.4		7.5			6.0			-		
					Bottom	13.9	19.0	19.0	8.4	8.4	34.4	34.4	99.8	99.9	7.5	7.6		8.4	8.4		-	N/A	
						13.9	19.0		8.4		34.4		100.0		7.6			8.3			-		
A5	Cloudy	Rough	08:05	21.0	Surface	1.0	19.0	19.0	8.4	8.4	34.4	34.4	100.1	100.1	7.6	7.6	7.6	4.7	4.7	5.1	-	N/A	N/A
						1.0	19.0		8.4		34.4		100.0		7.6			4.7			-		
					Middle	10.5	19.0	19.0	8.4	8.4	34.4	34.4	99.6	99.6	7.5	7.5		5.3	5.3		-	N/A	
						10.5	19.0		8.4		34.4		99.6		7.5			5.3			-		
					Bottom	20.0	19.0	19.0	8.4	8.4	34.4	34.4	99.9	100.0	7.6	7.6		5.3	5.3		-	N/A	
						20.0	19.0		8.4		34.4		100.0		7.6			5.4			-		

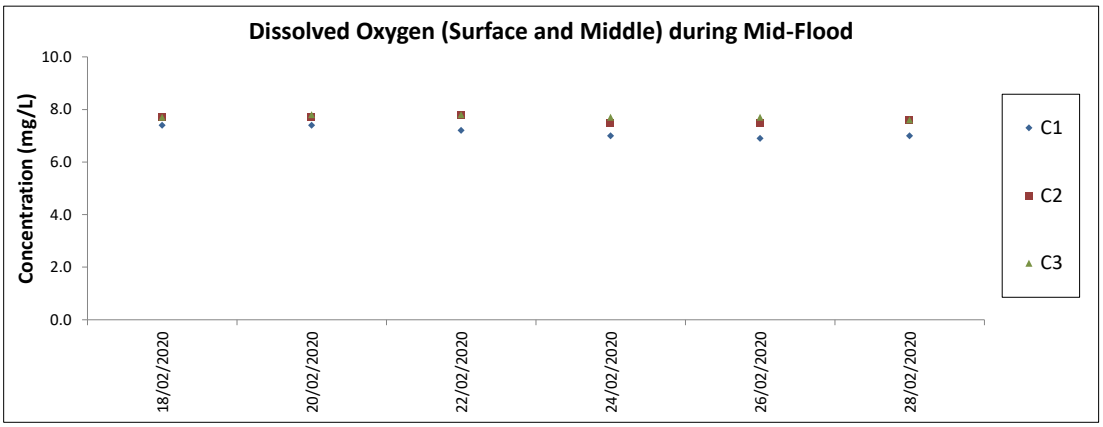
DA: Depth-averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**; Value exceeding Alert Level is double underlined

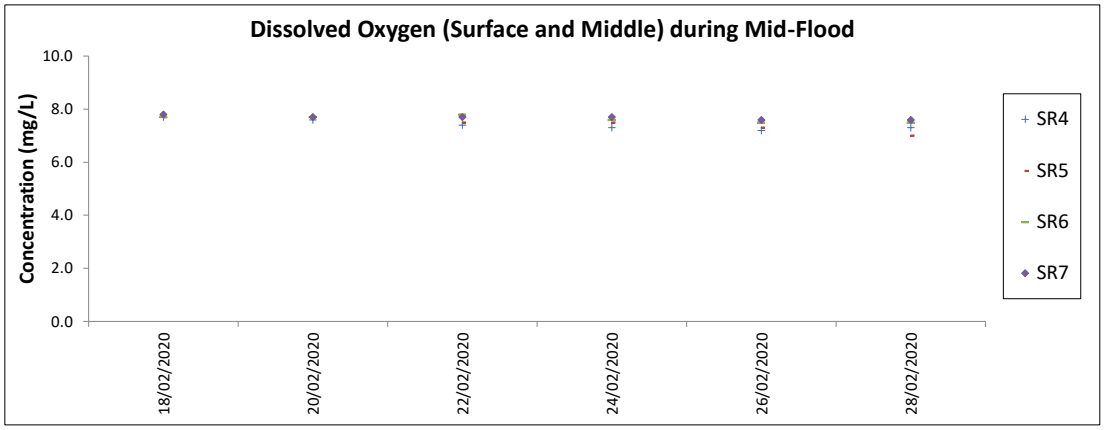
E. Graphical Presentations of Water Quality Monitoring Results

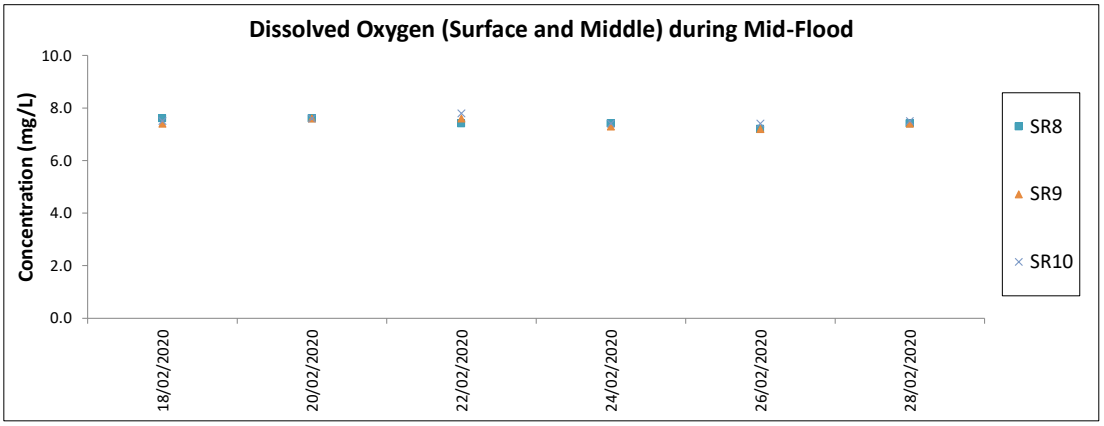

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
C1
C2
C3

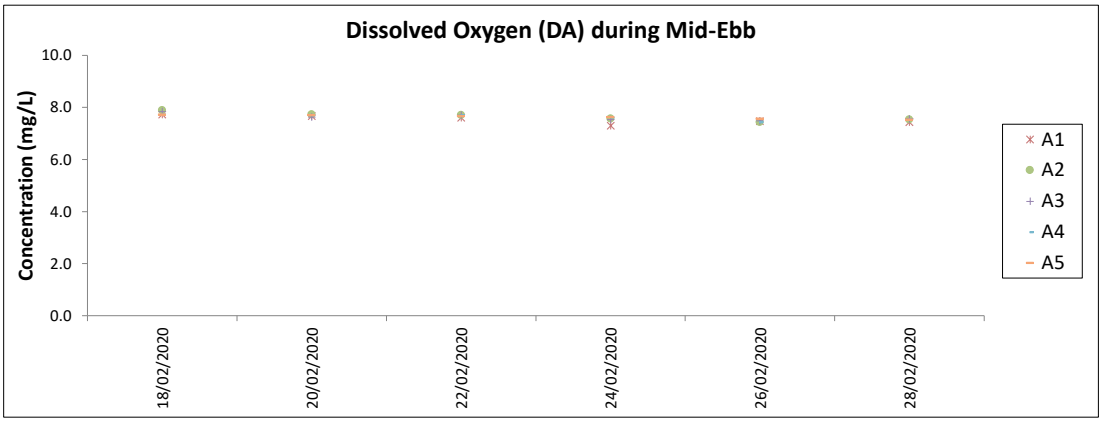

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
SR4
SR5
SR6
SR7

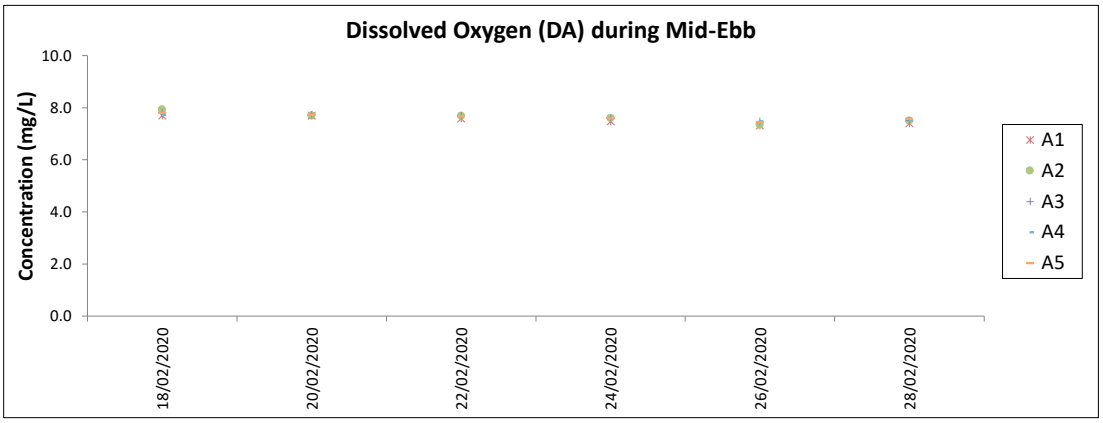

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
SR8
SR9
SR10

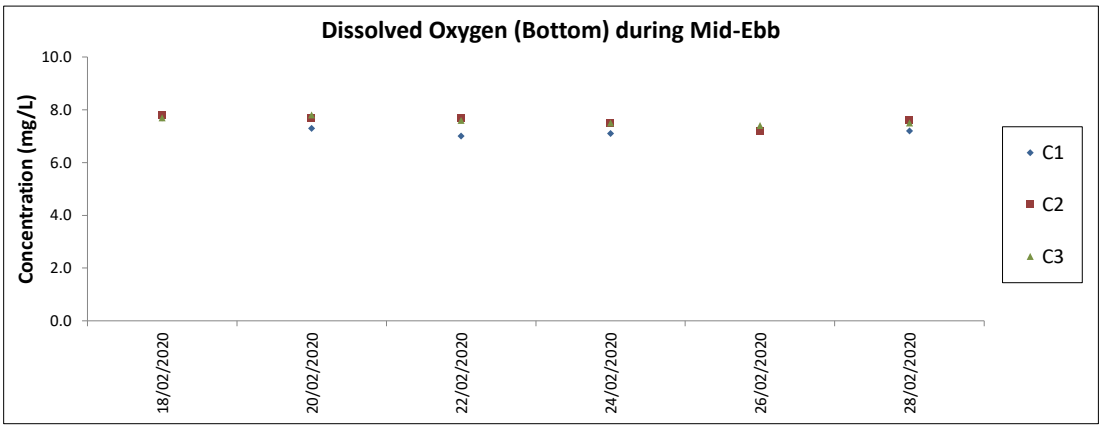

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
C1
C2
C3

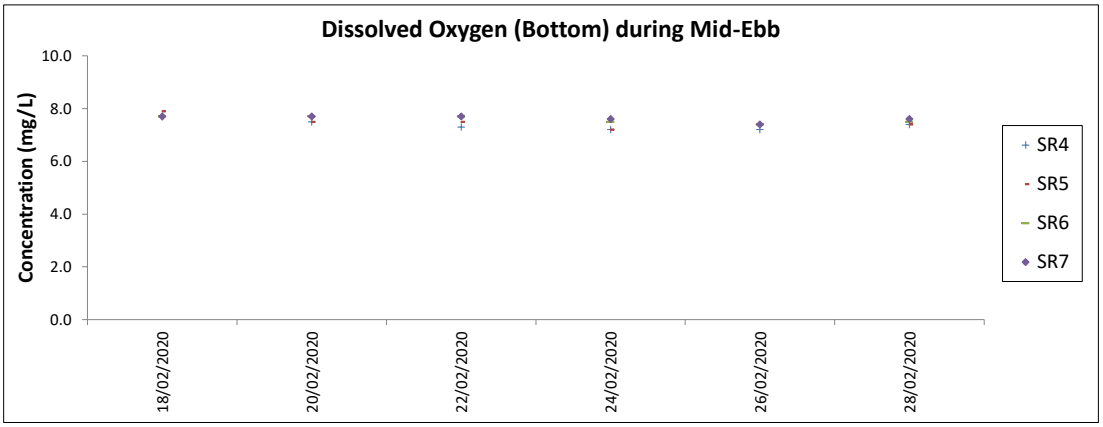

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
SR4
SR5
SR6
SR7


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
SR8
SR9
SR10


Dissolved Oxygen (DA) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
A1
A2
A3
A4
A5


Dissolved Oxygen (DA) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
A1
A2
A3
A4
A5


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
18/02/2020
20/02/2020
22/02/2020
24/02/2020
26/02/2020
28/02/2020
C1
C2
C3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Concentration (mg/L)
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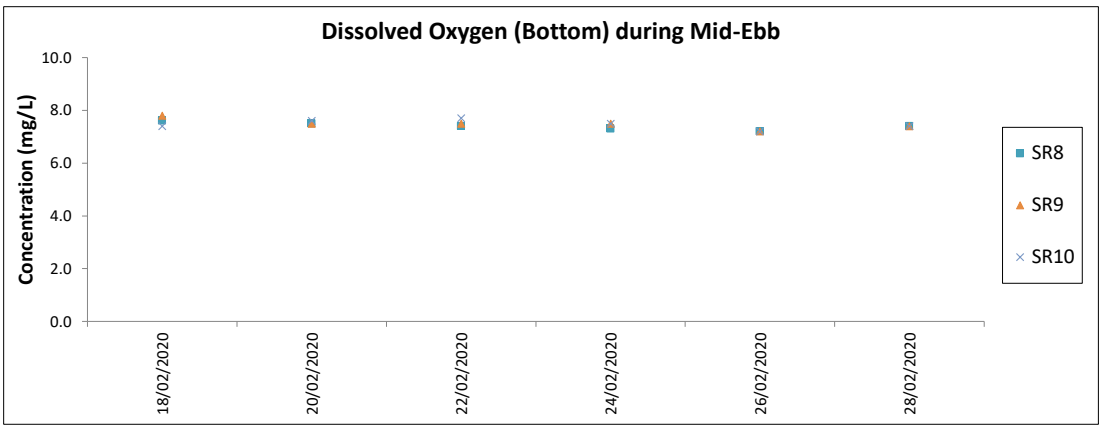
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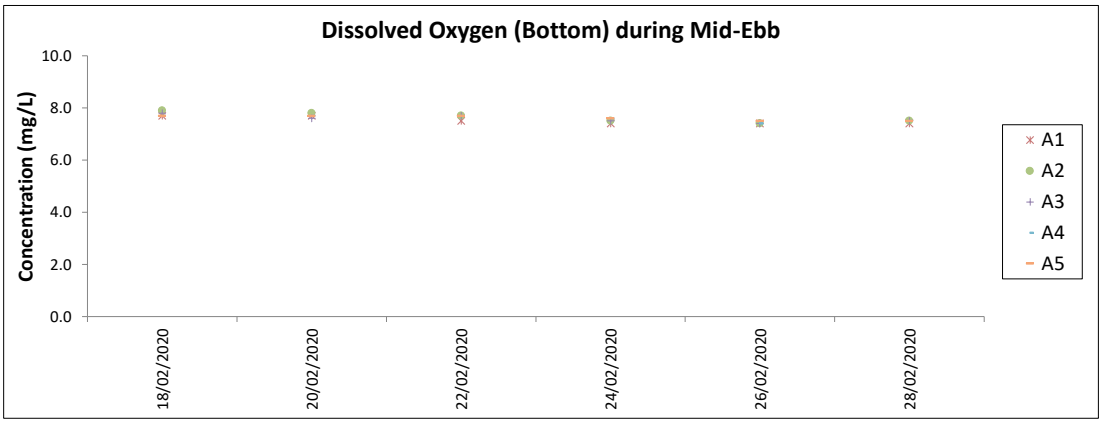
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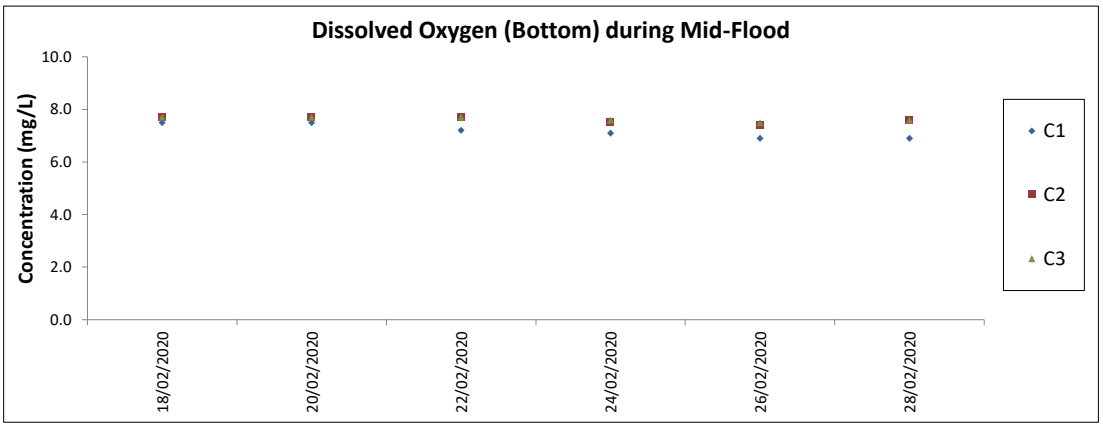
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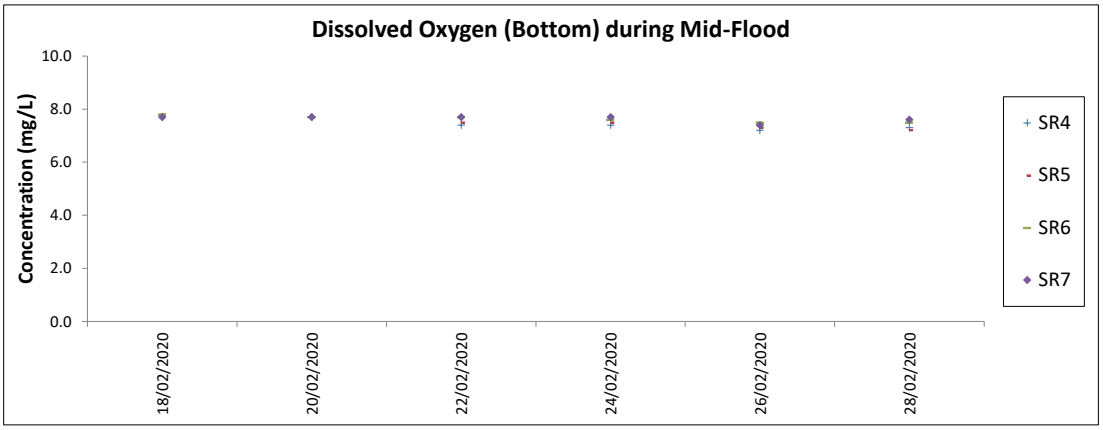
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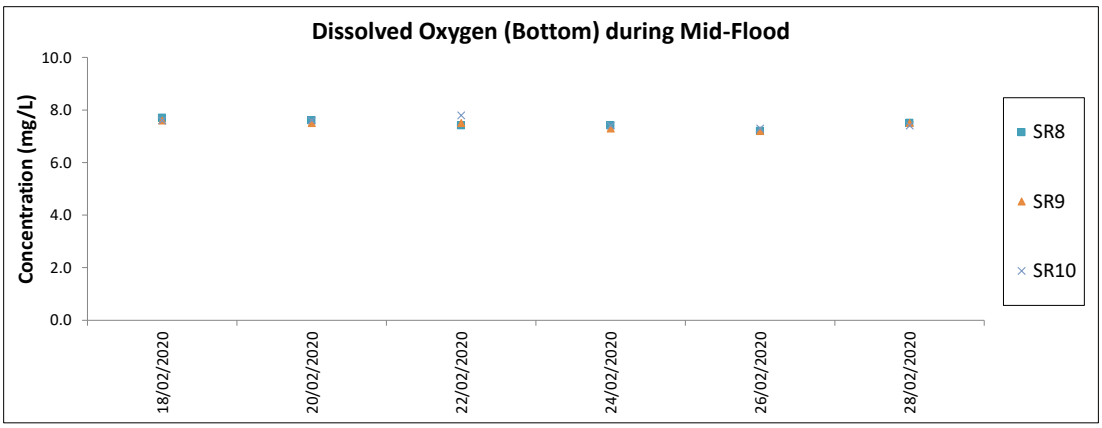
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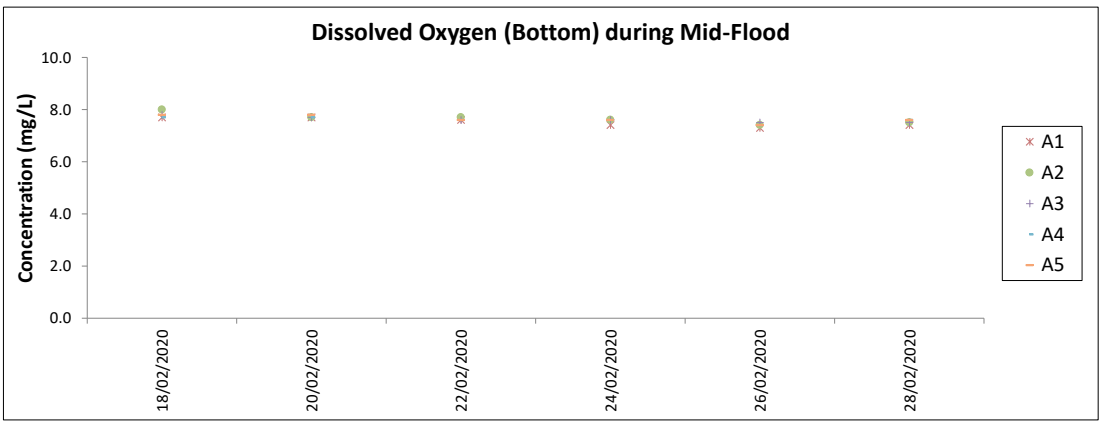
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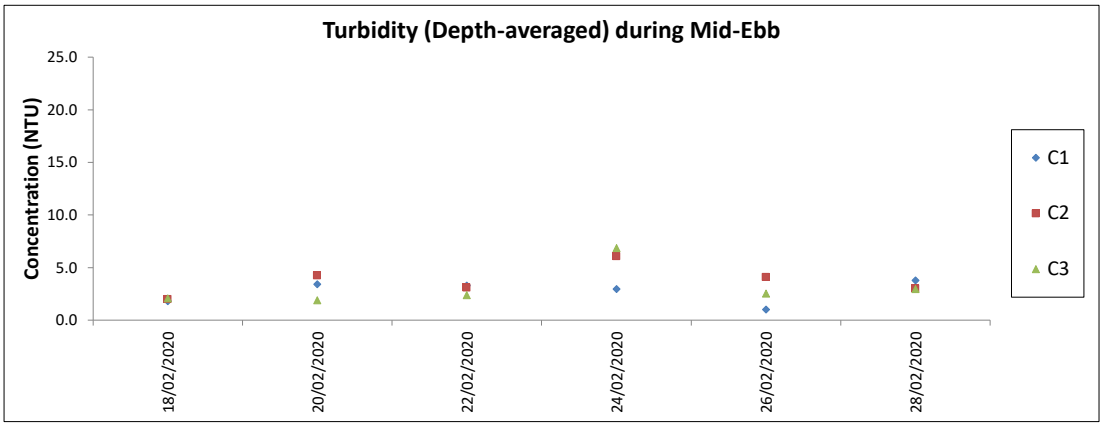
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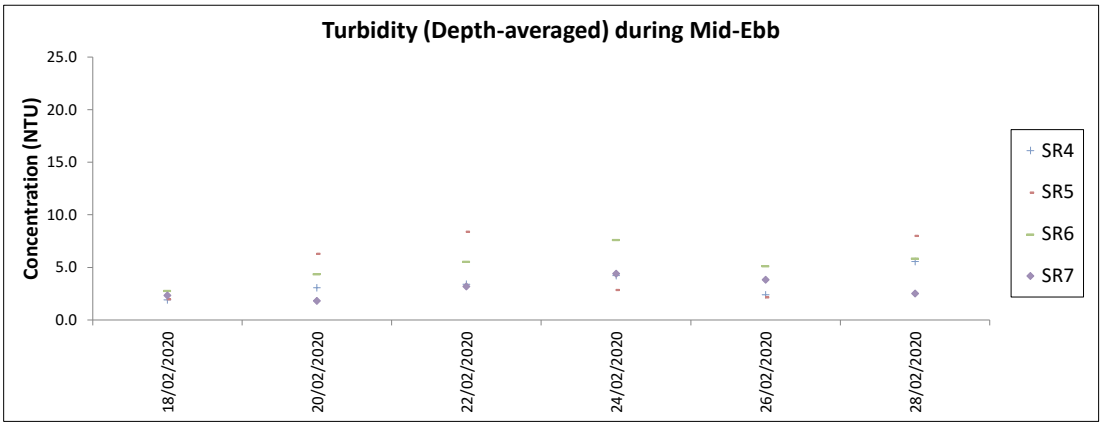
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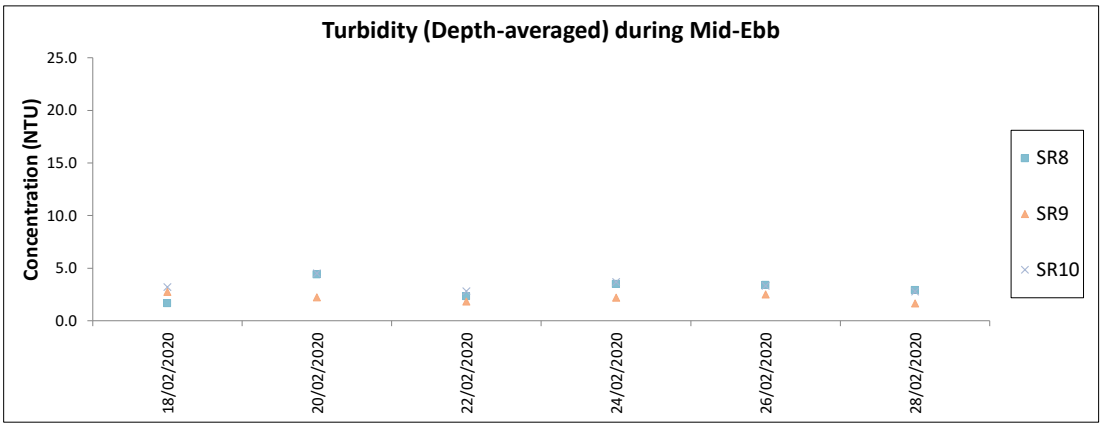
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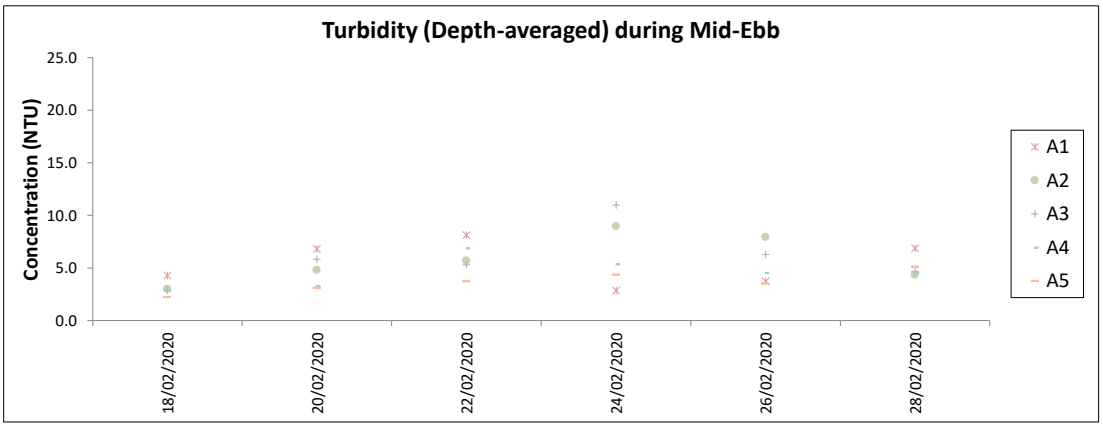
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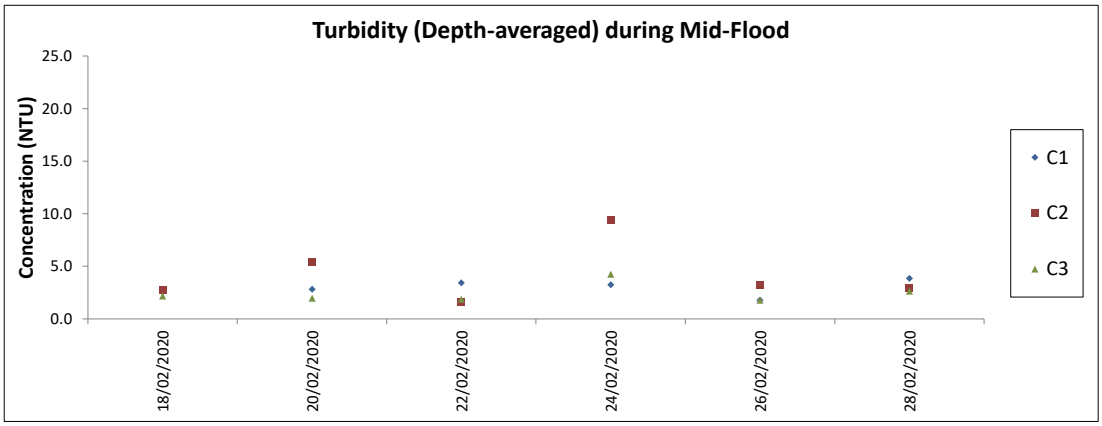
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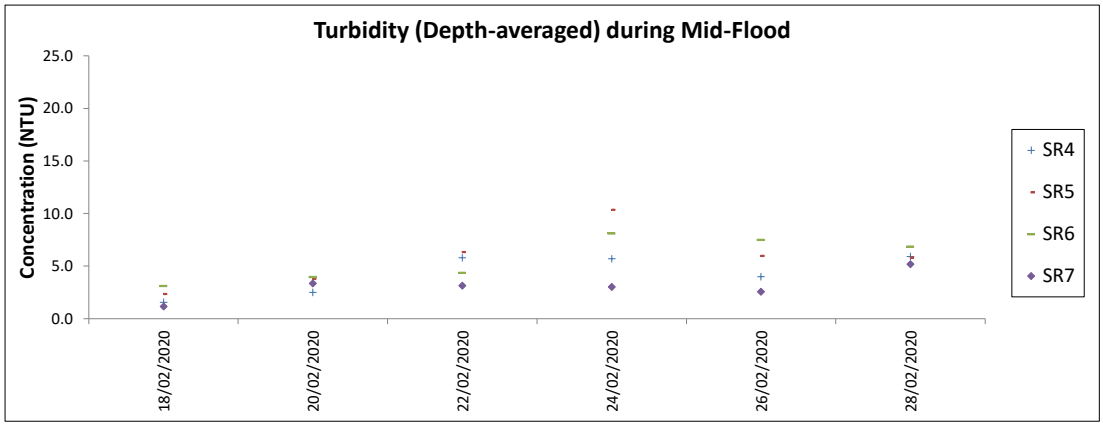
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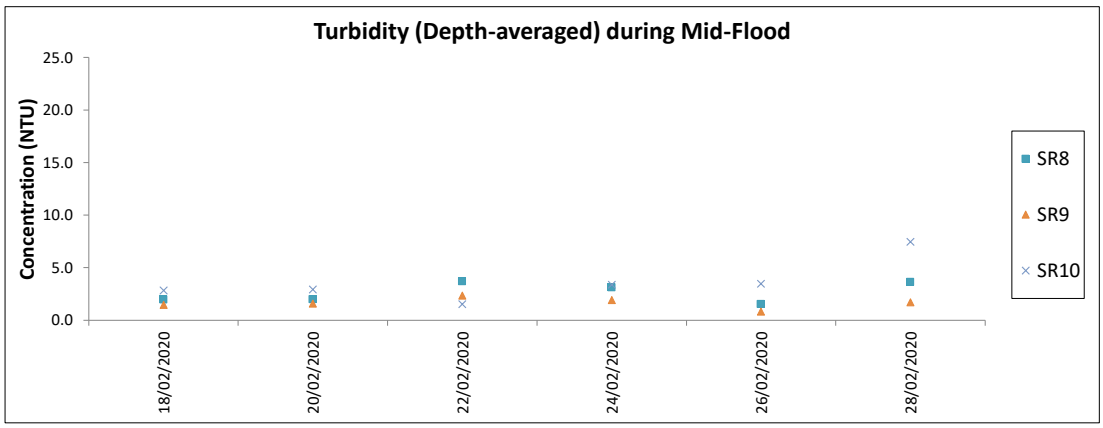
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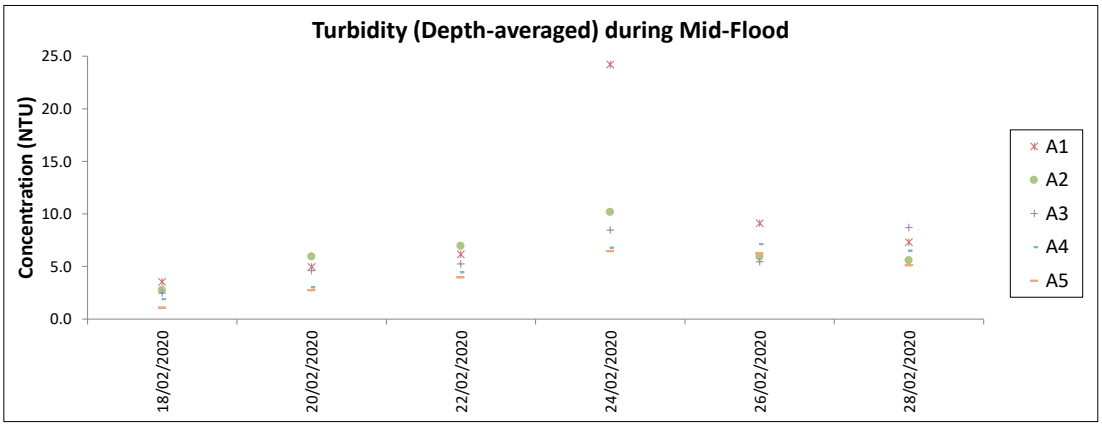
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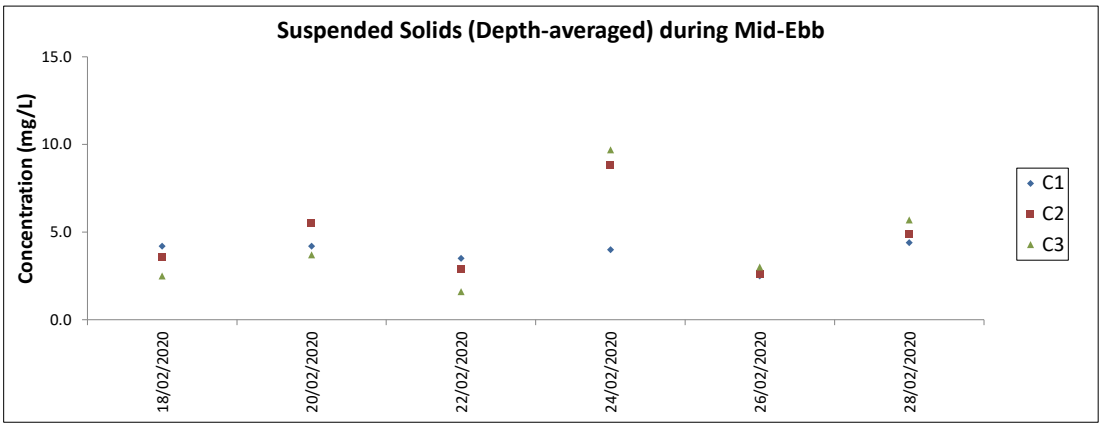
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Concentration (mg/L)
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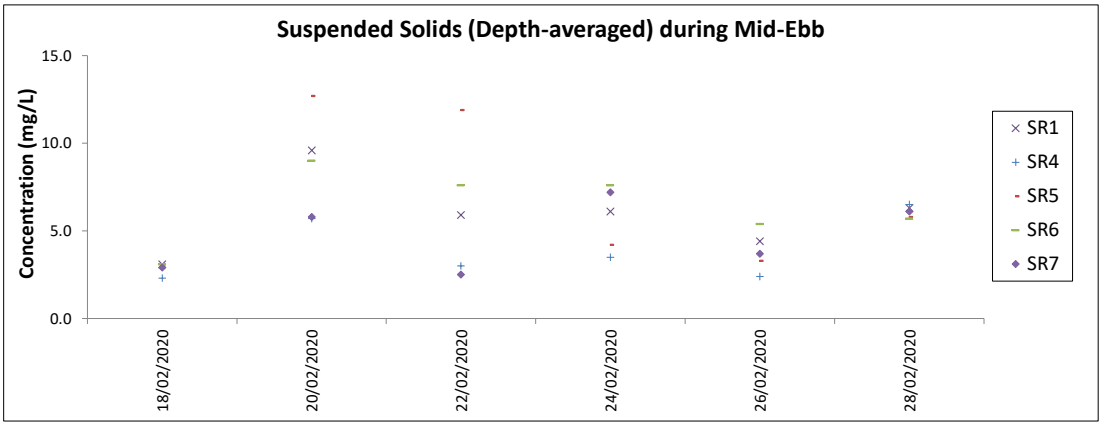
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Concentration (mg/L)
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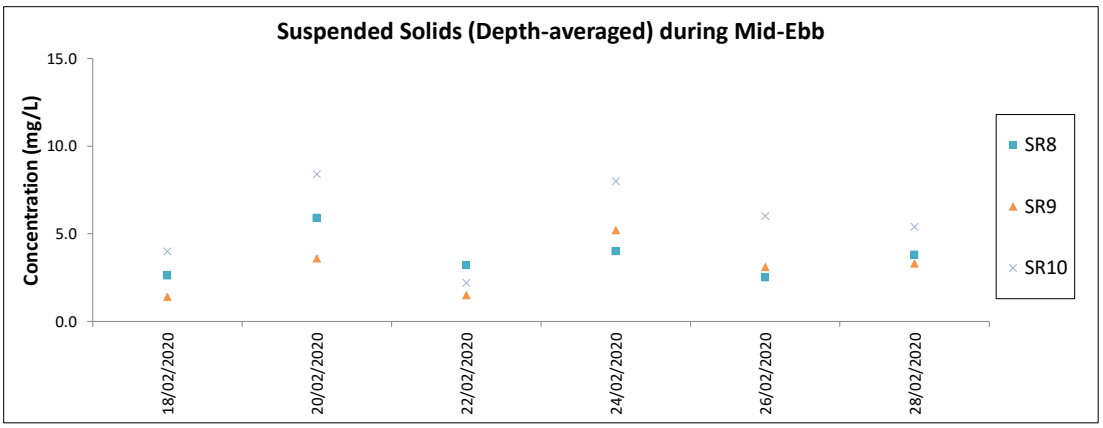
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Concentration (mg/L)
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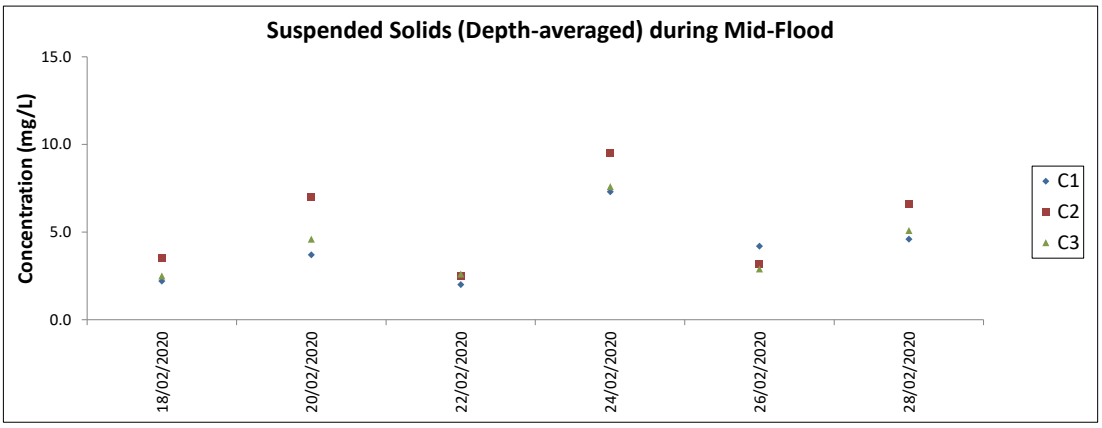
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Concentration (mg/L)
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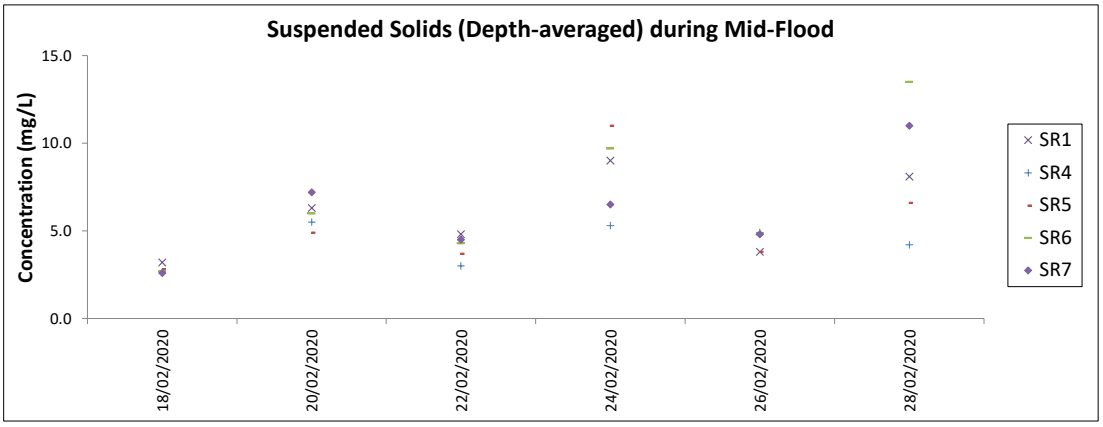
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Concentration (mg/L)
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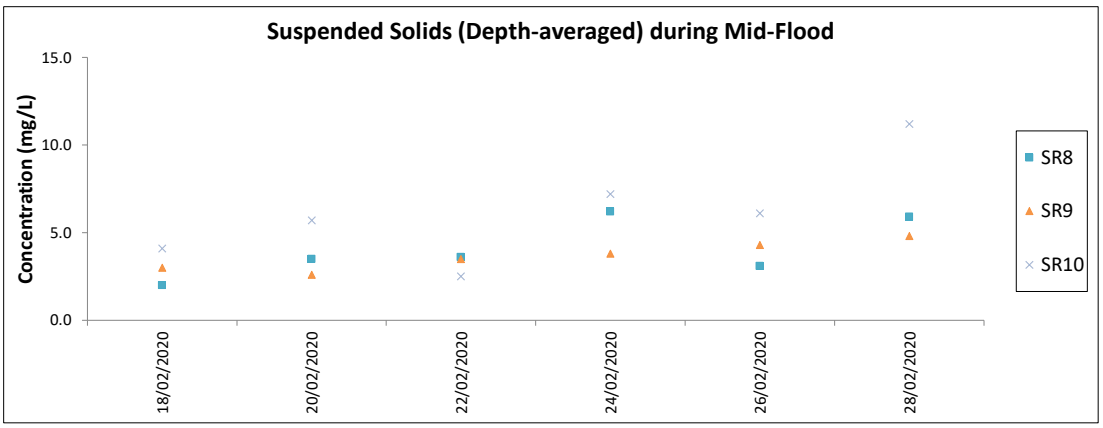
Suspended Solids (Depth-averaged) during Mid-Flood
Concentration (mg/L)
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Annex D Alert/Event and Action Plans

D1: Event and Action Plan for Water Quality at SR Stations

	Action			
Event	**ET Leader**	**IEC**	**Engineer**	**Contractor**
Action level being exceeded by one sampling day	• Repeat in-situ measurements to confirm findings; • Inform IEC, Contractor and Engineer; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC, Engineer and Contractor; • Repeat in-situ measurement on next day of exceedance.	• Discuss with ET, Engineer and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; • Verify the effectiveness of the implemented mitigation measures.	• Discuss with IEC, ET and Contractor on the mitigation measures; • Make agreement on the mitigation measures to be implemented; • Supervise the implemented of agreed mitigation measures.	• Identify source(s) of impact; • Inform the Engineer and confirm notification of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET, IEC and Engineer and propose mitigation measures; • Implement the agreed mitigation measures
Action Level being exceeded on more than one consecutive sampling day	• Repeat in-situ measurement to confirm findings; • Inform IEC, Contractor and Engineer; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC, Engineer and Contractor; • Ensure mitigation measures are implemented; • Prepare to increase the monitoring • frequency to daily; • Confirm the need for reducing dredging rates as per G2.	• Discuss with ET, Engineer and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; • Verify the effectiveness of the implemented mitigation measures; • Verify the need for reducing dredging rates as per G2.	• Discuss with IEC, ET and Contractor on the proposed mitigation measures; • Make agreement on the mitigation measures to be implemented; • Discuss with ET, IEC and Contractor on the effectiveness of the implemented mitigation measures; • Instruct the Contractor to reduce dredging rates as per G2 if confirmed by ET and verified by IEC.	• Identify the source(s) of impact; • Inform the Engineer and confirm notification • of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET, IEC and Engineer and propose mitigation measures to Engineer and IEC within 3 working days of notification; • Implement the agreed mitigation measures; • As directed by the Engineer, reduce dredging rates as per G2.

	Action			
Event	**ET Leader**	**IEC**	**Engineer**	**Contractor**
Limit Level being exceeded by one sampling day	• Repeat in-situ measurement to confirm findings; • Inform IEC, Contractor and Engineer; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC, Engineer and Contractor; • Ensure mitigation measures are implemented; • Increase the monitoring frequency to daily until no exceedance of limit level.	• Discuss with ET, Engineer and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; • Verify the effectiveness of the implemented mitigation measures.	• Discuss with IEC, ET and Contractor on the proposed mitigation measures; • Request Contractor to critically review the working methods; • Make agreement on the mitigation measures to be implemented; • Discuss with ET, IEC and Contractor on the effectiveness of the implemented mitigation measures.	• Identify the source(s) of impact; • Inform the Engineer and confirm notification of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET, IEC and Engineer and propose mitigation measures to Engineer and IEC within 3 working days of notification; • Implement the agreed mitigation measures.
Limit Level being exceeded by more than one consecutive sampling days	• Inform IEC, Contractor and Engineer; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC, Engineer and Contractor; • Ensure mitigation measures are implemented; • Confirm the need for reducing dredging rates as per D2; • Increase the monitoring frequency to daily until no exceedance of limit level for two consecutive days.	• Discuss with ET, Engineer and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise Engineer accordingly; • Verify the effectiveness of the implemented mitigation measures; • Verify the need for reducing dredging rates as per D2.	• Discuss with IEC, ET and Contractor on the proposed mitigation measures; • Request Contractor to critically review the working methods; • Make agreement on the mitigation measures to be implemented; • Discuss with ET, IEC and Contractor on the effectiveness of the implemented mitigation measures; • Instruct the Contractor to reduce dredging rates as per D2 if confirmed by ET and verified by IEC.	• Identify the source(s) of impact; • Inform the Engineer and confirm notification of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET, IEC and Engineer and propose mitigation • measures to Engineer • and IEC within 3 working days of notification; • Implement the agreed mitigation measures; • As directed by the Engineer, reduce dredging rates as per D2.

D2. Reduction of Maximum Allowable Hourly Dredging Rates due to Exceedances

Frequency of Exceedance	No. of Consecutive Sampling Days					
	Two	Three	Four	Five	Six	More than Six
Action Level	5%	10%	15%	20%	30%	40%
Limit Level	10%	20%	30%	40%	50%	Stop all dredging works for one week. Contractor to propose changes in dredging methods, dredging rates and mitigation measures for agreement with ET and IEC before re-initiating dredging works.

Note: Where action level followed by limit level is exceeded consecutively, the larger percentage reduction shall apply (e.g. if action level is exceeded for four consecutive days, followed immediately by two consecutive days of limit level exceedance, the percentage reduction to be applied between Day 2 and Day 6 shall be 5%, 10%, 15%, 20% and 30% respectively). Similarly, where limit level followed by action level is exceeded consecutively, the larger percentage reduction also applies as action level is inherently exceeded whenever limit level is exceeded.

D3. Alert Action Plan

The Alert Action Plan applies to exceedances of Alert levels at the near stations (A1 to A5) only. Upon identification of an exceedance of Alert level, the actions as in Alert Action Plan shall be implemented. Where applicable, the alert related actions shall proceed in parallel with the Event and Action Plan.

Action	Action By	Outcome	Follow Up Action	Follow Up Action By
1. Repeat in-situ measurement to confirm findings	ET	No exceedance in repeat measurement	No further action required	
		Exceedance identified in repeat measurement	**Proceed to Action 2**	
2. Check relevant SR station results	ET	No exceedance of Action or Limit Level	Notify IEC, Engineer and Contractor	ET
			Obtain and record Contractor's working methods and the status of existing mitigation measures implemented	ET
			Identify any unacceptable practice	ET, IEC, Engineer
			Rectify any unacceptable practice	Contractor
			Proceed to Action 3	
		Exceedance of Action or Limit Level	Initiate Event and Action Plan in Action or Limit Level	ET, IEC, Engineer, Contractor
			Proceed to Action 3	
3. Check for repeated cases of Outcome 2a or 2b	ET	No consecutive repeats of Outcome 2a or 2b	No further action required	
		Consecutive repeats of Outcome 2a	Review Contractor's working methods / mitigation measures and discuss with IEC, Engineer and Contractor	ET
			Identify and agree on improvements such as changes in working methods and/or additional mitigation measures	ET, IEC, Engineer, Contractor
			Implement the recommended improvements	Contractor
		Consecutive repeats of Outcome 2b	Review Alert levels and propose revised Alert levels where necessary to prevent exceedances at SR stations (due to project activities)	ET
			Verify the revised Alert levels	IEC
			Notify and agree with EPD on revised Alert levels	ET, Project Proponent

Annex E Site Audit Summary

Dates of Inspection: 18/2/2020 and 27/2/2020

Summary of Findings

General

- No environmental deficiency identified.

Water Quality & Marine Ecology

- Silt plume was observed during the course of dredging. Additional mitigation measures were implemented as follows:

    1. TSHD will keep close monitoring of any abnormal water conditions and adjust its dredging operations to minimize impact to the water quality during its works.

    2. TSHD will control its trail pipe raising operation more carefully to minimize impact to water quality by this operation. Raising will be done slowly and steadily.

    3. Close monitoring will be carried out by trail pipe operators to ensure such mitigation measures will minimize impact to water quality during trail pipe raising.

Hazard to Life

- No environmental deficiency identified.

Waste Management

- No environmental deficiency identified.

Noise

- No environmental deficiency identified.

Annex F Summary of EMIS

EM&A Log Ref.	Mitigation Measures	Implementation Status
EM&A: 2.10	Dredging shall be conducted by either closed grab dredgers and/or TSHDs. The grab dredgers shall not be operating at the same time as the TSHDs.	C
EM&A: 2.10	The dredging rates for the Project shall not exceed the maximum allowable dredging rates for each respective working zone and for the respective dredging method.	C
EM&A: 2.10	Adequate clearance to the seabed shall be provided to vessel at all states of tide.	C
EM&A: 2.10	No overflow is permitted and use of lean mixture overboard (LMOB) system is prohibited.	C
EM&A: 2.10	Closed grab capacity of grab dredger should not be less than 8 m3 (except near the submarine pipeline where smaller grabs may be used).	N/A
EM&A: 2.10	Cage-type silt curtains (at least 10m depth) shall be deployed for grab dredgers in accordance with the Silt Curtain Deployment Plan	N/A
EM&A: 3.2	No dredging shall be carried out at Zone 4 of the navigation channel during the calving season for the Finless Porpoise from February to April.	C
EM&A: 3.2	As far as practicable, vessel movements to disposal grounds bypass the Finless Porpoise habitat area in southwest and east Lamma.	C
EM&A: 3.2	Implement a maximum speed limit of 10 knots in south and east Lamma waters.	C
EM&A: 3.2	All vessel operators working on the Project should be thoroughly briefed on the possible occurrence of Finless Porpoise within and in the vicinity of the Project Area and along routes to the Project Area, as well as rules for safe vessel operation around cetaceans.	C
EM&A: 5.2 & 5.3	Marine vessels should avoid traveling during berthing and unberthing of coal vessel.	C
EM&A: 5.2 & 5.3	As far as practicable, marine vessels should avoid traveling after sunset or under low visibility when the works area is near submarine pipeline.	C
EM&A: 5.2 & 5.3	Working vessel not to stay right above the submarine pipeline unless it is necessary.	C
EM&A: 5.2 & 5.3	TSHD should not lower suction pipes in close proximity of the submarine pipeline.	C
EM&A: 5.2 & 5.3	TSHD should not stay near the submarine pipeline unless approval is granted.	C
EM&A: 6.1	The number of dredgers and operation conditions specified in the applicable CNPs should be strictly followed.	C
EM&A: 7.2 & 7.3	Monitoring of the barge loading should be conducted to ensure that loss of material does not take place during transportation.	C
EM&A: 7.2 & 7.3	All barges and hoppers shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material.	C

EM&A Log Ref.	Mitigation Measures	Implementation Status
EM&A: 7.2 & 7.3	The Real Time Tracking and Monitoring of Vessel (RTTMV) system should be installed in TSHD for monitoring the mud dumping activities.	C

Remarks:

C - Compliance with mitigation measure
NC - Non-compliance with mitigation measure
N/A - Not Applicable

Annex G

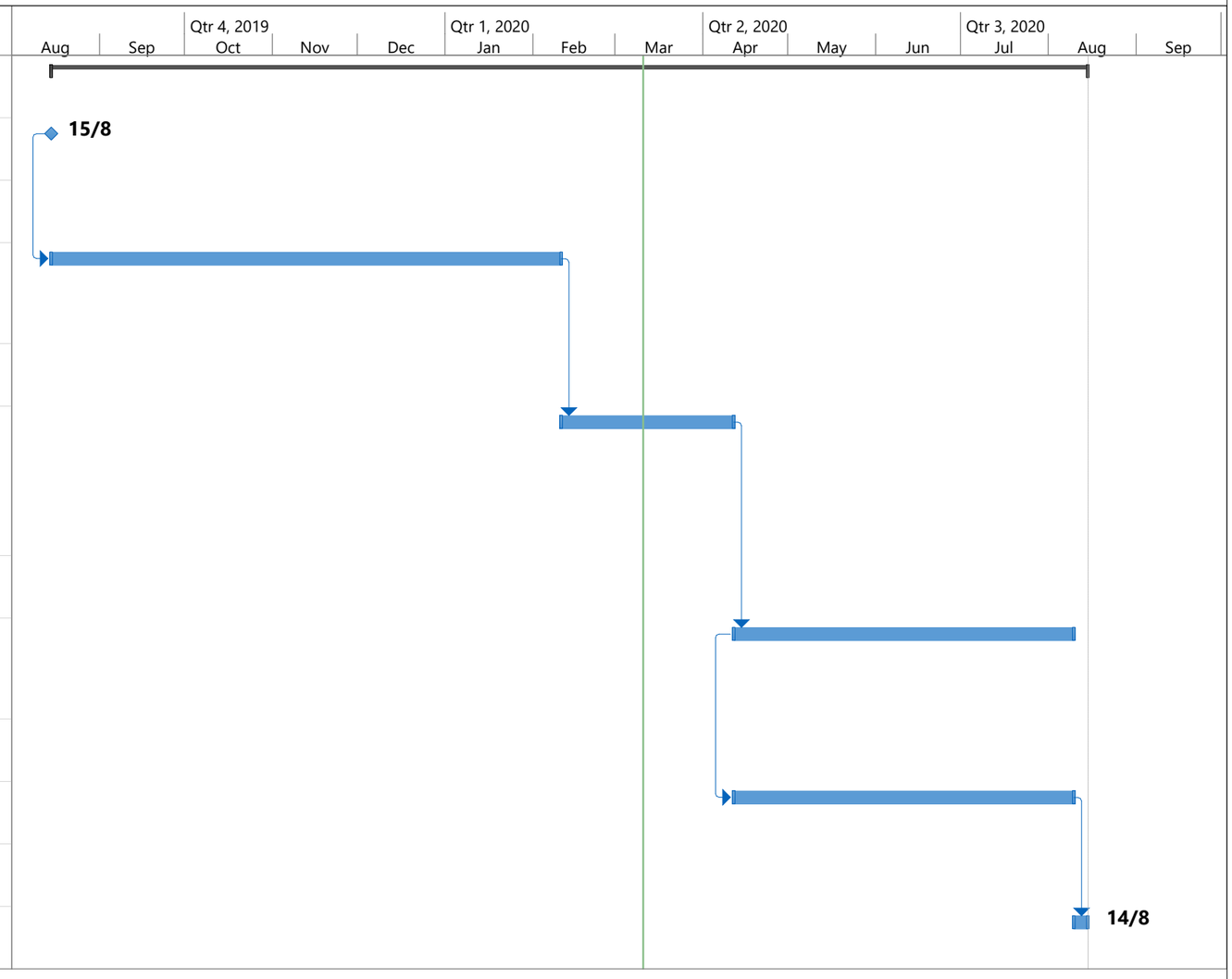
Tentative Works Programme

LOA : 14 June 2019
Contract Commencement :
15 August 2019

Contract No. 18/8005
The Hong Kong Electric Co., Ltd.
Lamma Power Station Navigation Channel Improvement 2019
(HKE Programme - Dredging Works)

UDL - Gitanes Joint Venture

ID	Task Name	Duration	Start	Finish
1	**CONTRACT DURATION**	**366 days**	**Thu 15/8/19**	**Fri 14/8/20**
2	Contract Commencement	0 days	Thu 15/8/19	Thu 15/8/19
3				
4	Pre-requisition & Application of Statutory License / Permit for dredging works	180 days	Thu 15/8/19	Mon 10/2/20
5				
6	Dredging by Trailer Suction Hopper Barge for Majority of the Site except those near Existing Structure & Remedial Trimming	61 days	Tue 11/2/20	Sat 11/4/20
7				
8	Dredging by Grab Dredgers for Remedial Trimming and Existing Jetty Structure	120 days	Sun 12/4/20	Sun 9/8/20
9				
10	Silt Curtain Deployment	120 days	Sun 12/4/20	Sun 9/8/20
11				
12	Plant Demobilization	5 days	Mon 10/8/20	Fri 14/8/20



HKE Programme -
Dredging Works
Date: February 2020

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	