

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



Improvement Dredging for Lamma Power Station Navigation Channel

Final Environmental Monitoring & Audit Review Report

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



ENVIRONMENTAL IMPACT ASSESSMENT (EIA) ORDINANCE, CAP. 499

ENVIRONMENTAL PERMIT NO. EP-535/2017

**IMPROVEMENT DREDGING FOR
LAMMA POWER STATION NAVIGATION CHANNEL**



Report Title	Final EM&A Review Report
Date	14 January 2022
Certified by	 (Mr. Kenneth Fung, Environmental Team Leader)
Verified by	 Mr. Y T Tang (AECOM Asia Company Limited, Independent Environmental Checker)

TABLE OF CONTENT

EXECUTIVE SUMMARY

- 1. INTRODUCTION..... 2**
 - 1.1 Background 2
 - 1.2 Project Organisation 2
 - 1.3 Construction Works undertaken 2
 - 1.4 Summary of EM&A Requirements 4
- 2. WATER QUALITY MONITORING 6**
- 3. ENVIRONMENTAL AUDIT 7**
 - 3.1 Assessment of Environmental Monitoring Results 7
 - 3.2 Site Environmental Audit 8
 - 3.3 Waste Management 9
 - 3.4 Implementation Status of Environmental Mitigation Measures 9
 - 3.5 Implementation Status of Event/Action Plans 9
 - 3.6 Summary of Enquiries/Complaints Received 9
 - 3.7 Summary Record of Notification of Summons and Successful Prosecutions 9
- 4. CONCLUSION..... 10**

LIST OF TABLES

Table 1.1	Construction Activities and Their Corresponding Environmental Mitigation Measures
Table 3.1	Summary of Alert, Action and Limit Level Exceedances on Monitoring Parameters
Table 3.2	Environmental Complaints Received

LIST OF FIGURE

Figure 1.1	Project Area
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ANNEX

Annex A	Organisation Chart
Annex B	Amount of Dredged and Dumped Marine Sediment
Annex C	Water Quality Monitoring
Annex D	Alert/Event and Action Plans
Annex E	Site Audit Summary
Annex F	Summary of EMIS

EXECUTIVE SUMMARY

This is the Final Environmental Monitoring and Audit (EM&A) Review Report for the project “Improvement Dredging for Lamma Power Station Navigation Channel” prepared by the Environmental Team (ET). This report presents the environmental mitigation measures and environmental monitoring and audit for the Project, as well as comparing the results of the EM&A data against the prediction of the EIA Report and reviewing the environmental monitoring methodology.

Water Quality Monitoring

Marine water quality monitoring for the dredging works was conducted in three different phases (viz. the baseline, impact and post-dredging monitoring) according to the required standard set out in the EM&A programme. The baseline water quality monitoring was conducted three days per week for four weeks in January 2019 (dry season), and four weeks in July and August 2019 (wet season). The construction phase water quality monitoring commenced in February 2020 and completed in September 2021. Post-dredging monitoring was conducted for four weeks in November 2021.

Environmental Audit

Some of the water quality monitoring results triggered the relevant Action or Limit Levels during the construction phase of the Project, and the corresponding investigations concluded that the cases were not related to the Project. The dredging activities throughout the construction phase did not cause adverse impact to all water quality sensitive receivers. Moreover, relevant water quality mitigation measures had been implemented. The results of the post-dredging water quality monitoring showed no significant changes from baseline, and hence the long-term water quality is considered to be unaffected by the Project.

Routine site audits were carried out by ET on a weekly basis during the course of dredging work to monitor environmental issues at the construction sites to ensure that all mitigation measures were implemented timely and properly. In addition, site inspections were also carried out by IEC on a monthly basis to audit the water quality monitoring and/or site works. The site conditions were generally satisfactory.

Environmental Complaints

No complaint against the Project was received during the entire construction period.

Environmental Summon and Successful Prosecution

No notifications of summon or successful prosecution was received during the entire construction period.

Concluding Remarks

The environmental monitoring was performed to the required standard set out in the EM&A programme. No significant deficiencies of the EM&A methodology and programme were found. 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 m³, subject to fine-tuning against the actual existing seabed profile. The Project Area is shown in [Figure 1.1](#).

The majority of dredging work was carried out by Trailer Suction Hopper Dredger (TSHD) whereas the minority of dredging work for remedial trimming and near the existing jetty structure was carried out by grab dredger. All construction works were completed in September 2021.

The EM&A programme for construction works was commenced in February 2020. The information for the termination proposal of EM&A programme was submitted to EPD on 8 October 2021.

This report presents the environmental mitigation measures and environmental monitoring and audit for the Project, as well as comparing the results of the EM&A data against the prediction of the EIA Report and reviewing the environmental monitoring methodology.

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

The construction works of the Project commenced in February 2020. Construction activities undertaken during the entire construction period were dredging and dumping of dredged mud, and were completed in September 2021.

The main construction activities carried out during the entire construction period and the corresponding environmental mitigation measures are summarized in [Table 1.1](#). The implementation of major mitigation measures in the period is provided in [Annex F](#).

Table 1.1 Construction Activities and Their Corresponding Environmental Mitigation Measures

Construction Activities	Environmental Mitigation Measures
Dredging	<p>Water Quality</p> <ul style="list-style-type: none"> - One number of TSHD was operated for the Project. - There was no concurrent or mixed use of grab dredger and TSHD operation. - Closed grab capacity was not less than 8m³ (except for dredging works near submarine pipeline). - Cage-type silt curtain (at least 10m depth) was used for grab dredger operation. - No operation of more than 5 grab dredgers concurrently at any time was allowed. - 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. <p>Marine Ecology</p> <ul style="list-style-type: none"> - 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. <p>Hazard to Life</p> <ul style="list-style-type: none"> - 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.

Construction Activities	Environmental Mitigation Measures
	<p data-bbox="509 387 580 416">Noise</p> <ul data-bbox="600 427 1394 562" style="list-style-type: none"><li data-bbox="600 427 1394 495">– General noise mitigation measures were employed at work site throughout the construction phase.<li data-bbox="600 499 1394 562">– The number and type of plants and operation conditions as specified in the CNP were strictly followed. <p data-bbox="509 607 762 636">Waste Management</p> <ul data-bbox="600 647 1394 882" style="list-style-type: none"><li data-bbox="600 647 1394 714">– All barges for transportation of dredged materials were fitted with tight bottom seals to prevent leakage.<li data-bbox="600 719 1394 786">– All vessels were filled to a level such that dredged materials would not spill over during loading and transportation.<li data-bbox="600 790 1394 819">– Dredged wastes were disposed of at Licensed dumping site.<li data-bbox="600 824 1394 882">– Records of the quantities of waste generated and disposed of off-site were taken.

1.4 Summary of EM&A Requirements

All the EM&A programme/ requirements as stated in the EM&A Manual, EIA and EP were fully implemented for the Project. The EM&A program requires environmental monitoring of water quality. The detailed EM&A monitoring work for water quality is described in [Section 2](#) of this report.

The following environmental audits during the entire construction period are provided in [Section 3](#) of the report:

- Environmental monitoring results;
- Site environmental audit results;
- Records of dredged/dumped mud;
- The implementation status of environmental protection and pollution control/ mitigation measures;
- Implementation status of event/action plans;
- Summary of enquiries/complaints Received; and
- Summary record of notification of summons and successful prosecutions

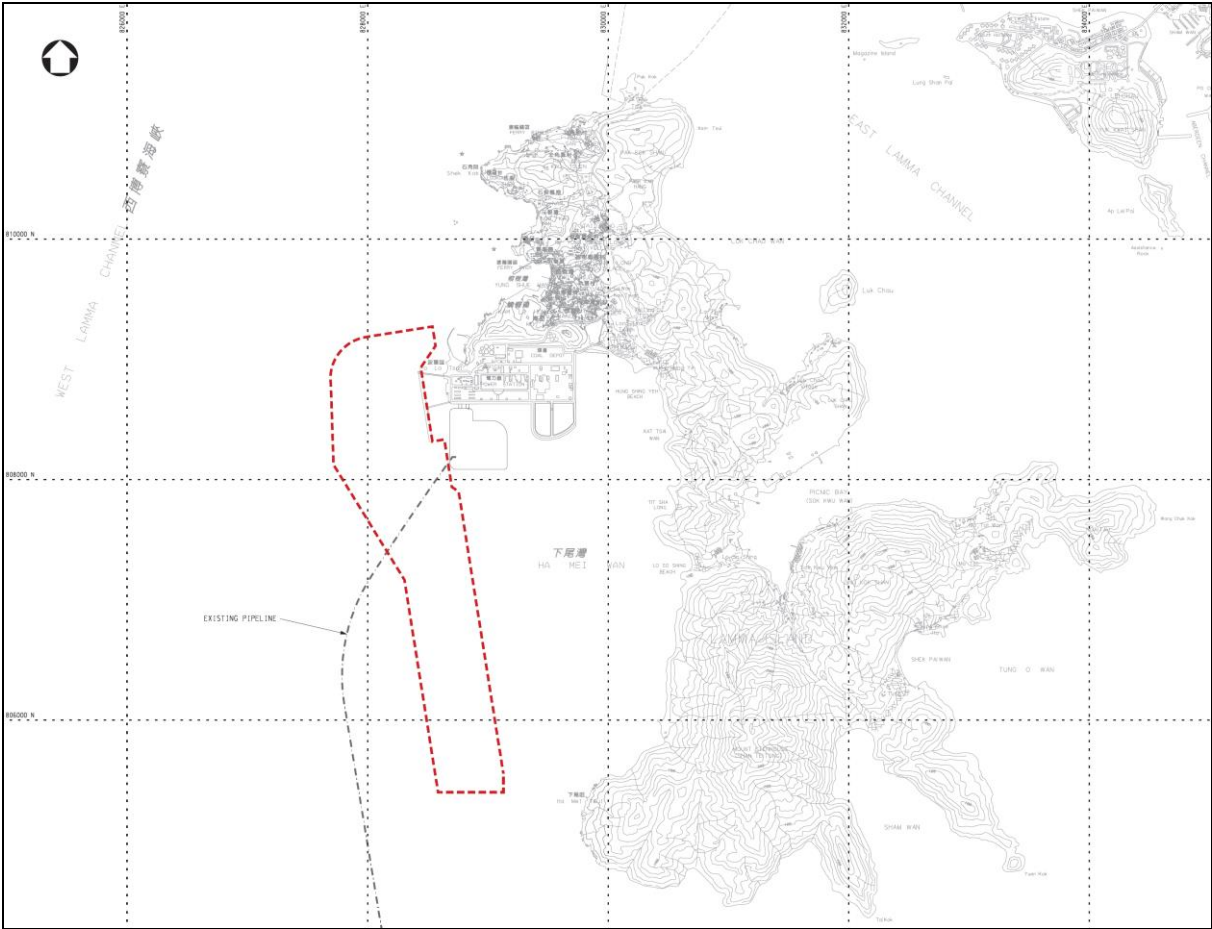


Figure 1.1 Project Area

2. WATER QUALITY MONITORING

The baseline water quality monitoring was conducted three days per week for four weeks in January 2019 (dry season), and four weeks in July and August 2019 (wet season). The construction phase water quality monitoring commenced in February 2020 and completed in September 2021. After the completion of all dredging activities, a post-dredging monitoring was carried out for four weeks in November 2021.

HK Electric commissioned Mott MacDonald Hong Kong Limited to carry out water quality monitoring works of the Project. The results for post-dredging water quality monitoring and statistical analysis of monitoring data for three monitoring phases (viz baseline, impact and post-dredging) is provided in [Annex C](#)

3. ENVIRONMENTAL AUDIT

3.1 Assessment of Environmental Monitoring Results

Summary of Exceedances

Some of the testing results triggered the corresponding Action or Limit Levels during the entire construction period as summarised in [Table 3.1](#).

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 30/09/2021	0	7	62	Investigation concluded that the exceedances were not related to the Project. Please refer to Section 2 and Annex C of the report for details.
2	DO (Bottom)	18/02/2020 30/09/2021	0	49	13	
3	Turbidity	18/02/2020 30/09/2021	0	1	0	
4	SS	18/02/2020 30/09/2021	N.A.	45	4	

Review of Reasons for and the Implications of Non-compliance

There were 102 Action Level and 79 Limit Level exceedances during the impact monitoring period. All cases were investigated and the investigations concluded that the cases were not related to the Project with the following reasons:

- The affected SR stations were upstream of the Project during the corresponding tide.
- The exceedance located at a great distance from the Project Site with no evidence of effect from the Project.
- The exceedance appeared to be due to local sources not related to the Project.
- No dredging work was carried out on the dates of exceedance; or no works was carried out around the concerned sampling time.
- Similar low DO levels were recorded at the upstream control stations.
- The active works was far from the affected stations.

Summary of Actions Taken

Relevant water quality mitigation measures had been implemented against the non-compliance are as follows:

- Cage-type silt curtain was deployed for grab dredger in accordance with the Silt Curtain Deployment Plan.
- Dredging rate was subject to a maximum limit specified in the Environmental Permit.
- Vessels had adequate clearance to the seabed during all states of the tide.
- Grab was closed tightly to minimize loss of sediment during dredging.
- Special care was taken during lowering and lifting grabs to minimize unnecessary disturbance to the seabed.
- The dredging contractor kept close monitoring of any abnormal water conditions and adjusted its dredging operations to minimize impact to the water quality during its works.
- Full time divers manned on board carrying out maintenance of silt curtain as and when necessary to ensure minimum impact to water quality during dredging.

Corresponding investigations were carried out for the exceedance cases, and the investigations concluded that the dredging activities did not cause adverse impacts on the water quality at the Project site, the cases were more likely due to natural variations instead. Hence, no further action had to be devised. Nevertheless, the marine water quality results had been closely monitored in order to take corresponding actions to ensure the seawater quality during the impact monitoring period.

Comparing EM&A data with EIA Predictions

The review of EM&A data against EIA predictions has shown that the EM&A data during construction phase of the Project are generally in line with the EIA predictions on the associated water quality impacts. This suggests that the recommended water quality mitigation measures are effective to avoid or alleviate the potential environmental impacts arise from the Project. For details, please refer to [Section 2](#) and [Annex C](#) of the report.

Review of Environmental Monitoring Methodology

The water quality monitoring methodology has been reviewed and based on the day-to-day operation of the water quality monitoring programme and the obtained monitoring results, the monitoring has achieved the required standard set out in the EM&A programme. In addition, the environmental monitoring methodology is considered technically and cost effective. However, several recommendations have been identified for enhancement the EM&A programme for future implementation during recurrent dredging works, including cancellation of Alert Levels for near stations and cessation of monitoring station SR10. For details, please refer to [Section 2](#) and [Annex C](#) of the report.

3.2 Site Environmental Audit

Site audits were carried out by ET on a weekly basis during the course of dredging work to monitor environmental issues at the construction sites to ensure that all mitigation measures were implemented timely and properly. In addition, site inspections were also carried out by IEC on a monthly basis to audit the water quality monitoring and/or site works. The site conditions were generally satisfactory. The site audit findings for the reporting period are summarized in [Annex E](#).

3.3 Waste Management

The daily records of dredged / dumped volume of dredged mud were already provided in the monthly EM&A reports. Dredged materials were disposed to the designated locations within South Cheung Chau Open Sea Sediment Disposal Area, East of Sha Chau Contaminated Mud Pit, East Ninepin Open Sea Sediment Disposal Area. The total bulk volume of dredged material was 4,593,300 m³ with breakdown for each month shown in [Annex B](#).

3.4 Implementation Status of Environmental Mitigation Measures

Mitigation measures detailed in the permits and the EM&A Manual were implemented. A summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in [Annex F](#).

3.5 Implementation Status of Event/Action Plans

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

3.6 Summary of Enquiries/Complaints Received

There was no environmental complaint received for the Project.

Table 3.2 Environmental Complaints Received

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

3.7 Summary Record of Notification of Summons and Successful Prosecutions

There was no summon or successful prosecution received for the Project.

4. CONCLUSION

The construction work under the Project commenced in February 2020 and was completed in September 2021. Water quality monitoring and environmental audit works were implemented in accordance with the updated EM&A Manual and the requirement under EP-535/2017.

Some of the water quality monitoring results triggered the relevant Action or Limit Levels during the construction phase of the Project, and the corresponding investigations concluded that the cases were not related to the Project. To conclude, the dredging activities throughout the construction phase did not cause adverse impact to all water quality sensitive receivers. Moreover, relevant water quality mitigation measures had been implemented against the non-compliance. The results of the post-dredging water quality monitoring showed no significant changes from baseline, and hence the long-term water quality is considered to be unaffected by the Project.

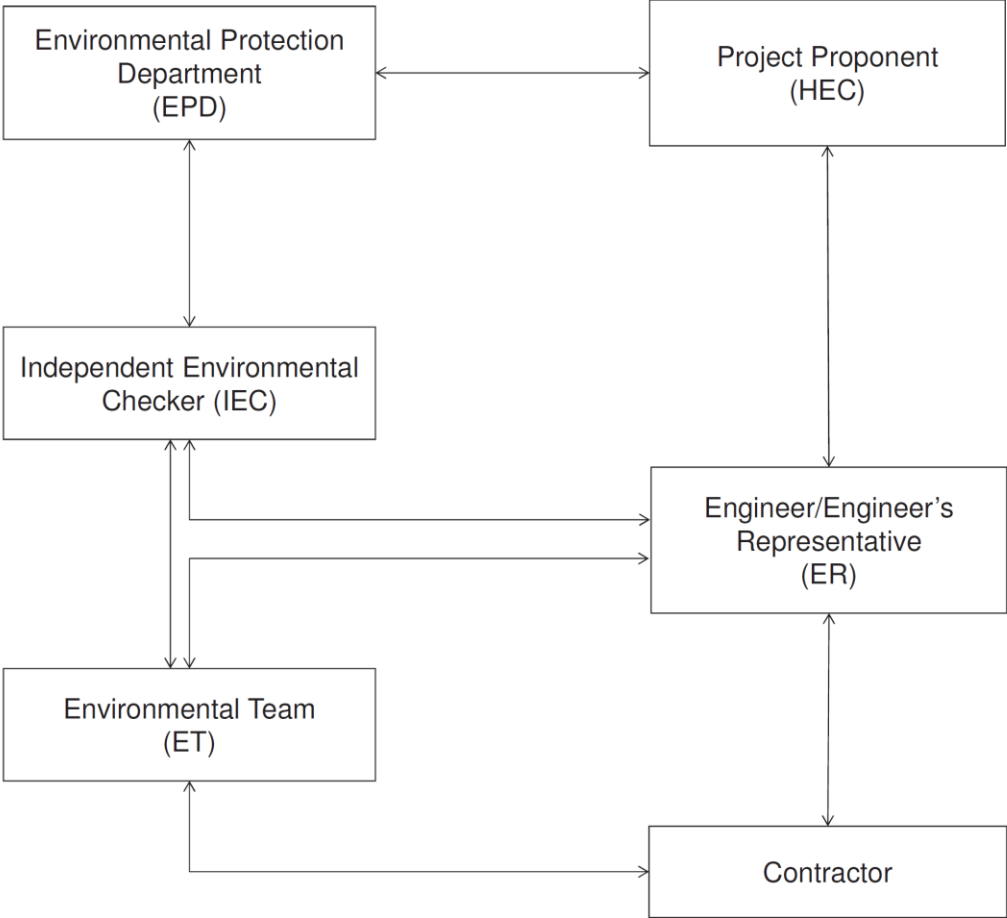
The environmental monitoring was performed to the required standard set out in the EM&A programme and the environmental monitoring methodology is considered technically and cost effective. No significant deficiencies of the EM&A methodology and programme were found. Some recommendations for enhancement of the EM&A programme are suggested for future implementation during recurrent dredging works of the Project where applicable.

The required environmental mitigation measures for water quality were implemented along with construction progress of the Project. No complaint against the Project was received. No prosecution and summons were received for the Project.

In view of the above, it is concluded that the environmental performance of the project was generally satisfactory.

Annex A Organization Chart

A1: Project Organisation Chart

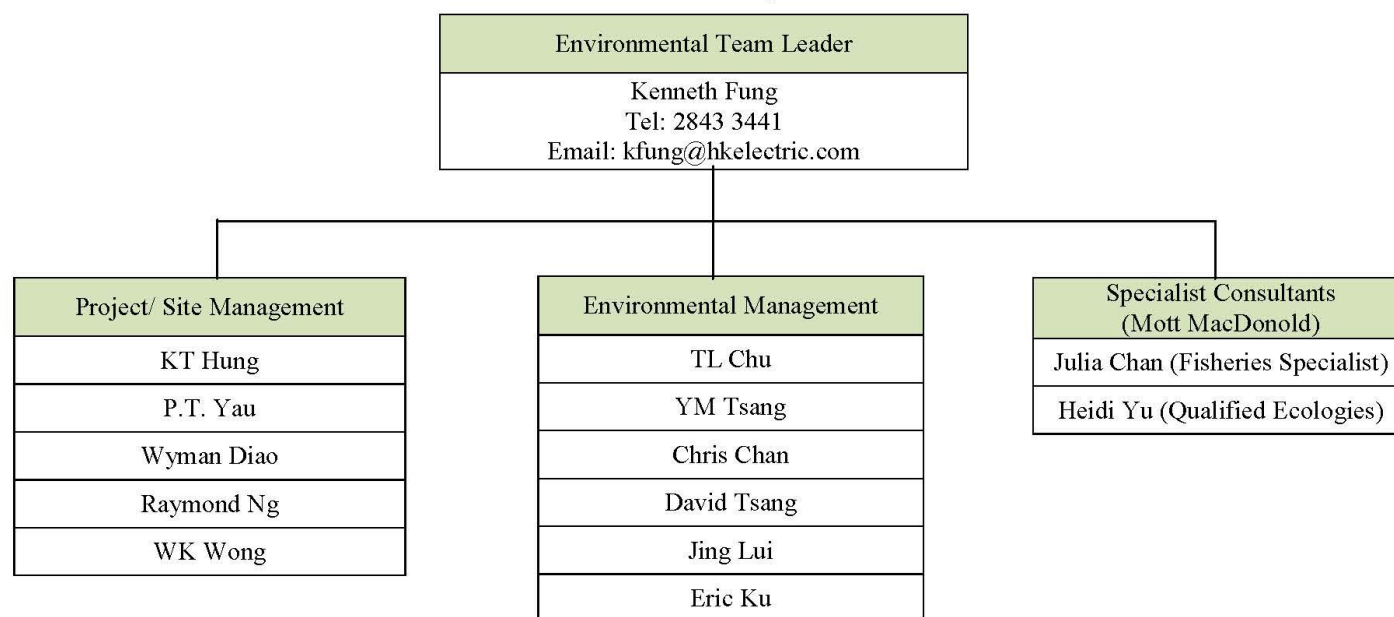


A2: Environmental Team Organisation Chart



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

Environmental Team Organization Chart



Annex B Amount of Dredged and Dumped Marine Sediment

Month	Dredged Marine Mud (bulk volume m³)	Dumped Marine Mud (bulk volume m³)
February 2020	2,145,000	2,145,000
March 2020	1,963,500	1,963,500
April 2020	0	0
May 2020	0	0
June 2020	0	0
July 2020	43,200	43,200
August 2020	58,200	58,200
September 2020	93,600	93,600
October 2020	95,400	95,400
November 2020	85,200	85,200
December 2020	16,200	16,200
January 2021	0	0
February 2021	0	0
March 2021	0	0
April 2021	1,800	1,800
May 2021	4,200	4,200
June 2021	13,800	13,800
July 2021	6,600	6,600
August 2021	4,200	4,200
September 2021	8,400	8,400
Total	4,593,300	4,593,300

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.

Following the interim survey carried out from 13 to 16 March 2020, the bulking factor for TSHD has been adjusted from 4 to 2.8 as directed by EPD. Form A were revised and resubmitted accordingly. Subsequent planning and control of dredging rates for coming works would be based on the adjusted bulking factor.

Annex C

Water Quality Monitoring



Improvement Dredging for Lamma Power Station Navigation Channel

Final Water Quality Monitoring Report

January 2022

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The Hongkong Electric
Company Limited

Improvement Dredging for Lamma Power Station Navigation Channel

Final Water Quality Monitoring Report

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Contents

Executive summary	1
1 Introduction	2
1.1 Project Background	2
1.2 Implementation Status of Environmental Mitigation Measures	2
2 Monitoring Methodology	3
2.1 Monitoring Equipment and Methodology	3
2.2 Laboratory Measurement / Analysis	3
2.3 Monitoring Frequency and Duration	3
2.4 Monitoring Locations	4
2.5 Monitoring Parameters	5
3 Action and Limit Levels for Sensitive Receiver Stations, and Alert Levels for Near Stations	6
3.1 Action and Limit Levels	6
3.2 Reduction of Maximum Allowable Dredging Rates	7
3.3 Alert Levels	7
3.4 Review of Alert Levels	7
4 Monitoring Results	9
4.1 Summary of the Exceedances	9
4.2 EM&A Data over the Monitoring Period	11
4.3 EM&A Data with the EIA Predictions	12
4.4 Review of Environmental Monitoring Methodology	12
4.5 Recommendations on the EM&A Programme	12
5 Conclusion	14
Appendices	15
A. Calibration Certificates for Post-dredging Monitoring	16
B. Quality Assurance and Quality Control (QA&QC) Results for Post-dredging Monitoring	17
C. Post-dredging Water Quality Monitoring Results	18

D.	Graphical Presentations of Post-dredging Water Quality Monitoring Results	19
E.	EM&A Data over the Monitoring Period	20
F.	EM&A Data with the EIA Predictions	21

Tables

Table 2.1:	Water Quality Monitoring Equipment	3
Table 2.2:	Locations of Water Quality Monitoring Stations	4
Table 3.1:	Calculated Action and Limit Levels	6
Table 3.2:	Reduction of Maximum Allowable Hourly Dredging Rates due to Exceedances	7
Table 3.3:	Calculated Initial Alert Levels	7
Table 4.1:	Summary of the Exceedances	9

Figures

Figure 2.1:	Water Quality Monitoring Locations
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Executive summary

The Project “Improvement Dredging for Lamma Power Station Navigation Channel” commenced in February 2020 and was completed in September 2021. This is the Final Water Quality Monitoring Report, presenting environmental mitigation measures and environmental monitoring and audit on marine water quality for the Project, as well as reviewing the results of the EM&A data against the prediction of the EIA Report. The Project was implemented according to the EP-535/2017. The required environmental mitigation measures for water quality were implemented along with construction progress of the Project.

The baseline water quality monitoring was conducted three days per week for four weeks in January 2019 (dry season), and four weeks in July and August 2019 (wet season). The construction phase water quality monitoring commenced in February 2020 and completed in September 2021. Post-dredging monitoring was conducted for four weeks in November 2021.

Some of the water quality monitoring results triggered the relevant Action or Limit Levels during the construction phase of the Project, and the corresponding investigations concluded that the cases were not related to the Project. To conclude, the dredging activities throughout the construction phase did not cause adverse impact to all water quality sensitive receivers. Moreover, relevant water quality mitigation measures had been implemented. The results of the post-dredging water quality monitoring showed no significant changes from baseline, hence the long term water quality is considered to be unaffected by the Project.

The water quality monitoring was performed according to the required standard set out in the EM&A programme and the monitoring methodology is considered technically and cost effective. No significant deficiencies of the EM&A methodology and programme were found. Some recommendations for enhancement of the EM&A programme are suggested in **Section 4.5** for future implementation during recurrent dredging works of the Project where applicable.

1 Introduction

1.1 Project Background

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 depth¹ of -16.5 mPD.

The construction phase of the Project commenced on 18 February 2020. This Final Water Quality Monitoring Report summarizes the water quality monitoring before, during and after dredging as part of the EM&A programme for the Project.

1.2 Implementation Status of Environmental Mitigation Measures

The Contractor had implemented environmental mitigation measures and fulfilled requirements as recommended in the approved EIA Report, Environmental Permit and EM&A manual. During the environmental site inspections, all mitigation measures were implemented timely and properly. It is concluded that the environmental mitigation measures as recommended in the EIA Report were implemented satisfactorily.

To minimise the potential water quality impacts associated with the Project, the following major mitigation measures had been applied to all dredging activities:

- There was no concurrent or mixed use of grab dredger and trailing suction hopper dredger (TSHD) operation.
- Closed grab capacity was not less than 8m³ (except for dredging works near submarine pipeline).
- Cage-type silt curtain (at least 10m depth) was used for grab dredger operation.
- No operation of more than 5 grab dredgers concurrently at any time was allowed.
- 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.

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 °C 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 post-dredging monitoring for water quality parameters are provided in **Appendix A**, while the calibration certificates for baseline and construction phase monitoring can be referred to Appendix 2.1 of the Baseline Water Quality Monitoring Report and Appendix A of the corresponding monthly EM&A reports.

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 (QA&QC) results for post-dredging monitoring are presented in **Appendix B**, while the QA/QC results for baseline and construction phase monitoring can be referred to Appendix 2.2. of the Baseline Water Quality Monitoring Report and Appendix B of the corresponding monthly EM&A reports.

2.3 Monitoring Frequency and Duration

The water quality monitoring was conducted three days per week at mid-flood and mid-ebb tides, at 18 water quality monitoring stations during baseline and construction phase monitoring, and

13 water quality monitoring stations (i.e. excluded near stations) during post-dredging monitoring. 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 baseline water quality monitoring was conducted for four weeks in January 2019 (dry season), and four weeks in July and August 2019 (wet season). The construction phase water quality monitoring commenced in February 2020 and terminated in September 2021. Post-dredging monitoring was conducted in November 2021.

2.4 Monitoring Locations

The monitoring was conducted at a total of 18 water quality monitoring stations during baseline and construction phase monitoring, comprising 10 SR stations, five near stations and three control stations. Near stations (i.e. 5 water quality monitoring stations) were excluded during post-dredging monitoring. 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.

Table 2.2: Locations of Water Quality Monitoring Stations

ID	Station	Easting	Northing	Remarks
SR1	HK Electric Power Station Intake	829194	808600	<ul style="list-style-type: none"> Monitored for SS only
SR2	Hung Shing Yeh Beach	830200	808700	<ul style="list-style-type: none"> Monitored during bathing season only (March to October inclusive)
SR3	Lo So Shing Beach	830450	807300	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> For monitoring potential impacts to SR5 and SR4 during flood tide. Not required in post-dredging monitoring.
A2	Near station for Zone 2	829053	807945	<ul style="list-style-type: none"> For monitoring potential impacts to SR1 and SR2 during flood tide. Not required in post-dredging monitoring.

ID	Station	Easting	Northing	Remarks
A3	Near station for Zone 3	829187	807100	<ul style="list-style-type: none"> For monitoring potential impacts to SR3 during both flood and ebb tide. Not required in post-dredging monitoring.
A4	Near station for Zone 4 (east)	829427	805520	<ul style="list-style-type: none"> For monitoring potential impacts to SR6 during ebb tide. Not required in post-dredging monitoring.
A5	Near station for Zone 4 (south)	829267	805134	<ul style="list-style-type: none"> For monitoring potential impacts to SR7 during ebb tide. Not required in post-dredging monitoring.
C1	Control Station 1	828000	813500	
C2	Control Station 2	825000	808000	
C3	Control Station 3	829000	802000	

2.5 Monitoring Parameters

For the 10 SR stations (SR1 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 Action and Limit Levels for Sensitive Receiver Stations, and Alert Levels for Near 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.

- In the event of water quality monitoring results at SR stations exceeding the Action and/or Limit levels for water quality, the actions in accordance with the Event and Action Plan presented in Table 2-4 of the updated EM&A Manual shall be carried out.

3.2 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 3.2**. 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 3.2: 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.

3.3 Alert Levels

The Initial Alert levels for water quality at near stations are presented in **Table 3.3**.

Table 3.3: 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				

Notes:

- Wet season: April to September; Dry season: October to March.
- Upon identification of an exceedance of Alert level at the near stations (A1 to A5), the actions specified in Table 2-6 of the updated EM&A Manual shall be implemented.

3.4 Review of Alert Levels

As stated in the Baseline Water Quality Monitoring Report of the Project (dated October 2019), the Initial Alert Levels should be reviewed when the project has accumulated at least two months' worth of impact monitoring field data.

Impact monitoring data from February to March and July to August 2020 were reviewed. During this period, there were no exceedances of turbidity data at sensitive receiver stations that triggered the relevant Action and/or Limit Levels, nor any exceedances at near stations that triggered the corresponding Alert Level. Impact monitoring data during this period showed no correlation between near stations and sensitive receiver stations, which is to be expected in the absence of any turbidity arising from the dredging activities of the project.

As the purpose of the review is to check the adequacy of the Alert Levels as early indication of potential exceedance of turbidity at sensitive receiver stations, the absence of any exceedance events means that the information is inadequate to derive any updates to the Alert Levels. It is recommended to review the Alert Levels for turbidity once there are adequate exceedance cases for reference.

Since there was only one exceedance case of turbidity in August 2021, which was also the only case between September 2020 and September 2021, no further review of Alert Levels for turbidity was carried out during the remaining construction phase monitoring.

4 Monitoring Results

Marine water quality monitoring was conducted during baseline, construction phase and post-dredging phase. All monitoring data and graphical presentation of the monitoring results during baseline and construction phase can be referred to the Baseline Water Quality Monitoring Report and corresponding monthly EM&A reports. **Appendix C** and **Appendix D** presents the post-dredging monitoring data and graphical presentation of the monitoring results respectively.

4.1 Summary of the Exceedances

Some of the testing results triggered the corresponding Action or Limit Levels during the construction phase, and investigations were conducted accordingly. **Table 4.1** presents the summary of the exceedances at SR stations during mid-ebb and mid-flood tide for the entire construction phase period.

Table 4.1: Summary of the Exceedances

Date	Parameter(s)	Affected Station(s)	Tide	Exceedance Type
20 Feb 2020	SS	SR5	Ebb tide	Limit Level
22 Feb 2020	SS	SR5	Ebb tide	Action Level
24 Feb 2020	SS	SR6	Flood tide	Action Level
28 Feb 2020	SS	SR6	Flood tide	Limit Level
		SR7, SR10	Flood tide	Action Level
2 Mar 2020	SS	SR2, SR3, SR5	Ebb tide	Action Level
		SR2, SR3	Flood tide	Action Level
4 Mar 2020	SS	SR3, SR6	Ebb tide	Action Level
6 Mar 2020	SS	SR2, SR5, SR10	Ebb tide	Action Level
9 Mar 2020	SS	SR5	Flood tide	Action Level
11 Mar 2020	SS	SR3	Ebb tide	Action Level
18 Mar 2020	SS	SR8	Flood tide	Action Level
8 Apr 2020	SS	SR4	Ebb tide	Action Level
24 Apr 2020	SS	SR7	Flood tide	Action Level
22 May 2020	DO (Surface & Middle)	SR9, SR10	Flood tide	Limit Level
25 May 2020	DO (Surface & Middle)	SR10	Ebb tide	Limit Level
		SR10	Flood tide	Limit Level
27 May 2020	DO (Surface & Middle)	SR8, SR9	Flood tide	Limit Level
8 Jun 2020	DO (Surface & Middle)	SR10	Ebb tide	Limit Level
		SR8, SR9, SR10	Flood tide	Limit Level
10 Jun 2020	DO (Surface & Middle)	SR10	Ebb tide	Limit Level
		SR8, SR9	Flood tide	Limit Level
12 Jun 2020	DO (Surface & Middle)	SR8	Flood tide	Limit Level
15 Jun 2020	DO (Bottom)	SR6, SR7	Flood tide	Action Level
19 Jun 2020	DO (Bottom)	SR2, SR4, SR5	Flood tide	Action Level
29 Jun 2020	DO (Bottom)	SR10	Ebb tide	Action Level
		SR5, SR6	Ebb tide	Limit Level
		SR5	Flood tide	Action Level
		SR10	Flood tide	Limit Level

Date	Parameter(s)	Affected Station(s)	Tide	Exceedance Type
13 Jul 2020	DO (Bottom)	SR2, SR10	Ebb tide	Action Level
31 Aug 2020	SS	SR3, SR4, SR6, SR8, SR10	Ebb tide	Action Level
		SR5	Ebb tide	Limit Level
		SR7	Flood tide	Action Level
30 Sep 2020	SS	SR10	Ebb tide	Action Level
2 Oct 2020	DO (Surface & Middle)	SR4	Ebb tide	Action Level
	DO (Bottom)	SR4, SR5, SR9	Ebb tide	Action Level
	DO (Bottom)	SR2, SR4, SR5, SR8, SR9, SR10	Flood tide	Action Level
5 Oct 2020	DO (Surface & Middle)	SR5	Ebb tide	Action Level
	DO (Bottom)	SR4, SR5, SR8, SR9, SR10	Ebb tide	Action Level
	DO (Surface & Middle)	SR4, SR8, SR9	Flood tide	Action Level
	DO (Bottom)	SR2, SR4, SR5, SR8, SR9, SR10	Flood tide	Action Level
	SS	SR3	Ebb tide	Action Level
7 Oct 2020	DO (Bottom)	SR3, SR9, SR10	Ebb tide	Action Level
	DO (Surface & Middle)	SR5, SR9	Flood tide	Action Level
	DO (Bottom)	SR5, SR8	Flood tide	Action Level
	SS	SR10	Ebb tide	Action Level
9 Oct 2020	DO (Bottom)	SR10	Flood tide	Action Level
12 Oct 2020	DO (Bottom)	SR4	Flood tide	Action Level
16 Oct 2020	SS	SR2, SR5, SR10	Ebb tide	Action Level
27 Oct 2020	SS	SR3, SR4	Ebb tide	Action Level
11 Nov 2020	SS	SR4, SR7, SR9	Flood tide	Action Level
16 Dec 2020	SS	SR10	Ebb tide	Action Level
		SR5, SR6, SR7, SR10	Flood tide	Action Level
		SR8	Flood tide	Limit Level
21 Dec 2020	SS	SR4, SR5, SR10	Ebb tide	Action Level
31 May 2021	DO (Surface & Middle)	SR10	Ebb tide	Limit Level
		SR8, SR9	Flood tide	Limit Level
2 Jun 2021	DO (Surface & Middle)	SR8, SR9	Flood tide	Limit Level
23 Jun 2021	DO (Surface & Middle)	SR8, SR9, SR10	Ebb tide	Limit Level
		SR8, SR9, SR10	Flood tide	Limit Level
	DO (Bottom)	SR8, SR9	Ebb tide	Action Level
		SR8, SR9	Flood tide	Action Level
25 Jun 2021	DO (Surface & Middle)	SR8, SR9, SR10	Ebb tide	Limit Level
		SR8, SR9, SR10	Flood tide	Limit Level
29 Jun 2021	DO (Surface & Middle)	SR8, SR9	Ebb tide	Limit Level
		SR8, SR9	Flood tide	Limit Level
1 Jul 2021	DO (Surface & Middle)	SR8, SR9, SR10	Flood tide	Limit Level
6 Aug 2021	DO (Surface & Middle)	SR9	Ebb tide	Limit Level
	DO (Bottom)	SR2, SR7	Ebb tide	Action Level
		SR4, SR5, SR6	Ebb tide	Limit Level
		SR3	Flood tide	Action Level
		SR2, SR4, SR6, SR7	Flood tide	Limit Level
9 Aug 2021	DO (Surface & Middle)	SR8, SR9	Ebb tide	Limit Level
	DO (Bottom)	SR8	Flood tide	Limit Level
		SR10	Ebb tide	Limit Level

Date	Parameter(s)	Affected Station(s)	Tide	Exceedance Type
		SR7	Flood tide	Action Level
		SR10	Flood tide	Limit Level
	Turbidity	SR8	Flood tide	Action Level
25 Aug 2021	DO (Surface & Middle)	SR8, SR9	Flood tide	Limit Level
27 Aug 2021	DO (Surface & Middle)	SR8, SR9	Flood tide	Limit Level
30 Aug 2021	DO (Bottom)	SR6	Ebb tide	Action Level
		SR6	Flood tide	Action Level
1 Sep 2021	DO (Bottom)	SR7	Ebb tide	Limit Level
13 Sep 2021	DO (Surface & Middle)	SR8, SR9	Ebb tide	Limit Level
		SR8, SR9	Flood tide	Limit Level
	DO (Bottom)	SR5, SR6	Ebb tide	Action Level
		SR6, SR7	Flood tide	Action Level
15 Sep 2021	DO (Surface & Middle)	SR8, SR9, SR10	Ebb tide	Limit Level
		SR8, SR10	Flood tide	Limit Level
27 Sep 2021	DO (Surface & Middle)	SR8	Flood tide	Limit Level
29 Sep 2021	DO (Surface & Middle)	SR8, SR9, SR10	Ebb tide	Limit Level
		SR8, SR9, SR10	Flood tide	Limit Level

All cases were investigated and the investigations concluded that the cases were not related to the Project with the following reasons:

- The affected SR stations were upstream of the Project during the corresponding tide.
- The exceedance located at a great distance from the Project Site with no evidence of effect from the Project.
- The exceedance appeared to be due to local sources not related to the Project.
- No dredging work was carried out on the dates of exceedance; or no works was carried out around the concerned sampling time.
- Similarly low DO levels were recorded at the upstream control stations.
- The active works was far from the affected stations.

Relevant water quality mitigation measures had been implemented against the non-compliance are as follows:

- Cage-type silt curtain was deployed for grab dredger in accordance with the Silt Curtain Deployment Plan.
- Dredging rate was subject to a maximum limit specified in the Environmental Permit.
- Vessels had adequate clearance to the seabed during all states of the tide.
- Grab was closed tightly to minimize loss of sediment during dredging.
- Special care was taken during lowering and lifting grabs to minimize unnecessary disturbance to the seabed.
- The dredging contractor kept close monitoring of any abnormal water conditions and adjusted its dredging operations to minimize impact to the water quality during its works.
- Full time divers manned on board carrying out maintenance of silt curtain as and when necessary to ensure minimum impact to water quality during dredging.

4.2 EM&A Data over the Monitoring Period

The monitoring results obtained during the entire construction phase and post-dredging period are graphically presented in **Appendix E**. In addition, a comparison between the baseline, construction phase and post-dredging monitoring results is presented in **Appendix E**.

The levels of DO measured during the construction phase and post-dredging monitoring at different sampling depths were generally either higher than or similar to those obtained during the baseline monitoring. For the monitoring results of turbidity and SS measured during the construction phase and post-dredging monitoring, it was observed that the interquartile range for turbidity and SS results were lower when compared to those measured during the baseline monitoring. More outliers (i.e. values outside the interquartile range) are apparent during construction phase monitoring, which may be attributed to the unusually high values that were detected and investigated as part of exceedance investigations during construction phase (see **Table 4.1**). However, the post-dredging monitoring did not reveal any long term changes or deterioration overall. Therefore, it was concluded that the dredging works did not cause any long term changes or adverse impacts on the water quality at the Project site.

4.3 EM&A Data with the EIA Predictions

DO and SS levels due to Project activities were predicted at each sensitive receiver stations during the EIA stage. The purpose of this section is to compare the construction phase monitoring data against the EIA predictions. Graphical presentation of the comparison is presented in **Appendix F**.

The majority of DO results (both depth-averaged and bottom) recorded during the construction phase monitoring were higher than the EIA predictions. More DO results were above the EIA prediction during dry season. The monitoring results of SS measured during the construction phase monitoring were generally lower than the EIA predictions. For those results below (i.e. DO) or above (i.e. SS) EIA predictions, most of them were also identified as exceedance cases.

Corresponding investigations were carried out for the exceedance cases, and the investigations concluded that the dredging activities did not cause adverse impacts on the water quality at the Project site, the cases were more likely due to natural variations instead. Summary of investigation findings can be referred to **Section 4.1**.

The review of EM&A data against EIA predictions has shown that the EM&A data during construction phase of the Project are generally in line with the EIA predictions on the associated water quality impacts. This suggests that the recommended water quality mitigation measures are effective to avoid or alleviate the potential environmental impacts arise from the Project.

4.4 Review of Environmental Monitoring Methodology

The water quality monitoring methodology has been reviewed and based on the day-to-day operation of the water quality monitoring programme and the obtained monitoring results, the monitoring has achieved the required standard set out in the EM&A programme. In addition, the environmental monitoring methodology is considered technically and cost effective.

4.5 Recommendations on the EM&A Programme

No significant deficiencies of the EM&A programme were found during the project period. However, several recommendations are identified for the enhancement of the programme in the future.

- Cancellation of Alert Levels for near stations – The purpose of proposing Alert Levels is to identify potential exceedance of DO and turbidity at sensitive receiver stations at an early stage. However, for turbidity, there was only one exceedance case throughout the entire project period, making it impossible to verify the adequacy of the Alert levels for turbidity. Moreover, for DO, values at SR stations that exceeded the Action / Limit Level were frequently lower than the DO level at the corresponding Alert stations. Therefore,

the setting up of Alert Levels may not be effective in providing early warning of exceedances at SR stations, though the near stations themselves are useful for providing additional data for comparison during exceedance events. Hence the future EM&A programme may consider retaining the near stations as reference stations only (without associated Alert Levels and Alert Action Plan).

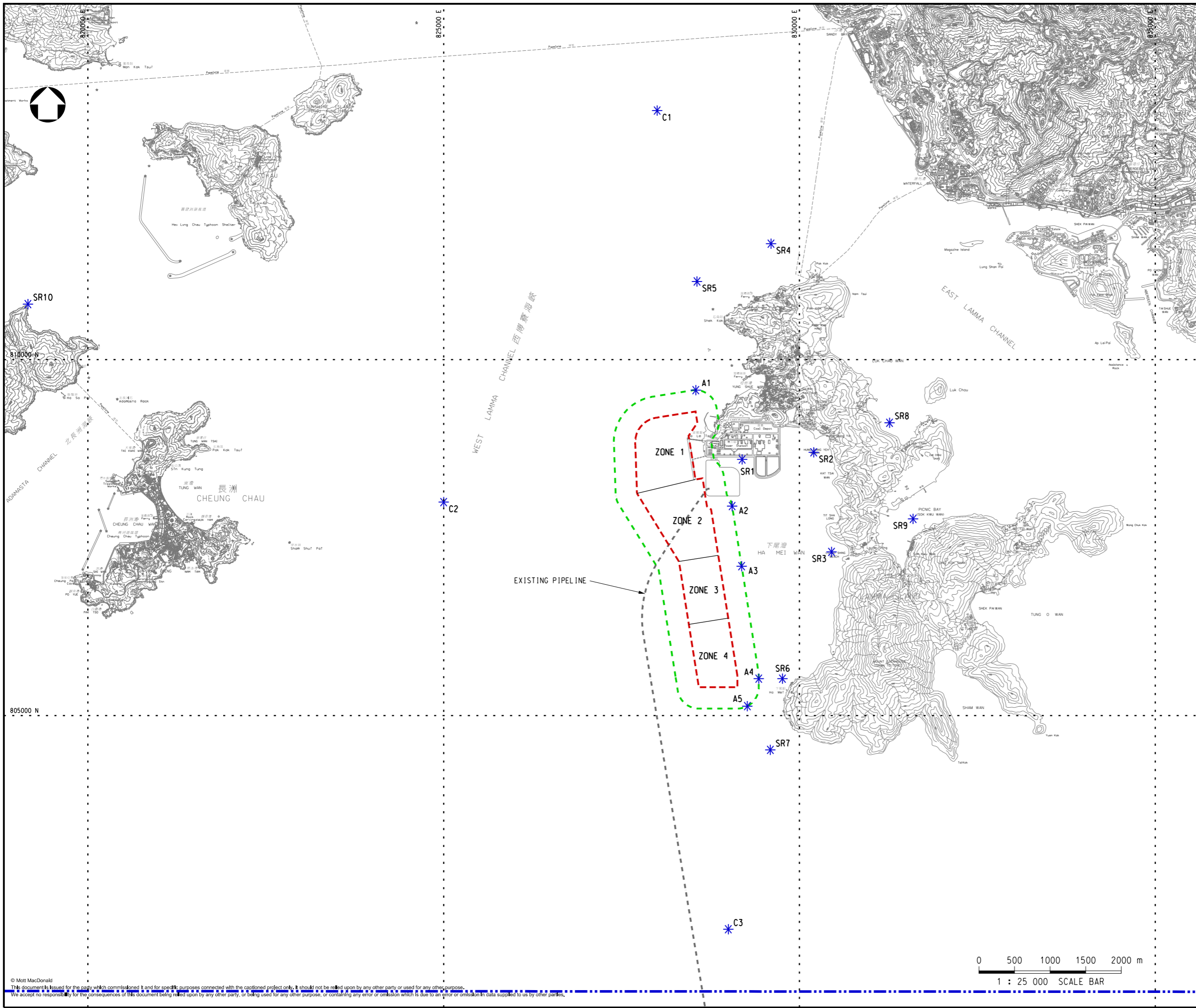
- Cessation of monitoring station SR10 – The project site of Lantau Tomorrow Vision Islands will be in close proximity to SR10 (i.e. Fish Culture Zone at Cheung Sha Wan). In future, the water quality near SR10 will be more likely influenced by the new reclamation project instead of this Project. Therefore, the cessation of SR10 should be considered in future dredging activities within the Lamma Power Station area where applicable.

5 Conclusion

The construction work under the Project was commenced in February 2020 and substantially completed in September 2021. Monitoring work for water quality was implemented in accordance with the updated EM&A Manual and the requirement under EP-535/2017. The required environmental mitigation measures for water quality were implemented along with construction progress of the Project.

Some of the water quality monitoring results triggered the relevant Action or Limit Levels during the construction phase of the Project, and the corresponding investigations concluded that the cases were not related to the Project. To conclude, the dredging activities throughout the construction phase did not cause adverse impact to all water quality sensitive receivers. Moreover, relevant water quality mitigation measures had been implemented against the non-compliance. The results of the post-dredging water quality monitoring showed no significant changes from baseline, hence the long term water quality is considered to be unaffected by the Project.

The water quality monitoring was performed according to the required standard set out in the EM&A programme and the environmental monitoring methodology is considered technically and cost effective. No significant deficiencies of the EM&A methodology and programme were found. Some recommendations for enhancement of the EM&A programme are suggested for future implementation during recurrent dredging works of the Project where applicable.



Notes

Key to symbols

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

Reference drawings

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

**MOTT
MACDONALD**

20/F AIA Kowloon Tower
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100 How Ming Street
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Client

**港燈
HK Electric**

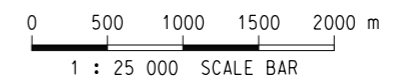
Project

**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	Status	Rev	
1:25000	PRE	P1	
Drawing Number		FIGURE 2.1	



Appendices

A.	Calibration Certificates for Post-dredging Monitoring	16
B.	Quality Assurance and Quality Control (QA&QC) Results for Post-dredging Monitoring	17
C.	Post-dredging Water Quality Monitoring Results	18
D.	Graphical Presentations of Post-dredging Water Quality Monitoring Results	19
E.	EM&A Data over the Monitoring Period	20
F.	EM&A Data with the EIA Predictions	21

A. Calibration Certificates for Post-dredging Monitoring



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA100044
Date of Issue : 22 October 2021
Page No. : 1 of 2

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 : 15M100005
Date of Received : Oct 22, 2021
Date of Calibration : Oct 22, 2021
Date of Next Calibration^(a) : Jan 21, 2022

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Parameter</u>	<u>Reference Method</u>
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	4.09	0.09	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.11	0.10	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
24	23.8	-0.2	Satisfactory
45	44.9	-0.1	Satisfactory

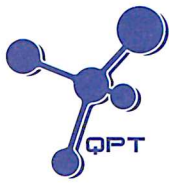
Tolerance limit of temperature should be less than ± 2.0 (°C)

~ 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 from 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 the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.


LEE Chun-ning
Senior Chemist



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA100044
 Date of Issue : 22 October 2021
 Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.12	0.11	-0.01	Satisfactory
1.77	1.84	0.07	Satisfactory
5.01	5.17	0.16	Satisfactory
8.19	8.19	0.00	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 ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
0.001	146.9	153.2	4.29	Satisfactory
0.01	1412	1371	-2.90	Satisfactory
0.1	12890	12409	-3.73	Satisfactory
0.5	58670	57941	-1.24	Satisfactory
1.0	111900	111932	0.03	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.90	-1.00	Satisfactory
20	19.93	-0.35	Satisfactory
30	30.14	0.47	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	9.91	-0.9	Satisfactory
20	19.88	-0.6	Satisfactory
100	97.73	-2.3	Satisfactory
800	796.64	-0.4	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 from relevant international standards.



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA080092
Date of Issue : 27 August 2021
Page No. : 1 of 2

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 : 16H104233
Date of Received : Aug 27, 2021
Date of Calibration : Aug 27, 2021
Date of Next Calibration^(a) : Nov 26, 2021

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,e)

(1) pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.44	0.02	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	10.0	0.0	Satisfactory
20	20.0	0.0	Satisfactory
45	44.9	-0.1	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 from 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 the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards..


LEE Chun-ning
Senior Chemist



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA080092
Date of Issue : 27 August 2021
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.20	0.30	0.10	Satisfactory
2.19	2.27	0.08	Satisfactory
4.99	5.00	0.01	Satisfactory
7.49	7.58	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 ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
0.001	146.9	137.4	-6.47	Satisfactory
0.01	1412	1336.6	-5.34	Satisfactory
0.1	12890	12567.3	-2.50	Satisfactory
0.5	58670	57933.2	-1.26	Satisfactory
1.0	111900	110783	-1.00	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.94	-0.60	Satisfactory
20	20.11	0.55	Satisfactory
30	30.18	0.60	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	9.93	-0.7	Satisfactory
20	20.06	0.3	Satisfactory
100	106.42	6.4	Satisfactory
800	797.21	-0.3	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 from relevant international standards.



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA080093
Date of Issue : 27 August 2021
Page No. : 1 of 2

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 : Aug 27, 2021
Date of Calibration : Aug 27, 2021
Date of Next Calibration^(a) : Nov 26, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Parameter</u>	<u>Reference Method</u>
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	7.45	0.03	Satisfactory
10.01	9.98	-0.03	Satisfactory

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

(2) Temperature


Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
20	20.0	0.0	Satisfactory
45	44.9	-0.1	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 from 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 the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards..


LEE Chun-ning
Senior Chemist



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA080093
Date of Issue : 27 August 2021
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.20	0.28	0.08	Satisfactory
2.19	2.30	0.11	Satisfactory
4.99	4.99	0.00	Satisfactory
7.49	7.53	0.04	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 ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
0.001	146.9	138.4	-5.79	Satisfactory
0.01	1412	1339.3	-5.15	Satisfactory
0.1	12890	12663.2	-1.76	Satisfactory
0.5	58670	57882.1	-1.34	Satisfactory
1.0	111900	110653.4	-1.11	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.93	-0.70	Satisfactory
20	19.89	-0.55	Satisfactory
30	30.20	0.67	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	9.90	-1.0	Satisfactory
20	19.88	-0.6	Satisfactory
100	107.31	7.3	Satisfactory
800	796.34	-0.5	Satisfactory

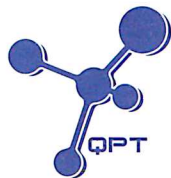
Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

Remark(s): -

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA090071
Date of Issue : 27 September 2021
Page No. : 1 of 2

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 : 18A104824
Date of Received : Sep 24, 2021
Date of Calibration : Sep 24, 2021
Date of Next Calibration^(a) : Dec 23, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Parameter</u>	<u>Reference Method</u>
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	7.46	0.04	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	10.0	0.0	Satisfactory
24	24.0	0.0	Satisfactory
48	48.0	0.0	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.
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^(e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards..


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Senior Chemist



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA090071
Date of Issue : 27 September 2021
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.18	0.30	0.12	Satisfactory
2.71	2.66	-0.05	Satisfactory
5.00	5.09	0.09	Satisfactory
7.48	7.48	0.00	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 ($\mu\text{S}/\text{cm}$)	Displayed Reading ($\mu\text{S}/\text{cm}$)	Tolerance (%)	Results
0.001	146.9	147.6	0.48	Satisfactory
0.01	1412	1451	2.76	Satisfactory
0.1	12890	12758	-1.02	Satisfactory
0.5	58670	58927	0.44	Satisfactory
1.0	111900	110688	-1.08	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.20	Satisfactory
20	19.87	-0.65	Satisfactory
30	29.80	-0.67	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.17	--	Satisfactory
10	9.94	-0.6	Satisfactory
20	19.88	-0.6	Satisfactory
100	98.93	-1.1	Satisfactory
800	794.52	-0.7	Satisfactory

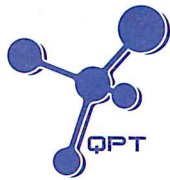
Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

Remark(s): -

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA090072
Date of Issue : 27 September 2021
Page No. : 1 of 2

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 : 21G105356
Date of Received : Sep 24, 2021
Date of Calibration : Sep 24, 2021
Date of Next Calibration^(a) : Dec 23, 2021

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	7.45	0.03	Satisfactory
10.01	10.05	0.04	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
24	24.0	0.0	Satisfactory
48	48.0	0.0	Satisfactory

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

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Remark(s) :-

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^(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 the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards..

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA090072
Date of Issue : 27 September 2021
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.18	0.30	0.12	Satisfactory
2.71	2.60	-0.11	Satisfactory
5.00	5.13	0.13	Satisfactory
7.48	7.49	0.01	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 ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
0.001	146.9	147.5	0.41	Satisfactory
0.01	1412	1466	3.82	Satisfactory
0.1	12890	12747	-1.11	Satisfactory
0.5	58670	59430	1.30	Satisfactory
1.0	111900	110667	-1.10	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.97	-0.30	Satisfactory
20	20.36	1.80	Satisfactory
30	30.77	2.57	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.18	--	Satisfactory
10	10.13	1.3	Satisfactory
20	19.74	-1.3	Satisfactory
100	102.36	2.4	Satisfactory
800	796.41	-0.4	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 from relevant international standards.

B. Quality Assurance and Quality Control (QA&QC) Results for Post-dredging Monitoring

QA&QC Results on 01 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3990717)								
HK2143188-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.2	5.6	7.6
HK2143188-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.3	3.7	12.5
EA/ED: Physical and Aggregate Properties (QC Lot: 3990718)								
HK2143188-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.0	4.7	5.9
HK2143188-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.9	9.4
EA/ED: Physical and Aggregate Properties (QC Lot: 3990719)								
HK2143188-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.5	13.5
HK2143188-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	3.1	11.9
EA/ED: Physical and Aggregate Properties (QC Lot: 3990720)								
HK2143188-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	4.6	7.9
HK2143188-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.2	10.0
EA/ED: Physical and Aggregate Properties (QC Lot: 3990721)								
HK2143188-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	4.1	2.4
HK2143188-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.5	7.0	8.5
EA/ED: Physical and Aggregate Properties (QC Lot: 3990722)								
HK2143188-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.2	4.4
HK2143188-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.6	14.8
EA/ED: Physical and Aggregate Properties (QC Lot: 3990723)								
HK2143188-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.1	1.8	13.3
HK2143188-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.1	2.6	18.1
EA/ED: Physical and Aggregate Properties (QC Lot: 3990724)								
HK2143188-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.8	2.1	11.5
HK2143188-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.4	1.7	15.4

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			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)					
						LCS	DCS	Low	High	Value	Control Limit				
EA/ED: Physical and Aggregate Properties (QC Lot: 3990717)															
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.0	----	85.9	117	----	----				
EA/ED: Physical and Aggregate Properties (QC Lot: 3990718)															
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	110	----	85.9	117	----	----				
EA/ED: Physical and Aggregate Properties (QC Lot: 3990719)															
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.0	----	85.9	117	----	----				

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<i>CAS Number</i>											
EA/ED: Physical and Aggregate Properties (QCLot: 3990720)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	101	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 3990721)											
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: 3990722)											
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: 3990723)											
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: 3990724)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	101	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 03 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3996932)								
HK2143190-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.3	11.9
HK2143190-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.1	13.5
EA/ED: Physical and Aggregate Properties (QC Lot: 3996933)								
HK2143190-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	3.0	12.7
HK2143190-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	3.7	6.9
EA/ED: Physical and Aggregate Properties (QC Lot: 3996934)								
HK2143190-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.5	2.2	9.0
HK2143190-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.5	2.9	15.0
EA/ED: Physical and Aggregate Properties (QC Lot: 3996935)								
HK2143190-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	3.2	8.2
HK2143190-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.4	2.0	15.3
EA/ED: Physical and Aggregate Properties (QC Lot: 3996936)								
HK2143190-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.8	8.3
HK2143190-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.6	2.7	5.7
EA/ED: Physical and Aggregate Properties (QC Lot: 3996937)								
HK2143190-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	2.5	12.9
HK2143190-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.8	4.2	8.8
EA/ED: Physical and Aggregate Properties (QC Lot: 3996938)								
HK2143190-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.8	9.2
HK2143190-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.8	4.5	8.3
EA/ED: Physical and Aggregate Properties (QC Lot: 3996939)								
HK2143190-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	3.5	12.7
HK2143190-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	4.0	11.7

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3996932)											
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: 3996933)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 3996934)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.5	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>							
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>		
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>	
EA/ED: Physical and Aggregate Properties (QCLot: 3996935)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.5	----	85.9	117	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 3996936)												
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: 3996937)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 3996938)												
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: 3996939)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.5	----	85.9	117	----	----	

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 05 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4002459)								
HK2143193-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.7	4.8	2.3
HK2143193-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.1	6.5
EA/ED: Physical and Aggregate Properties (QC Lot: 4002460)								
HK2143193-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.3	3.2
HK2143193-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.4	3.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4002461)								
HK2143193-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.8	5.1	4.3
HK2143193-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.1	4.4	8.8
EA/ED: Physical and Aggregate Properties (QC Lot: 4002462)								
HK2143193-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.3	4.5	4.2
HK2143193-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.6	7.2	5.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4002463)								
HK2143193-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.2	6.1
HK2143193-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.6	7.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4002464)								
HK2143193-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	4.3	5.4
HK2143193-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	4.3	7.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4002465)								
HK2143193-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	4.5	7.1
HK2143193-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	3.8	9.4
EA/ED: Physical and Aggregate Properties (QC Lot: 4002466)								
HK2143193-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.3	7.0
HK2143193-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.2	8.9

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						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4002459)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4002460)											
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: 4002461)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
EA/ED: Physical and Aggregate Properties (QCLot: 4002462)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4002463)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4002464)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4002465)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4002466)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.0	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 08 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4004757)								
HK2143196-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.1	7.1	0.0
HK2143196-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.0	3.1
EA/ED: Physical and Aggregate Properties (QC Lot: 4004758)								
HK2143196-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.0	3.5
HK2143196-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.1	6.1	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4004759)								
HK2143196-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.5	6.5	0.0
HK2143196-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.9	6.9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4004760)								
HK2143196-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.8	6.9	0.0
HK2143196-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.9	5.7	3.7
EA/ED: Physical and Aggregate Properties (QC Lot: 4004761)								
HK2143196-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.1	5.1	0.0
HK2143196-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.4	5.6	2.9
EA/ED: Physical and Aggregate Properties (QC Lot: 4004762)								
HK2143196-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.2	3.2
HK2143196-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.8	2.7
EA/ED: Physical and Aggregate Properties (QC Lot: 4004763)								
HK2143196-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.4	5.4	0.0
HK2143196-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4004764)								
HK2143196-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.9	0.0
HK2143196-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.0	5.0	0.0

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						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 4004757)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 4004758)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 4004759)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	107	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<i>CAS Number</i>											
EA/ED: Physical and Aggregate Properties (QCLot: 4004760)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	92.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4004761)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	99.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4004762)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4004763)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4004764)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.0	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 10 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4010031)								
HK2145081-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.1	6.0	3.1
HK2145081-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4010032)								
HK2145081-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.7	4.7	0.0
HK2145081-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	4.5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4010033)								
HK2145081-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	4.6	3.3
HK2145081-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.3	3.3	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4010034)								
HK2145081-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.7	5.6	0.0
HK2145081-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.4	7.5	1.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4010035)								
HK2145081-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	4.6	2.2
HK2145081-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.7	5.6	2.4
EA/ED: Physical and Aggregate Properties (QC Lot: 4010036)								
HK2145081-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.4	8.5	1.3
HK2145081-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.4	7.3	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4010037)								
HK2145081-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.1	0.0
HK2145081-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.8	3.9	2.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4010038)								
HK2145081-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.3	3.3	0.0
HK2145081-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.5	0.0

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						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4010031)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4010032)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4010033)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.5	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<i>CAS Number</i>											
EA/ED: Physical and Aggregate Properties (QCLot: 4010034)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	99.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4010035)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4010036)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	105	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4010037)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	101	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4010038)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 12 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4015477)								
HK2145108-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.5	7.0	8.1
HK2145108-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.9	5.6	6.7
EA/ED: Physical and Aggregate Properties (QC Lot: 4015478)								
HK2145108-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.7	5.1	9.9
HK2145108-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.5	2.5
EA/ED: Physical and Aggregate Properties (QC Lot: 4015479)								
HK2145108-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	5.2	20.6
HK2145108-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	4.6	17.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4015480)								
HK2145108-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.7	0.0
HK2145108-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	3.6	15.8
EA/ED: Physical and Aggregate Properties (QC Lot: 4015481)								
HK2145108-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.3	18.4
HK2145108-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	3.6	22.9
EA/ED: Physical and Aggregate Properties (QC Lot: 4015482)								
HK2145108-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.2	9.9
HK2145108-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.8	9.5
EA/ED: Physical and Aggregate Properties (QC Lot: 4015483)								
HK2145108-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.3	17.2
HK2145108-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	3.8	6.7
EA/ED: Physical and Aggregate Properties (QC Lot: 4015484)								
HK2145108-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.6	3.5	29.8
HK2145108-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	4.6	2.2

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						
		LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number					LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4015477)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	88.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4015478)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	109	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4015479)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.0	----	85.9	117	----	----

Matrix: WATER

Method: Compound		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report							
		CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
							LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4015480)												
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: 4015481)												
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: 4015482)												
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: 4015483)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 4015484)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----	

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 15 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4018373)								
HK2145684-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.8	4.9	3.6
HK2145684-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	5.3	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4018374)								
HK2145684-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.4	2.4	0.0
HK2145684-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.9	1.8	5.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4018375)								
HK2145684-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.0	0.0
HK2145684-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.9	4.8
EA/ED: Physical and Aggregate Properties (QC Lot: 4018376)								
HK2145684-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.9	3.9
HK2145684-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.2	2.3	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4018377)								
HK2145684-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.8	0.0
HK2145684-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	2.8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4018378)								
HK2145684-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	2.8	0.0
HK2145684-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	2.7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4018379)								
HK2145684-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.4	0.0
HK2145684-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.7	3.6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4018380)								
HK2145684-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.2	3.2	0.0
HK2145684-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	3.0	4.3

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4018373)											
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: 4018374)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4018375)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.5	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<i>CAS Number</i>											
EA/ED: Physical and Aggregate Properties (QCLot: 4018376)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4018377)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	99.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4018378)											
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: 4018379)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	99.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4018380)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 17 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4023978)								
HK2145689-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.7	3.6	0.0
HK2145689-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.4	2.5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4023979)								
HK2145689-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.7	3.1
HK2145689-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4023980)								
HK2145689-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.6	0.0
HK2145689-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.7	3.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4023981)								
HK2145689-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.5	2.5	0.0
HK2145689-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.3	4.4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4023982)								
HK2145689-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.5	0.0
HK2145689-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	2.8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4023983)								
HK2145689-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.0	0.0
HK2145689-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.2	3.2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4023984)								
HK2145689-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.1	4.1	0.0
HK2145689-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.7	3.9	6.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4023985)								
HK2145689-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.9	0.0
HK2145689-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.4	2.5	5.7

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4023978)											
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: 4023979)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4023980)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	101	----	85.9	117	----	----

Matrix: WATER

Method: Compound		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report							
		CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
							LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4023981)		----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA025: Suspended Solids (SS)		----	0.5	mg/L	<0.5	20 mg/L	105	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4023982)		----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA025: Suspended Solids (SS)		----	0.5	mg/L	<0.5	20 mg/L	109	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4023983)		----	0.5	mg/L	<0.5	20 mg/L	112	----	85.9	117	----	----
EA025: Suspended Solids (SS)		----	0.5	mg/L	<0.5	20 mg/L		----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4023984)		----	0.5	mg/L	<0.5	20 mg/L		----	85.9	117	----	----
EA025: Suspended Solids (SS)		----	0.5	mg/L	<0.5	20 mg/L		----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4023985)		----	0.5	mg/L	<0.5	20 mg/L		----	85.9	117	----	----
EA025: Suspended Solids (SS)		----	0.5	mg/L	<0.5	20 mg/L		----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 19 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4026521)								
HK2145692-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.9	5.8	1.7
HK2145692-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.4	8.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4026522)								
HK2145692-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.3	3.2	0.0
HK2145692-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.1	3.1	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4026523)								
HK2145692-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.1	3.1	0.0
HK2145692-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.6	1.6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4026524)								
HK2145692-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.0	2.1	0.0
HK2145692-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.9	4.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4026525)								
HK2145692-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.1	2.1	0.0
HK2145692-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	3.0	3.4
EA/ED: Physical and Aggregate Properties (QC Lot: 4026526)								
HK2145692-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.2	2.3	4.4
HK2145692-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.3	4.4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4026527)								
HK2145692-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.3	0.0
HK2145692-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.4	2.4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4026528)								
HK2145692-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.7	0.0
HK2145692-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.0	2.0	0.0

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4026521)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4026522)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	97.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4026523)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
EA/ED: Physical and Aggregate Properties (QCLot: 4026524)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4026525)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	92.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4026526)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4026527)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4026528)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	93.5	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 22 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4032324)								
HK2147312-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.6	0.0
HK2147312-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.6	5.6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4032325)								
HK2147312-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	8.2	8.1	0.0
HK2147312-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4032326)								
HK2147312-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.6	5.7	2.6
HK2147312-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.6	1.8
EA/ED: Physical and Aggregate Properties (QC Lot: 4032327)								
HK2147312-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.7	6.6	0.0
HK2147312-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.3	2.2
EA/ED: Physical and Aggregate Properties (QC Lot: 4032328)								
HK2147312-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.6	5.6	0.0
HK2147312-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.0	5.1	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4032329)								
HK2147312-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.4	0.0
HK2147312-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	4.2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4032330)								
HK2147312-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.2	3.1	3.6
HK2147312-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	4.0	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4032331)								
HK2147312-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.5	0.0
HK2147312-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.4	7.5	1.7

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 4032324)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 4032325)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 4032326)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	99.5	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<i>CAS Number</i>											
EA/ED: Physical and Aggregate Properties (QCLot: 4032327)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4032328)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4032329)											
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: 4032330)											
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: 4032331)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	93.5	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 24 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4038084)								
HK2147313-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	5.9	5.8
HK2147313-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.3	6.2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4038085)								
HK2147313-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.9	5.5	6.4
HK2147313-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.2	6.4	3.8
EA/ED: Physical and Aggregate Properties (QC Lot: 4038086)								
HK2147313-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.9	4.3	12.7
HK2147313-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.2	4.9	5.9
EA/ED: Physical and Aggregate Properties (QC Lot: 4038087)								
HK2147313-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.4	4.9	9.0
HK2147313-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	4.3	9.1
EA/ED: Physical and Aggregate Properties (QC Lot: 4038088)								
HK2147313-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.0	3.7	7.2
HK2147313-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	3.6	14.4
EA/ED: Physical and Aggregate Properties (QC Lot: 4038089)								
HK2147313-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.8	4.8
HK2147313-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.6	4.2	9.6
EA/ED: Physical and Aggregate Properties (QC Lot: 4038090)								
HK2147313-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.4	3.7	10.6
HK2147313-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	4.9	9.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4038091)								
HK2147313-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.4	13.7
HK2147313-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.5	5.0	12.1

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4038084)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4038085)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	110	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4038086)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	99.0	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>							
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>		
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>	
EA/ED: Physical and Aggregate Properties (QCLot: 4038087)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.5	----	85.9	117	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 4038088)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	100	----	85.9	117	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 4038089)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 4038090)												
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: 4038091)												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	105	----	85.9	117	----	----	

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

QA&QC Results on 26 November 21

Laboratory Duplicate (DUP) Report

Matrix: WATER

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4043999)								
HK2147314-001	C1/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.8	0.0
HK2147314-011	C2/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.1	3.2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4044000)								
HK2147314-021	SR1/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	6.4	6.5	1.6
HK2147314-031	SR3/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.4	3.5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4044001)								
HK2147314-041	SR4/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.2	2.2	0.0
HK2147314-051	SR6/E/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.9	4.8
EA/ED: Physical and Aggregate Properties (QC Lot: 4044002)								
HK2147314-061	SR8/E/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.0	2.0	0.0
HK2147314-071	SR9/E/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.2	2.1	5.3
EA/ED: Physical and Aggregate Properties (QC Lot: 4044003)								
HK2147314-081	C1/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.5	3.5	0.0
HK2147314-091	C3/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.3	4.4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4044004)								
HK2147314-101	SR1/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.7	3.6
HK2147314-111	SR3/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.9	2.9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4044005)								
HK2147314-121	SR5/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.4	4.3
HK2147314-131	SR6/F/B/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.2	3.1	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4044006)								
HK2147314-141	SR8/F/M/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.6	2.8	6.1
HK2147314-151	SR10/F/S/1	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.4	4.4	0.0

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					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 4043999)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	94.0	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4044000)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	98.5	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4044001)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----

Matrix: WATER

<i>Method: Compound</i>		<i>Method Blank (MB) Report</i>			<i>Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report</i>						
		<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPDs (%)</i>	
						<i>LCS</i>	<i>DCS</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<i>CAS Number</i>											
EA/ED: Physical and Aggregate Properties (QCLot: 4044002)											
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: 4044003)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	105	----	85.9	117	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 4044004)											
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: 4044005)											
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: 4044006)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

C. Post-dredging Water Quality Monitoring Results

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 01 November 21 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	08:00	10.7	Surface	1.0	26.0	26.0	8.0	8.0	33.4	33.4	92.6	92.6	6.2	6.2	6.2	2.8	2.8		5.2	5.1	4.5	
						1.0	26.0		8.0		33.4		92.6		6.2		6.2	2.7			4.9			
					Middle	5.4	26.0	26.0	8.0	8.0	33.4	33.4	92.5	92.5	6.2	6.2	6.2	3.6	3.6	4.2	5.2	5.0		
						5.4	26.0		8.0		33.4		92.5		6.2		6.2	3.6			5.2			
					Bottom	9.7	26.0	26.0	8.0	8.0	33.5	33.5	93.9	93.9	6.3	6.3	6.3	6.2	6.3	6.3	4.0	3.6		
						9.7	26.0		8.0		33.5		93.9		6.3		6.3	6.4			3.1			
C2	Sunny	Rough	09:25	11.2	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	101.3	101.3	6.8	6.8	6.8	5.2	5.3		4.6	5.0	4.5	
						1.0	25.9		8.1		33.7		101.3		6.8		6.8	5.3			5.4			
					Middle	5.6	25.9	25.9	8.1	8.1	33.7	33.7	100.9	100.8	6.8	6.8	6.8	5.3	5.4	5.4	4.2	4.8		
						5.6	25.9		8.1		33.7		100.6		6.8		6.8	5.4			4.2			
					Bottom	10.2	25.9	25.9	8.1	8.1	33.7	33.7	100.0	100.0	6.7	6.7	6.7	5.7	5.7	6.7	3.3	3.7		
						10.2	25.9		8.1		33.7		100.0		6.7		6.7	5.7			4.0			
C3	Sunny	Rough	08:53	23.1	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	101.1	101.1	6.8	6.8	6.8	5.1	5.2		5.1	4.0	4.0	
						1.0	25.9		8.1		33.7		101.1		6.8		6.8	5.2			2.8			
					Middle	11.6	25.9	25.9	8.1	8.1	33.7	33.7	100.7	100.7	6.8	6.8	6.8	5.3	5.3	5.7	4.8	4.1		
						11.6	25.9		8.1		33.7		100.7		6.8		6.8	5.3			3.4			
					Bottom	22.1	25.9	25.9	8.1	8.1	33.7	33.7	99.8	99.8	6.7	6.7	6.7	6.6	6.6	6.7	4.0	3.8		
						22.1	25.9		8.1		33.7		99.8		6.7		6.7	6.6			3.6			
SR1	Sunny	Moderate	07:40	8.3	Surface	1.0	26.1	26.1	8.1	8.1	33.7	33.7	98.2	98.2	6.6	6.6	6.6	5.0	5.0		5.6	5.9	4.7	
						1.0	26.1		8.1		33.7		98.2		6.6		6.6	5.0			6.1			
					Middle	4.2	26.0	26.0	8.1	8.1	33.7	33.7	98.6	98.7	6.6	6.6	6.6	5.6	5.6	5.6	5.0	4.7		
						4.2	26.0		8.1		33.7		98.7		6.6		6.6	5.6			4.4			
					Bottom	7.3	25.8	25.8	8.1	8.1	33.7	33.7	98.6	98.7	6.6	6.6	6.6	6.2	6.3	6.6	2.3	3.6		
						7.3	25.8		8.1		33.7		98.7		6.6		6.6	6.3			4.8			
SR2	Sunny	Moderate	07:49	6.1	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	99.3	99.3	6.7	6.7	6.6	5.5	5.6		4.6	5.0	4.5	
						1.0	25.9		8.1		33.7		99.3		6.7		6.6	5.6			5.3			
					Middle	3.1	25.9	25.9	8.1	8.1	33.7	33.7	97.0	97.0	6.5	6.5	6.5	6.7	6.7	7.1	4.7	4.5		
						3.1	25.9		8.1		33.7		97.0		6.5		6.5	6.7			4.3			
					Bottom	5.1	25.8	25.8	8.1	8.1	33.7	33.7	95.1	95.1	6.4	6.4	6.4	9.0	9.1	6.4	3.6	3.9		
						5.1	25.8		8.1		33.7		95.1		6.4		6.4	9.1			4.2			
SR3	Sunny	Moderate	08:01	8.0	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	98.9	98.9	6.7	6.7	6.6	4.9	5.0		4.4	4.6	3.6	
						1.0	25.9		8.1		33.7		98.8		6.6		6.6	5.0			4.7			
					Middle	4.0	25.8	25.8	8.1	8.1	33.7	33.7	97.7	97.7	6.6	6.6	6.6	5.4	5.4	5.7	4.2	3.9		
						4.0	25.8		8.1		33.7		97.7		6.6		6.6	5.4			3.5			
					Bottom	7.0	25.8	25.8	8.1	8.1	33.7	33.7	95.7	95.8	6.4	6.5	6.5	6.8	6.8	6.5	2.6	2.4		
						7.0	25.8		8.1		33.7		95.8		6.5		6.5	6.8			2.1			
SR4	Sunny	Moderate	08:54	13.6	Surface	1.0	26.0	26.0	8.1	8.1	33.4	33.4	96.9	96.9	6.5	6.5	6.5	4.2	4.2		2.5	2.3	2.8	
						1.0	26.0		8.1		33.4		96.8		6.5		6.5	4.1			2.1			
					Middle	6.8	26.0	26.0	8.1	8.1	33.5	33.5	95.7	95.7	6.4	6.4	6.4	4.5	4.5	6.4	2.6	2.7		
						6.8	26.0		8.1		33.5		95.7		6.4		6.4	4.5			2.7			
					Bottom	12.6	26.1	26.1	8.1	8.1	33.7	33.7	96.4	96.4	6.5	6.5	6.5	10.7	10.6	6.5	3.0	3.4		
						12.6	26.1		8.1		33.7		96.4		6.5		6.5	10.5			3.8			
SR5	Sunny	Moderate	09:00	9.5	Surface	1.0	26.0	26.0	8.1	8.1	33.4	33.4	95.5	95.5	6.4	6.4	6.4	3.9	3.9		3.2	3.1	2.7	
						1.0	26.0		8.1		33.4		95.4		6.4		6.4	3.9			2.9			
					Middle	4.8	26.0	26.0	8.1	8.1	33.4	33.4	95.1	95.1	6.4	6.4	6.4	4.1	4.1	4.3	2.4	2.6		
						4.8	26.0		8.1		33.4		95.1		6.4		6.4	4.1			2.8			
					Bottom	8.5	26.0	26.0	8.1	8.1	33.5	33.5	94.7	94.7	6.4	6.4	6.4	5.0	5.0	6.4	2.3	2.5		
						8.5	26.0		8.1		33.5		94.7		6.4		6.4	5.0			2.6			
SR6	Sunny	Moderate	08:15	14.6	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.9	100.9	6.8	6.8	6.8	5.1	5.1		3.0	3.5	2.8	
						1.0	25.9		8.1		33.7		100.9		6.8		6.8	5.1			4.0			
					Middle	7.3	25.9	25.9	8.1	8.1	33.7	33.7	99.8	99.8	6.7	6.7	6.7	5.7	5.8	6.7	2.8	2.6		
						7.3	25.9		8.1		33.7		99.8		6.7		6.7	5.8			2.4			
					Bottom	13.6	25.8	25.8	8.1	8.1	33.7	33.7	98.9	98.9	6.7	6.7	6.7	9.3	9.3	6.7	2.1	2.4		
						13.6	25.8		8.1		33.7		98.9		6.7		6.7	9.2			2.6			
SR7	Sunny	Rough	08:34	21.8	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.8	100.9	6.8	6.8	6.8	5.0	5.0		5.3	5.7	4.8	
						1.0	25.9		8.1		33.7		100.9		6.8		6.8	5.0			6.0			
					Middle	10.9	25.9	25.9	8.1	8.1	33.7	33.7	100.3	100.3	6.7	6.7	6.7	5.6	5.6	6.4	4.5	4.9		
						10.9	25.9		8.1		33.7		100.3		6.7		6.7	5.6			4.5			
					Bottom	20.8	25.8	25.8	8.1	8.1	33.7	33.7	99.4	99.4	6.7	6.7	6.7	8.4	8.5	6.7	4.2	3.9		
						20.8	25.8		8.1		33.7		99.4		6.7		6.7	8.5			3.6			

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 01 November 21 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	08:22	10.3	Surface	1.0	26.0	26.0	8.1	8.1	33.5	33.5	96.6	96.6	6.5	6.5	6.5	3.7	3.8	4.2	4.2	4.0	4.2					
						1.0	26.0		8.1		33.5		96.6		6.5			3.8			3.8							
						5.2	26.0		8.1		33.6		96.3		6.5			4.0			3.9							
					Middle	5.2	26.0	26.0	8.1	8.1	33.6	33.6	96.3	96.3	6.5	6.5	6.5	4.0	4.0	4.2	4.0	4.0	4.2	3.9	3.9	4.2		
						9.3	26.0		8.1		33.6		95.9		6.4			4.8			4.5							
						9.3	26.0		8.1		33.6		95.9		6.4			4.8			4.9							
					SR9	Cloudy	Moderate	08:33	9.8	Surface	1.0	26.0	26.0	8.1	8.1	33.3	33.3	95.5	95.6	6.4	6.4	6.5	3.4	3.4	3.5	4.0	3.9	4.1
											1.0	26.0		8.1		33.3		95.6		6.4			3.7			3.7		
											4.9	26.0		8.1		33.4		96.1		6.5			3.4			4.1		
Middle	4.9	26.0	26.0	8.1						8.1	33.4	33.4	96.1	96.1	6.5	6.5	6.5	3.4	3.4	3.5	3.4	3.4	3.5	3.9	4.0	4.1		
	8.8	26.1		8.1							33.5		96.1		6.5			3.8			4.6							
	8.8	26.1		8.1							33.5		96.1		6.5			3.8			4.3							
SR10	Sunny	Rough	09:57	6.3						Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.9	100.9	6.8	6.8	6.8	3.2	3.2	4.3	2.3	2.2	3.5
											1.0	25.9		8.1		33.7		100.9		6.8			3.2			2.0		
											3.2	25.9		8.1		33.7		100.8		6.8			4.4			4.2		
					Middle	3.2	25.9	25.9	8.1	8.1	33.7	33.7	100.7	100.8	6.8	6.8	6.8	4.4	4.4	4.3	4.4	4.4	4.3	4.0	4.1	3.5		
						5.3	25.9		8.1		33.7		100.6		6.8			5.3			4.3							
						5.3	25.9		8.1		33.7		100.6		6.8			5.3			4.1							

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 01 November 21 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	Sunny	Moderate	16:46	10.7	Surface	1.0	26.2	26.2	8.1	8.1	33.3	33.3	106.9	106.9	7.2	7.2	7.1	3.3	3.3	3.9	3.5	3.7	4.0
						1.0	26.2	26.2	8.1	8.1	33.3	33.3	106.9	106.9	7.2	7.2		3.3	3.3		3.9	3.7	
					Middle	5.4	26.0	26.0	8.1	8.1	33.3	33.3	104.2	104.2	7.0	7.0	6.6	3.5	3.5	6.6	4.2	4.1	4.3
						5.4	26.0	26.0	8.1	8.1	33.3	33.3	104.1	104.2	7.0	7.0		3.5	3.5		4.0	4.1	
					Bottom	9.7	26.0	26.0	8.1	8.1	33.4	33.4	98.4	98.3	6.6	6.6	6.6	4.9	4.9	6.6	4.5	4.0	4.3
						9.7	26.0	26.0	8.1	8.1	33.4	33.4	98.2	98.3	6.6	6.6		4.8	4.9		4.0	4.3	
C2	Sunny	Rough	15:13	11.2	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.3	100.3	6.7	6.7	6.7	5.3	5.3	5.7	7.6	7.1	6.7
						1.0	25.9	25.9	8.1	8.1	33.8	33.8	100.3	100.3	6.7	6.7		5.3	5.3		6.6	7.1	
					Middle	5.6	25.9	25.9	8.1	8.1	33.7	33.7	100.0	100.0	6.7	6.7	6.7	5.7	5.7	6.7	7.0	6.6	6.5
						5.6	25.9	25.9	8.1	8.1	33.8	33.8	100.0	100.0	6.7	6.7		5.7	5.7		6.2	6.6	
					Bottom	10.2	25.9	25.9	8.1	8.1	33.7	33.7	99.7	99.7	6.7	6.7	6.7	6.2	6.2	6.7	6.8	6.5	6.5
						10.2	25.9	25.9	8.1	8.1	33.7	33.7	99.7	99.7	6.7	6.7		6.2	6.2		6.2	6.5	
C3	Sunny	Rough	15:16	23.1	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.1	100.1	6.7	6.7	6.7	5.9	5.9	6.5	6.5	7.0	6.6
						1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.1	100.1	6.7	6.7		5.9	5.9		7.4	7.0	
					Middle	11.6	25.9	25.9	8.1	8.1	33.7	33.7	99.6	99.6	6.7	6.7	6.7	6.3	6.3	6.5	6.7	6.4	6.6
						11.6	25.9	25.9	8.1	8.1	33.7	33.7	99.6	99.6	6.7	6.7		6.3	6.3		6.1	6.4	
					Bottom	22.1	25.9	25.9	8.1	8.1	33.8	33.8	99.4	99.4	6.7	6.7	6.7	7.3	7.3	6.7	6.3	6.3	6.6
						22.1	25.9	25.9	8.1	8.1	33.8	33.8	99.4	99.4	6.7	6.7		7.3	7.3		6.3	6.3	
SR1	Sunny	Moderate	16:28	8.3	Surface	1.0	26.2	26.2	8.1	8.1	33.7	33.7	100.2	100.2	6.7	6.7	6.7	4.1	4.1	5.2	2.5	2.7	2.4
						1.0	26.2	26.2	8.1	8.1	33.7	33.7	100.2	100.2	6.7	6.7		4.1	4.1		2.9	2.7	
					Middle	4.2	26.0	26.0	8.1	8.1	33.7	33.7	99.9	99.9	6.7	6.7	6.7	5.0	5.0	6.7	2.1	2.2	2.2
						4.2	26.0	26.0	8.1	8.1	33.7	33.7	99.9	99.9	6.7	6.7		5.0	5.0		2.3	2.2	
					Bottom	7.3	25.9	25.9	8.1	8.1	33.7	33.7	99.2	99.2	6.7	6.7	6.7	6.4	6.5	6.7	2.3	2.2	2.2
						7.3	25.9	25.9	8.1	8.1	33.7	33.7	99.2	99.2	6.7	6.7		6.5	6.5		2.1	2.2	
SR2	Sunny	Moderate	16:20	6.1	Surface	1.0	26.0	26.0	8.1	8.1	33.6	33.6	100.9	100.8	6.8	6.8	6.7	6.1	6.2	7.2	2.6	2.6	2.2
						1.0	26.0	26.0	8.1	8.1	33.6	33.6	100.7	100.8	6.8	6.8		6.2	6.2		2.5	2.6	
					Middle	3.1	25.9	25.9	8.1	8.1	33.7	33.7	98.5	98.5	6.6	6.6	6.5	6.7	6.7	6.5	2.2	2.3	2.2
						3.1	25.9	25.9	8.1	8.1	33.7	33.7	98.4	98.5	6.6	6.6		6.7	6.7		2.4	2.3	
					Bottom	5.1	25.8	25.8	8.1	8.1	33.7	33.7	97.3	97.3	6.5	6.5	6.5	8.8	8.9	6.5	1.4	1.8	2.2
						5.1	25.8	25.8	8.1	8.1	33.7	33.7	97.3	97.3	6.5	6.5		8.9	8.9		2.1	1.8	
SR3	Sunny	Moderate	16:09	8.0	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.0	100.0	6.7	6.7	6.7	5.3	5.4	6.9	2.4	2.7	2.8
						1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.0	100.0	6.7	6.7		5.4	5.4		3.0	2.7	
					Middle	4.0	25.8	25.8	8.1	8.1	33.7	33.7	99.2	99.2	6.7	6.7	6.7	6.6	6.8	6.9	2.3	2.7	2.8
						4.0	25.8	25.8	8.1	8.1	33.7	33.7	99.1	99.1	6.7	6.7		6.9	6.8		3.0	2.7	
					Bottom	7.0	25.8	25.8	8.1	8.1	33.7	33.7	99.1	99.1	6.7	6.7	6.7	8.6	8.6	6.7	2.9	3.1	2.8
						7.0	25.8	25.8	8.1	8.1	33.8	33.7	99.1	99.1	6.7	6.7		8.5	8.6		3.3	3.1	
SR4	Sunny	Moderate	15:49	13.6	Surface	1.0	26.3	26.3	8.1	8.1	33.4	33.4	96.9	96.9	6.5	6.5	6.4	3.7	3.7	4.6	3.0	2.9	2.6
						1.0	26.3	26.3	8.1	8.1	33.4	33.4	96.9	96.9	6.5	6.5		3.7	3.7		2.8	2.9	
					Middle	6.8	26.1	26.1	8.1	8.1	33.4	33.4	94.7	94.7	6.4	6.4	6.3	4.6	4.6	6.3	2.5	2.5	2.6
						6.8	26.1	26.1	8.1	8.1	33.4	33.4	94.6	94.7	6.3	6.3		4.6	4.6		2.4	2.5	
					Bottom	12.6	26.1	26.1	8.1	8.1	33.4	33.4	93.7	93.8	6.3	6.3	6.3	5.5	5.5	6.3	2.4	2.3	2.6
						12.6	26.1	26.1	8.1	8.1	33.4	33.4	93.8	93.8	6.3	6.3		5.4	5.5		2.2	2.3	
SR5	Sunny	Moderate	15:41	9.5	Surface	1.0	26.2	26.2	8.1	8.1	33.3	33.3	92.9	92.9	6.2	6.2	6.2	4.1	4.1	5.3	2.1	1.8	1.8
						1.0	26.2	26.2	8.1	8.1	33.3	33.3	92.9	92.9	6.2	6.2		4.1	4.1		1.4	1.8	
					Middle	4.8	26.1	26.1	8.0	8.0	33.3	33.3	91.4	91.5	6.1	6.1	6.2	5.0	5.1	6.2	1.5	1.8	1.8
						4.8	26.1	26.1	8.0	8.0	33.3	33.3	91.5	91.5	6.1	6.1		5.1	5.1		2.1	1.8	
					Bottom	8.5	26.0	26.0	8.1	8.1	33.4	33.4	92.6	92.6	6.2	6.2	6.2	6.7	6.7	6.2	2.3	1.9	2.2
						8.5	26.0	26.0	8.1	8.1	33.4	33.4	92.6	92.6	6.2	6.2		6.6	6.7		1.4	1.9	
SR6	Sunny	Moderate	15:55	14.6	Surface	1.0	26.0	26.0	8.1	8.1	33.8	33.8	100.3	100.2	6.7	6.7	6.7	5.5	5.5	6.0	1.9	1.9	2.2
						1.0	25.9	25.9	8.1	8.1	33.8	33.8	100.1	100.2	6.7	6.7		5.5	5.5		1.9	1.9	
					Middle	7.3	25.9	25.9	8.1	8.1	33.7	33.7	99.6	99.7	6.7	6.7	6.7	5.9	5.9	6.0	2.2	2.3	2.2
						7.3	25.9	25.9	8.1	8.1	33.7	33.7	99.7	99.7	6.7	6.7		5.8	5.9		2.4	2.3	
					Bottom	13.6	25.9	25.9	8.1	8.1	33.7	33.7	99.2	99.2	6.7	6.7	6.7	6.8	6.8	6.7	2.1	2.3	2.2
						13.6	25.9	25.9	8.1	8.1	33.7	33.7	99.2	99.2	6.7	6.7		6.7	6.8		2.5	2.3	
SR7	Sunny	Rough	15:31	21.8	Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.2	100.2	6.7	6.7	6.7	5.3	5.3	6.0	2.6	2.8	2.2
						1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.2	100.2	6.7	6.7		5.3	5.3		3.0	2.8	
					Middle	10.9	25.9	25.9	8.1	8.1	33.8	33.7	99.9	99.9	6.7	6.7	6.7	5.9	5.9	6.0	2.2	2.0	2.2
						10.9	25.9	25.9	8.1	8.1	33.7	33.7	99.8	99.9	6.7	6.7		5.8	5.9		1.7	2.0	
					Bottom	20.8	25.9	25.9	8.1	8.1	33.7	33.7	99.5	99.5	6.7	6.7	6.7	6.7	6.7	6.7	1.6	1.9	2.2
						20.8	25.9	25.9	8.1	8.1	33.7	33.7	99.5	99.5	6.7	6.7		6.7	6.7		2.2	1.9	

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 01 November 21 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	Moderate	16:27	10.3	Surface	1.0	26.2	26.2	8.1	8.1	33.3	33.3	107.1	107.1	7.2	7.2	7.2	3.3	3.3	3.8	3.2	3.0	2.4						
						1.0	26.2		8.1		33.3		107.1		7.2			3.3											
						5.2	26.1		8.1		33.4		106.6		7.2			3.6											
					Middle	5.2	26.1	26.1	8.1	8.1	33.4	33.4	106.6	106.6	7.2	7.2	3.6	3.6	2.6										
						9.3	26.0		8.1		33.5		100.4		6.7		4.5												
						9.3	26.0		8.1		33.5		100.5		6.8		4.6												
					SR9	Sunny	Moderate	16:14	9.8	Surface	1.0	26.2	26.2	8.1	8.1	33.6	33.6	101.2	101.2	6.8	6.8	6.8		3.1	3.1	3.9	2.8	2.5	2.1
											1.0	26.2		8.1		33.6		101.1		6.8				3.1					
											4.9	26.2		8.1		33.5		101.4		6.8				3.7					
Middle	4.9	26.2	26.2	8.1						8.1	33.5	33.5	101.4	101.4	6.8	6.8	3.7	3.7	1.6										
	8.8	26.1		8.1							33.6		99.9		6.7		4.9												
	8.8	26.1		8.1							33.6		99.9		6.7		4.9												
SR10	Sunny	Rough	14:46	6.3						Surface	1.0	25.9	25.9	8.1	8.1	33.7	33.7	100.3	100.4	6.7	6.7	6.7	4.5	4.5	5.2	1.4	1.8	3.4	
											1.0	25.9		8.1		33.7		100.4		6.7			4.5						
											3.2	25.9		8.1		33.7		100.4		6.8			5.1						
					Middle	3.2	25.9	25.9	8.1	8.1	33.7	33.7	100.4	100.4	6.8	6.8	5.2	5.2	3.2										
						5.3	25.9		8.1		33.7		100.6		6.8		5.8												
						5.3	25.9		8.1		33.7		100.6		6.8		5.8												

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 03 November 21 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	09:29	10.7	Surface	1.0	25.4	25.4	8.1	8.1	32.3	32.3	85.7	85.7	5.9	5.9	5.9	6.1	6.1	5.9	3.0	3.3	3.1	
						1.0	25.4		8.1		32.3		85.6		5.9		5.9	6.1		5.9	3.6			
					Middle	5.4	25.4	25.4	8.1	8.1	32.3	32.3	85.4	85.4	5.8	5.8	5.9	5.9	5.9	5.9	5.9	3.2		3.4
						5.4	25.4		8.1		32.3		85.4		5.8		5.9	5.9		5.9	3.6			
					Bottom	9.7	25.4	25.4	8.1	8.1	32.3	32.3	85.3	85.3	5.8	5.8	5.8	5.7	5.7	5.7	5.7	3.0		2.7
						9.7	25.4		8.1		32.3		85.3		5.8		5.8	5.6		5.7	2.4			
C2	Cloudy	Rough	10:56	11.2	Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	95.5	95.5	6.6	6.6	6.6	6.1	6.1	6.6	2.9	2.9	3.2	
						1.0	25.1		8.2		32.6		95.5		6.6		6.6	6.0		6.1	2.9			
					Middle	5.6	25.1	25.1	8.2	8.2	32.6	32.6	95.0	95.0	6.5	6.5	6.5	5.9	5.9	5.4	3.5	3.3		
						5.6	25.1		8.2		32.6		95.0		6.5		5.9	5.9		5.9	3.0			
					Bottom	10.2	25.1	25.1	8.2	8.2	32.6	32.6	94.2	94.2	6.5	6.5	6.5	4.2	4.3	4.3	3.6	3.5		
						10.2	25.1		8.2		32.6		94.2		6.5		6.5	4.4		4.3	3.3			
C3	Cloudy	Rough	10:31	23.1	Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	95.2	95.2	6.5	6.5	6.5	6.0	6.0	6.5	2.4	2.7	2.9	
						1.0	25.1		8.2		32.6		95.2		6.5		6.5	5.9		6.0	2.9			
					Middle	11.6	25.1	25.1	8.2	8.2	32.6	32.6	94.3	94.3	6.5	6.5	6.5	5.1	5.1	4.3	2.5	2.7		
						11.6	25.1		8.2		32.6		94.3		6.5		6.5	5.0		5.1	2.9			
					Bottom	22.1	25.1	25.1	8.2	8.2	32.6	32.6	93.5	93.5	6.4	6.4	6.4	2.0	2.0	2.0	2.8	3.3		
						22.1	25.1		8.2		32.6		93.5		6.4		6.4	1.9		2.0	3.8			
SR1	Cloudy	Moderate	09:23	8.3	Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	94.1	94.1	6.5	6.5	6.5	5.7	5.7	6.5	1.8	2.2	2.9	
						1.0	25.1		8.2		32.6		94.1		6.5		6.5	5.7		5.7	2.5			
					Middle	4.2	25.1	25.1	8.2	8.2	32.6	32.6	93.6	93.6	6.4	6.4	6.4	5.4	5.4	5.7	2.7	3.0		
						4.2	25.1		8.2		32.6		93.6		6.4		6.4	5.3		5.4	3.3			
					Bottom	7.3	25.1	25.1	8.2	8.2	32.6	32.6	93.5	93.5	6.4	6.4	6.4	6.0	6.0	6.4	4.0	3.6		
						7.3	25.1		8.2		32.6		93.4		6.4		6.4	6.0		6.0	3.1			
SR2	Cloudy	Moderate	09:31	6.1	Surface	1.0	25.2	25.2	8.2	8.2	32.6	32.6	93.6	93.6	6.4	6.4	6.4	4.4	4.4	6.4	4.3	4.0	3.5	
						1.0	25.2		8.2		32.6		93.6		6.4		6.4	4.4		4.4	3.6			
					Middle	3.1	25.2	25.2	8.2	8.2	32.6	32.6	93.3	93.3	6.4	6.4	6.4	4.3	4.3	4.4	3.6	3.3		
						3.1	25.2		8.2		32.6		93.3		6.4		6.4	4.3		4.3	3.0			
					Bottom	5.1	25.2	25.2	8.2	8.2	32.6	32.6	93.4	93.4	6.4	6.4	6.4	4.5	4.5	4.4	3.4	3.1		
						5.1	25.2		8.2		32.6		93.3		6.4		6.4	4.5		4.5	2.8			
SR3	Cloudy	Moderate	09:43	8.0	Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	93.9	93.9	6.4	6.4	6.4	6.0	6.0	6.4	4.0	3.8	3.2	
						1.0	25.1		8.2		32.6		93.9		6.4		6.4	5.9		6.0	3.6			
					Middle	4.0	25.1	25.1	8.2	8.2	32.6	32.6	93.7	93.7	6.4	6.4	6.4	5.8	5.9	5.9	5.8	3.7		
						4.0	25.1		8.2		32.6		93.7		6.4		6.4	5.9		5.9	3.5			
					Bottom	7.0	25.1	25.1	8.2	8.2	32.6	32.6	93.5	93.5	6.4	6.4	6.4	5.8	5.8	6.4	2.0	2.2		
						7.0	25.1		8.2		32.6		93.5		6.4		6.4	5.8		5.8	2.4			
SR4	Cloudy	Moderate	10:19	13.6	Surface	1.0	25.4	25.4	8.2	8.2	32.6	32.6	94.6	94.6	6.5	6.5	6.4	6.1	6.1	6.4	3.8	4.0	3.5	
						1.0	25.4		8.2		32.6		94.6		6.5		6.4	6.1		6.1	4.2			
					Middle	6.8	25.3	25.3	8.2	8.2	32.6	32.6	92.5	92.5	6.3	6.3	6.3	3.5	3.5	4.0	3.8	3.9		
						6.8	25.3		8.2		32.6		92.5		6.3		6.3	3.5		4.0	3.8			
					Bottom	12.6	25.3	25.3	8.2	8.2	32.6	32.6	92.4	92.4	6.3	6.3	6.3	2.3	2.3	2.3	2.5	2.5		
						12.6	25.3		8.2		32.6		92.4		6.3		6.3	2.3		2.3	2.5			
SR5	Cloudy	Moderate	10:27	9.5	Surface	1.0	25.4	25.4	8.2	8.2	32.6	32.6	94.6	94.6	6.5	6.5	6.4	5.9	5.9	6.4	2.7	2.8	3.0	
						1.0	25.4		8.2		32.6		94.6		6.4		6.4	5.9		5.9	2.9			
					Middle	4.8	25.4	25.4	8.2	8.2	32.6	32.6	94.1	94.1	6.4	6.4	6.4	5.6	5.6	5.0	3.0	2.9		
						4.8	25.4		8.2		32.6		94.0		6.4		6.4	5.6		5.6	2.7			
					Bottom	8.5	25.2	25.2	8.2	8.2	32.6	32.6	92.3	92.3	6.3	6.3	6.3	3.6	3.6	6.3	3.0	3.2		
						8.5	25.2		8.2		32.6		92.3		6.3		6.3	3.6		3.6	3.4			
SR6	Cloudy	Moderate	09:52	14.6	Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	95.1	95.1	6.5	6.5	6.5	6.0	6.0	6.5	2.6	2.8	2.9	
						1.0	25.1		8.2		32.6		95.1		6.5		6.5	6.0		6.0	3.0			
					Middle	7.3	25.1	25.1	8.2	8.2	32.6	32.6	94.1	94.1	6.5	6.5	6.5	5.7	5.7	4.8	2.5	2.9		
						7.3	25.1		8.2		32.6		94.1		6.5		6.5	5.6		5.7	3.3			
					Bottom	13.6	25.1	25.1	8.2	8.2	32.6	32.6	93.2	93.2	6.4	6.4	6.4	2.8	2.7	2.7	2.8	3.1		
						13.6	25.1		8.2		32.6		93.2		6.4		6.4	2.6		2.7	3.3			
SR7	Cloudy	Rough	10:12	21.8	Surface	1.0	25.1	25.1	8.2	8.2	32.5	32.5	95.2	95.2	6.5	6.5	6.5	5.9	5.9	6.5	4.1	4.1	3.7	
						1.0	25.1		8.2		32.5		95.2		6.5		6.5	5.9		5.9	4.0			
					Middle	10.9	25.1	25.1	8.2	8.2	32.6	32.6	93.6	93.6	6.4	6.4	6.4	3.3	3.3	4.4	3.8	3.7		
						10.9	25.1		8.2		32.6		93.7		6.4		6.4	3.2		3.3	3.5			
					Bottom	20.8	25.1	25.1	8.2	8.2	32.6	32.6	93.5	93.5	6.4	6.4	6.4	3.9	3.9	4.4	3.4	3.5		
						20.8	25.1		8.2		32.6		93.4		6.4		6.4	3.9		3.9	3.6			

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 03 November 21 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	09:48	10.3	Surface	1.0	25.3	25.3	8.2	8.2	32.6	32.6	93.0	93.0	6.4	6.4	6.1	6.1	5.8	2.9	3.2	3.3					
						1.0	25.3		8.2		32.6		93.0		6.4		6.1			3.4							
						5.2	25.3		8.2		32.5		92.4		6.3		6.0			3.0							
					Middle	5.2	25.3	25.3	8.2	8.2	32.5	32.5	92.4	92.4	6.3	6.3	6.0	6.0	6.0	6.0	5.8	5.8	3.4	3.2	3.3		
						9.3	25.3		8.2		32.5		91.9		6.3		5.3		3.2								
						9.3	25.3		8.2		32.5		91.8		6.3		5.3		4.0								
					SR9	Cloudy	Moderate	09:59	9.8	Surface	1.0	25.2	25.2	8.2	8.2	32.3	32.3	91.9	91.9	6.3	6.3	7.3	7.3	7.0	2.9	3.2	2.8
											1.0	25.2		8.2		32.3		91.9		6.3		7.3			3.4		
											4.9	25.4		8.2		32.5		95.1		6.5		6.9			3.2		
Middle	4.9	25.4	25.4	8.2						8.2	32.5	32.5	95.3	95.2	6.5	6.5	6.9	6.9	6.9	6.9	7.0	7.0	2.8	3.0	2.8		
	8.8	25.3		8.2							32.6		92.3		6.3		6.8		2.4								
	8.8	25.3		8.2							32.6		92.2		6.3		6.8		2.1								
SR10	Cloudy	Rough	11:23	6.3						Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	95.6	95.6	6.6	6.6	6.1	6.1	6.0	3.0	3.5	3.2
											1.0	25.1		8.2		32.6		95.6		6.6		6.1			3.9		
											3.2	25.1		8.2		32.6		95.3		6.5		6.0			3.2		
					Middle	3.2	25.1	25.1	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5	6.0	6.0	6.0	6.0	6.0	6.0	3.8	3.5	3.2		
						5.3	25.1		8.2		32.6		95.0		6.5		5.9		2.5								
						5.3	25.1		8.2		32.6		95.0		6.5		6.0		2.7								

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 03 November 21 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	17:51	10.7	Surface	1.0	25.4	8.2	8.2	32.3	32.3	110.5	110.5	7.5	7.5	7.4	7.1	7.1	6.6	3.5	3.6	3.2
						1.0	25.4	8.2	8.2	32.3	32.3	110.4	110.5	7.5	7.5		7.1	7.1		3.6	3.6	
					Middle	5.4	25.4	8.2	8.2	32.3	32.3	106.3	106.3	7.3	7.3	7.1	7.1	3.5	3.4			
						5.4	25.4	8.2	8.2	32.3	32.3	106.3	106.3	7.3	7.3	7.0	7.1	3.2	3.4			
					Bottom	9.7	25.3	8.2	8.2	32.5	32.5	92.3	92.4	6.3	6.3	5.6	5.7	3.0	2.7			
						9.7	25.3	8.2	8.2	32.5	32.5	92.4	92.4	6.3	6.3	5.8	5.7	2.3	2.7			
C2	Cloudy	Rough	16:12	11.2	Surface	1.0	25.1	8.2	8.2	32.6	32.6	95.5	95.5	6.6	6.6	6.6	6.1	6.1	5.7	2.6	2.6	2.8
						1.0	25.1	8.2	8.2	32.6	32.6	95.5	95.5	6.6	6.6		6.0	6.1		2.5	2.6	
					Middle	5.6	25.1	8.2	8.2	32.6	32.6	95.0	95.0	6.5	6.5	5.8	5.8	3.1	2.9			
						5.6	25.1	8.2	8.2	32.6	32.6	95.0	95.0	6.5	6.5	5.8	5.8	2.7	2.9			
					Bottom	10.2	25.1	8.2	8.2	32.6	32.6	94.3	94.3	6.5	6.5	5.3	5.3	2.9	3.0			
						10.2	25.1	8.2	8.2	32.6	32.6	94.3	94.3	6.5	6.5	5.2	5.3	3.1	3.0			
C3	Cloudy	Rough	16:06	23.1	Surface	1.0	25.1	8.2	8.2	32.6	32.6	95.2	95.2	6.5	6.5	6.5	5.9	5.9	5.7	2.6	3.0	3.2
						1.0	25.1	8.2	8.2	32.6	32.6	95.2	95.2	6.5	6.5		5.9	5.9		3.4	3.0	
					Middle	11.6	25.1	8.2	8.2	32.6	32.6	94.9	94.9	6.5	6.5	5.7	5.7	3.3	3.4			
						11.6	25.1	8.2	8.2	32.6	32.6	94.9	94.9	6.5	6.5	5.7	5.7	3.5	3.4			
					Bottom	22.1	25.1	8.2	8.2	32.6	32.6	94.4	94.4	6.5	6.5	5.6	5.6	3.6	3.3			
						22.1	25.1	8.2	8.2	32.6	32.6	94.5	94.5	6.5	6.5	5.6	5.6	3.0	3.3			
SR1	Cloudy	Moderate	17:14	8.3	Surface	1.0	25.3	8.2	8.2	32.6	32.6	93.7	93.7	6.4	6.4	6.4	3.7	3.7	4.1	3.0	3.2	3.0
						1.0	25.3	8.2	8.2	32.6	32.6	93.7	93.7	6.4	6.4		3.7	3.7		3.4	3.2	
					Middle	4.2	25.2	8.2	8.2	32.6	32.6	93.7	93.7	6.4	6.4	4.2	4.2	2.7	3.1			
						4.2	25.2	8.2	8.2	32.6	32.6	93.7	93.7	6.4	6.4	4.2	4.2	3.4	3.1			
					Bottom	7.3	25.2	8.2	8.2	32.6	32.6	94.0	94.0	6.4	6.4	4.2	4.3	2.9	2.9			
						7.3	25.2	8.2	8.2	32.6	32.6	94.0	94.0	6.4	6.4	4.4	4.3	2.8	2.9			
SR2	Cloudy	Moderate	17:02	6.1	Surface	1.0	25.3	8.2	8.2	32.6	32.6	95.5	95.5	6.5	6.5	6.5	4.2	4.2	3.7	3.3	2.9	2.7
						1.0	25.3	8.2	8.2	32.6	32.6	95.4	95.5	6.5	6.5		4.2	4.2		2.5	2.9	
					Middle	3.1	25.3	8.2	8.2	32.6	32.6	95.0	95.1	6.5	6.5	4.1	4.1	2.9	2.8			
						3.1	25.3	8.2	8.2	32.6	32.6	95.1	95.1	6.5	6.5	4.1	4.1	2.6	2.8			
					Bottom	5.1	25.2	8.2	8.2	32.6	32.6	93.8	93.8	6.4	6.4	3.0	2.9	2.6	2.6			
						5.1	25.2	8.2	8.2	32.6	32.6	93.8	93.8	6.4	6.4	2.8	2.9	2.6	2.6			
SR3	Cloudy	Moderate	16:52	8.0	Surface	1.0	25.2	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5	6.5	6.2	6.2	6.1	3.7	4.2	3.7
						1.0	25.2	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5		6.2	6.2		4.7	4.2	
					Middle	4.0	25.1	8.2	8.2	32.6	32.6	95.0	95.0	6.5	6.5	6.4	6.4	3.8	3.5			
						4.0	25.1	8.2	8.2	32.6	32.6	95.0	95.0	6.5	6.5	6.4	6.4	3.2	3.5			
					Bottom	7.0	25.1	8.2	8.2	32.6	32.6	93.9	93.9	6.4	6.4	5.5	5.6	3.0	3.4			
						7.0	25.1	8.2	8.2	32.6	32.6	93.9	93.9	6.4	6.4	5.6	5.6	3.8	3.4			
SR4	Cloudy	Moderate	16:49	13.6	Surface	1.0	25.6	8.2	8.2	32.4	32.4	101.3	101.3	6.9	6.9	6.7	6.5	6.6	4.3	3.2	3.4	3.0
						1.0	25.6	8.2	8.2	32.4	32.4	101.2	101.3	6.9	6.9		6.6	6.6		3.5	3.4	
					Middle	6.8	25.5	8.2	8.2	32.4	32.4	96.2	96.0	6.6	6.6	6.3	6.3	2.7	3.0			
						6.8	25.5	8.2	8.2	32.4	32.4	95.8	96.0	6.5	6.6	6.3	6.3	3.2	3.0			
					Bottom	12.6	25.3	8.2	8.2	32.5	32.5	93.3	93.4	6.4	6.4	0.1	0.1	2.5	2.6			
						12.6	25.3	8.2	8.2	32.5	32.5	93.4	93.4	6.4	6.4	0.1	0.1	2.6	2.6			
SR5	Cloudy	Moderate	16:41	9.5	Surface	1.0	25.6	8.2	8.2	32.4	32.4	101.1	101.1	6.9	6.9	6.9	6.6	6.6	5.5	3.5	3.4	3.2
						1.0	25.6	8.2	8.2	32.4	32.4	101.0	101.1	6.9	6.9		6.6	6.6		3.3	3.4	
					Middle	4.8	25.4	8.2	8.2	32.4	32.4	99.2	99.3	6.8	6.8	6.4	6.4	3.4	3.2			
						4.8	25.4	8.2	8.2	32.4	32.4	99.3	99.3	6.8	6.8	6.4	6.4	2.9	3.2			
					Bottom	8.5	25.3	8.2	8.2	32.5	32.5	93.2	93.3	6.4	6.4	3.5	3.5	2.8	3.0			
						8.5	25.3	8.2	8.2	32.5	32.5	93.3	93.3	6.4	6.4	3.4	3.5	2.8	3.0			
SR6	Cloudy	Moderate	16:43	14.6	Surface	1.0	25.1	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5	6.5	6.1	6.1	5.4	5.8	5.8	5.3
						1.0	25.1	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5		6.1	6.1		5.7	5.8	
					Middle	7.3	25.1	8.2	8.2	32.6	32.6	94.5	94.6	6.5	6.5	5.8	5.7	5.5	5.2			
						7.3	25.1	8.2	8.2	32.6	32.6	94.6	94.6	6.5	6.5	5.6	5.7	4.8	5.2			
					Bottom	13.6	25.1	8.2	8.2	32.6	32.6	93.8	93.8	6.4	6.4	4.6	4.5	4.8	4.9			
						13.6	25.1	8.2	8.2	32.6	32.6	93.8	93.8	6.4	6.4	4.4	4.5	5.0	4.9			
SR7	Cloudy	Rough	16:23	21.8	Surface	1.0	25.1	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5	6.5	6.0	6.0	5.8	3.8	3.9	3.5
						1.0	25.1	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5		6.0	6.0		4.0	3.9	
					Middle	10.9	25.1	8.2	8.2	32.6	32.6	95.0	95.0	6.5	6.5	5.9	5.9	3.6	3.4			
						10.9	25.1	8.2	8.2	32.6	32.6	94.9	95.0	6.5	6.5	5.9	5.9	3.2	3.4			
					Bottom	20.8	25.1	8.2	8.2	32.6	32.6	94.1	94.1	6.5	6.5	5.4	5.4	3.0	3.2			
						20.8	25.1	8.2	8.2	32.6	32.6	94.1	94.1	6.5	6.5	5.4	5.4	3.4	3.2			

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 03 November 21 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	17:23	10.3	Surface	1.0	25.4	25.4	8.2	8.2	32.3	32.3	108.9	108.9	7.4	7.4	7.2	7.2	7.2	6.3	5.0	4.9	4.0
						1.0	25.4		8.2		32.3		108.8		7.4			7.1			4.7		
					Middle	5.2	25.4	25.4	8.2	8.2	32.4	32.4	102.2	102.2	7.0	7.0	7.0	7.0	7.0	7.0	3.5	3.8	
						5.2	25.4		8.2		32.4		102.1		7.0		7.0		3.0				
					Bottom	9.3	25.4	25.4	8.2	8.2	32.5	32.5	90.1	90.2	6.2	6.2	6.2	6.2	4.9	4.8	3.0	3.3	
						9.3	25.4		8.2		32.5		90.3		6.2		6.2		4.6		3.6		
SR9	Cloudy	Moderate	17:13	9.8	Surface	1.0	25.4	25.4	8.2	8.2	32.3	32.3	108.8	108.8	7.4	7.4	7.4	7.1	7.1	6.9	4.1	3.6	3.2
						1.0	25.4		8.2		32.3		108.8		7.4			7.1			3.1		
					Middle	4.9	25.4	25.4	8.2	8.2	32.3	32.3	106.5	106.4	7.3	7.3	7.0	7.1	3.4	3.1			
						4.9	25.4		8.2		32.3		106.3		7.3		7.1		2.8				
					Bottom	8.8	25.3	25.3	8.2	8.2	32.4	32.4	99.1	99.2	6.8	6.8	6.8	6.8	6.6	6.6	3.0	2.9	
						8.8	25.3		8.2		32.4		99.2		6.8		6.6		2.7				
SR10	Cloudy	Rough	15:48	6.3	Surface	1.0	25.1	25.1	8.2	8.2	32.6	32.6	95.5	95.5	6.6	6.6	6.6	6.1	6.1	6.1	4.5	4.4	3.8
						1.0	25.1		8.2		32.6		95.5		6.6			6.1			4.2		
					Middle	3.2	25.1	25.1	8.2	8.2	32.6	32.6	95.5	95.5	6.6	6.6	6.0	6.0	3.2	3.7			
						3.2	25.1		8.2		32.6		95.5		6.6		6.0		4.2				
					Bottom	5.3	25.1	25.1	8.2	8.2	32.6	32.6	95.3	95.3	6.5	6.5	6.5	6.5	6.1	6.1	3.3	3.5	
						5.3	25.1		8.2		32.6		95.3		6.5		6.1		3.6				

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 05 November 21 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	11:03	11.2	Surface	1.0	25.3	25.3	8.0	8.0	32.0	32.0	84.3	84.4	5.8	5.8	5.9	3.1	3.1	4.2	4.7	4.9	4.3
						1.0	25.3		8.0		32.0		84.5		5.8		5.9	3.1			5.1		
					Middle	5.6	25.4	25.4	8.0	8.0	32.0	32.0	86.1	86.3	5.9	5.9	6.0	4.1	4.2	4.2	4.0	4.2	
						5.6	25.4		8.0		32.0		86.4		5.9		6.0	4.2			4.4		
					Bottom	10.2	25.4	25.4	8.0	8.0	32.0	32.0	87.4	87.7	6.0	6.0	6.0	5.2	5.2	5.2	3.7	3.8	
						10.2	25.4		8.0		32.0		88.0		6.0		6.0	5.2			3.8		
C2	Fine	Moderate	12:29	10.6	Surface	1.0	25.1	25.1	8.2	8.2	32.5	32.5	96.6	96.6	6.6	6.6	6.6	3.6	3.6	4.4	5.2	5.1	4.6
						1.0	25.1		8.2		32.5		96.6		6.6		6.6	3.6			5.0		
					Middle	5.3	25.1	25.1	8.2	8.2	32.5	32.5	96.6	96.6	6.6	6.6	6.6	4.5	4.5	4.4	4.4	4.6	
						5.3	25.1		8.2		32.5		96.6		6.6		6.6	4.5			4.7		
					Bottom	9.6	25.1	25.1	8.2	8.2	32.5	32.5	96.6	96.7	6.6	6.6	6.6	5.2	5.2	5.2	4.4	4.2	
						9.6	25.1		8.2		32.5		96.7		6.6		6.6	5.2			4.0		
C3	Fine	Moderate	12:04	23.0	Surface	1.0	25.1	25.1	8.2	8.2	32.5	32.5	96.6	96.7	6.6	6.6	6.6	3.7	3.7	4.8	3.8	4.0	4.8
						1.0	25.1		8.2		32.5		96.7		6.6		6.6	3.7			4.2		
					Middle	11.5	25.1	25.1	8.2	8.2	32.5	32.5	96.8	96.9	6.6	6.7	6.7	4.8	4.8	4.8	4.5	4.7	
						11.5	25.1		8.2		32.5		96.9		6.7		6.7	4.8			4.9		
					Bottom	22.0	25.1	25.1	8.2	8.2	32.5	32.5	97.0	97.1	6.7	6.7	6.7	5.9	5.9	5.9	5.4	5.6	
						22.0	25.1		8.2		32.5		97.1		6.7		6.7	5.9			5.8		
SR1	Fine	Moderate	11:01	8.2	Surface	1.0	25.2	25.2	8.2	8.2	32.4	32.4	96.6	96.7	6.6	6.6	6.7	5.9	5.9	6.5	4.1	4.3	6.2
						1.0	25.2		8.2		32.4		96.7		6.6		6.7	5.9			4.5		
					Middle	4.1	25.2	25.2	8.2	8.2	32.4	32.4	97.1	97.2	6.7	6.7	6.7	6.4	6.4	6.5	5.5	5.7	
						4.1	25.2		8.2		32.4		97.2		6.7		6.7	6.4			5.8		
					Bottom	7.2	25.2	25.2	8.2	8.2	32.4	32.4	97.7	97.8	6.7	6.7	6.7	7.1	7.1	7.1	8.4	8.5	
						7.2	25.2		8.2		32.4		97.8		6.7		6.7	7.1			8.6		
SR2	Fine	Moderate	11:10	6.4	Surface	1.0	25.2	25.2	8.2	8.2	32.4	32.4	96.9	96.9	6.6	6.6	6.7	4.5	4.5	5.6	5.7	5.6	6.2
						1.0	25.2		8.2		32.4		96.9		6.6		6.7	4.5			5.5		
					Middle	3.2	25.2	25.2	8.2	8.2	32.4	32.4	97.1	97.1	6.7	6.7	6.7	5.7	5.7	5.7	6.3	6.1	
						3.2	25.2		8.2		32.4		97.1		6.7		6.7	5.7			5.9		
					Bottom	5.4	25.2	25.2	8.2	8.2	32.4	32.4	97.2	97.2	6.7	6.7	6.7	6.6	6.6	6.6	6.7	6.8	
						5.4	25.2		8.2		32.4		97.2		6.7		6.7	6.6			6.9		
SR3	Fine	Moderate	11:19	7.8	Surface	1.0	25.2	25.2	8.2	8.2	32.4	32.4	96.6	96.6	6.6	6.6	6.6	8.0	8.0	8.7	6.2	6.1	6.5
						1.0	25.2		8.2		32.4		96.6		6.6		6.6	8.0			5.9		
					Middle	3.9	25.2	25.2	8.2	8.2	32.4	32.4	96.9	97.0	6.6	6.7	6.7	8.8	8.8	8.7	6.6	6.4	
						3.9	25.2		8.2		32.4		97.0		6.7		6.7	8.8			6.1		
					Bottom	6.8	25.2	25.2	8.2	8.2	32.4	32.4	97.3	97.4	6.7	6.7	6.7	9.2	9.3	9.3	7.0	7.2	
						6.8	25.2		8.2		32.4		97.4		6.7		6.7	9.3			7.4		
SR4	Fine	Moderate	11:56	12.8	Surface	1.0	25.3	25.3	8.1	8.1	32.3	32.3	89.9	89.0	6.1	6.1	6.1	4.3	4.3	5.3	7.0	7.0	5.9
						1.0	25.3		8.1		32.3		89.0		6.1		6.1	4.3			6.9		
					Middle	6.4	25.3	25.3	8.1	8.1	32.3	32.3	89.0	89.1	6.1	6.1	6.1	5.3	5.3	5.3	6.0	6.2	
						6.4	25.3		8.1		32.3		89.1		6.1		6.1	5.2			6.3		
					Bottom	11.8	25.3	25.3	8.1	8.1	32.3	32.3	89.1	89.1	6.1	6.1	6.1	6.2	6.2	6.2	4.8	4.6	
						11.8	25.3		8.1		32.3		89.1		6.1		6.1	6.2			4.4		
SR5	Fine	Moderate	12:06	9.8	Surface	1.0	25.2	25.2	8.2	8.2	32.4	32.4	98.1	98.1	6.7	6.7	6.7	3.4	3.4	4.6	3.9	4.1	4.5
						1.0	25.2		8.2		32.4		98.1		6.7		6.7	3.4			4.2		
					Middle	4.9	25.2	25.2	8.2	8.2	32.4	32.4	98.2	98.2	6.7	6.7	6.7	4.4	4.4	4.4	4.4	4.5	
						4.9	25.2		8.2		32.4		98.2		6.7		6.7	4.4			4.6		
					Bottom	8.8	25.2	25.2	8.2	8.2	32.4	32.4	98.5	98.6	6.8	6.8	6.8	6.0	6.0	6.0	4.7	4.9	
						8.8	25.2		8.2		32.4		98.7		6.8		6.8	6.0			5.0		
SR6	Fine	Moderate	11:29	12.6	Surface	1.0	25.2	25.2	8.2	8.2	32.4	32.4	99.5	99.6	6.8	6.8	6.9	5.3	5.3	6.6	3.7	3.6	4.2
						1.0	25.2		8.2		32.4		99.7		6.8		6.9	5.3			3.5		
					Middle	6.3	25.0	25.0	8.2	8.2	32.5	32.5	100.5	100.7	6.9	6.9	6.9	6.7	6.7	6.7	4.1	4.2	
						6.3	25.0		8.2		32.5		100.9		6.9		6.9	6.7			4.3		
					Bottom	11.6	24.9	24.9	8.2	8.2	32.6	32.6	102.2	102.7	7.0	7.1	7.1	7.8	7.8	7.8	4.8	4.7	
						11.6	24.8		8.2		32.6		103.1		7.1		7.1	7.8			4.5		
SR7	Fine	Moderate	11:48	22.2	Surface	1.0	25.1	25.1	8.2	8.2	32.5	32.5	98.2	98.3	6.7	6.8	6.8	4.6	4.6	5.5	4.6	4.4	3.9
						1.0	25.1		8.2		32.5		98.4		6.8		6.8	4.6			4.2		
					Middle	11.1	24.9	24.9	8.2	8.2	32.6	32.6	100.3	100.5	6.9	6.9	6.9	5.6	5.6	5.6	3.9	4.0	
						11.1	24.8		8.2		32.6		100.6		6.9		6.9	5.6			4.1		
					Bottom	21.2	24.6	24.6	8.2	8.2	32.8	32.8	101.6	101.7	7.0	7.0	7.0	6.2	6.2	6.2	3.5	3.4	
						21.2	24.6		8.2		32.8		101.8		7.0		7.0	6.2			3.3		

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 05 November 21 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	Moderate	11:26	10.6	Surface	1.0	25.3	25.3	8.1	8.1	32.2	32.2	90.3	90.4	6.2	6.2	6.3	3.1	3.1	4.1	4.3	4.5	5.6						
						1.0	25.3		8.1		32.2		90.5		6.2			3.0			4.7								
						5.3	25.3		8.1		32.2		91.7		6.3			4.3			5.2								
					Middle	5.3	25.3	25.3	8.1	8.1	32.2	32.2	91.9	91.8	6.3	6.3	4.3	4.3	5.5										
						9.6	25.3		8.1		32.2		92.8		6.4		5.0		6.8										
						9.6	25.3		8.1		32.2		93.3		6.4		5.0		7.2										
					SR9	Fine	Moderate	11:38	10.4	Surface	1.0	25.3	25.3	8.1	8.1	32.2	32.2	89.7	89.7	6.1	6.1	6.1		8.0	8.0	8.5	3.7	3.9	5.4
											1.0	25.3		8.1		32.2		89.7		6.1				8.0			4.0		
											5.2	25.3		8.1		32.2		89.7		6.1				8.3			4.7		
Middle	5.2	25.3	25.3	8.1						8.1	32.2	32.2	89.7	89.7	6.1	6.1	8.2	8.3	5.0										
	9.4	25.3		8.1							32.2		89.6		6.1		9.1		7.6										
	9.4	25.3		8.1							32.0		89.6		6.1		9.1		7.4										
SR10	Fine	Moderate	13:01	6.2						Surface	1.0	25.1	25.1	8.2	8.2	32.5	32.5	96.0	96.0	6.6	6.6	6.6	3.6	3.6	4.5	5.8	5.8	5.2	
											1.0	25.1		8.2		32.5		96.0		6.6			3.6			5.8			
											3.1	25.1		8.2		32.5		96.0		6.6			4.9			5.4			
					Middle	3.1	25.1	25.1	8.2	8.2	32.5	32.5	96.1	96.1	6.6	6.6	4.8	4.9	5.1										
						5.2	25.1		8.2		32.5		96.4		6.6		5.1		4.8										
						5.2	25.1		8.2		32.5		96.5		6.6		5.0		4.4										

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 05 November 21 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	18:32	10.8	Surface	1.0	25.7	25.7	8.1	8.1	32.1	32.1	95.1	95.0	6.5	6.5	6.5	4.1	4.2	5.2	3.8	3.9	4.4
						1.0	25.7	8.1	8.1	32.1	32.1	94.8	94.6	6.5	6.4	4.2		4.4					
					Middle	5.4	25.7	25.7	8.1	8.1	32.1	32.1	94.5	94.6	6.4	6.4		5.1	5.2		4.7	4.6	
						5.4	25.7	8.1	8.1	32.1	32.1	94.7	94.6	6.4	6.4	5.1		5.2	4.7		4.6		
					Bottom	9.8	25.8	25.8	8.1	8.1	32.1	32.1	95.5	95.7	6.5	6.5		6.2	6.2		4.7	4.8	
						9.8	25.8	8.1	8.1	32.1	32.1	95.9	95.7	6.5	6.5	6.2		6.2	4.8		4.8		
C2	Fine	Moderate	17:00	11.2	Surface	1.0	25.6	25.6	8.2	8.2	32.1	32.1	104.1	104.1	7.1	7.1	7.1	4.8	4.8	5.6	6.2	6.1	5.1
						1.0	25.6	8.2	8.2	32.1	32.1	104.0	104.1	7.1	7.1	4.8		4.8					
					Middle	5.6	25.6	25.6	8.2	8.2	32.1	32.1	104.0	104.1	7.1	7.1		5.8	5.8		4.5	4.8	
						5.6	25.6	8.2	8.2	32.1	32.1	104.2	104.1	7.1	7.1	5.8		5.8	4.5		4.8		
					Bottom	10.2	25.6	25.6	8.2	8.2	32.1	32.1	104.5	104.6	7.1	7.1		6.3	6.3		4.2	4.4	
						10.2	25.6	8.2	8.2	32.1	32.1	104.6	104.6	7.1	7.1	6.3		6.3	4.6		4.4		
C3	Fine	Moderate	17:16	23.0	Surface	1.0	25.6	25.6	8.2	8.2	32.1	32.1	104.7	104.7	7.1	7.1	7.2	3.7	3.7	4.6	3.9	4.1	4.8
						1.0	25.6	8.2	8.2	32.1	32.1	104.6	104.7	7.1	7.1	3.6		4.2					
					Middle	11.5	25.6	25.6	8.2	8.2	32.1	32.1	105.1	105.2	7.2	7.2		4.5	4.5		4.4	4.2	
						11.5	25.6	8.2	8.2	32.1	32.1	105.2	105.2	7.2	7.2	4.5		4.5	4.0		4.2		
					Bottom	22.0	25.7	25.7	8.2	8.2	32.0	32.0	105.6	105.6	7.2	7.2		5.7	5.7		6.2	6.0	
						22.0	25.7	8.2	8.2	32.0	32.0	105.6	105.6	7.2	7.2	5.6		5.7	5.8		6.0		
SR1	Fine	Moderate	18:20	9.0	Surface	1.0	25.5	25.5	8.3	8.3	32.5	32.5	120.9	121.1	8.2	8.3	8.3	5.4	5.5	6.5	5.9	5.7	4.7
						1.0	25.4	8.3	8.3	32.5	32.5	121.3	121.1	8.3	8.3	5.5		5.5					
					Middle	4.5	25.3	25.3	8.3	8.3	32.5	32.5	121.8	122.0	8.3	8.4		6.5	6.5		4.6	4.5	
						4.5	25.3	8.3	8.3	32.5	32.5	122.1	122.0	8.4	8.4	6.5		6.5	4.4		4.5		
					Bottom	8.0	25.3	25.3	8.3	8.3	32.5	32.4	124.2	127.2	8.5	8.7		7.4	7.4		4.0	3.8	
						8.0	25.3	8.3	8.3	32.4	32.4	130.1	127.2	8.9	8.7	7.4		7.4	3.6		3.8		
SR2	Fine	Moderate	18:11	6.2	Surface	1.0	25.3	25.3	8.2	8.2	32.5	32.5	103.3	103.2	7.1	7.1	7.0	5.4	5.4	6.3	4.1	4.3	4.8
						1.0	25.3	8.2	8.2	32.5	32.5	103.1	103.2	7.1	7.1	5.4		5.4					
					Middle	3.1	25.3	25.3	8.2	8.2	32.4	32.4	101.0	101.2	6.9	6.9		6.5	6.5		4.9	4.8	
						3.1	25.3	8.2	8.2	32.4	32.4	101.3	101.2	6.9	6.9	6.4		6.5	4.6		4.8		
					Bottom	5.2	25.4	25.4	8.2	8.2	32.2	32.2	104.8	104.8	7.2	7.2		7.1	7.1		5.1	5.3	
						5.2	25.4	8.2	8.2	32.2	32.2	104.8	104.8	7.2	7.2	7.1		7.1	5.4		5.3		
SR3	Fine	Moderate	18:02	7.8	Surface	1.0	25.3	25.3	8.2	8.2	32.5	32.5	103.5	103.6	7.1	7.1	7.1	4.4	4.4	5.5	4.4	4.3	3.8
						1.0	25.3	8.2	8.2	32.5	32.5	103.6	103.6	7.1	7.1	4.4		4.4					
					Middle	3.9	25.3	25.3	8.2	8.2	32.4	32.4	104.2	104.3	7.1	7.1		5.4	5.5		4.0	3.9	
						3.9	25.3	8.2	8.2	32.4	32.4	104.4	104.3	7.1	7.1	5.5		5.5	3.8		3.9		
					Bottom	6.8	25.4	25.4	8.2	8.2	32.4	32.4	105.1	105.3	7.2	7.2		6.5	6.5		3.1	3.3	
						6.8	25.4	8.2	8.2	32.4	32.4	105.4	105.3	7.2	7.2	6.5		6.5	3.5		3.3		
SR4	Fine	Moderate	17:36	13.0	Surface	1.0	25.4	25.4	8.2	8.2	32.5	32.4	113.8	113.8	7.8	7.8	7.6	5.2	5.2	6.1	6.4	6.2	5.2
						1.0	25.4	8.2	8.2	32.4	32.4	113.8	113.8	7.8	7.8	5.2		5.2					
					Middle	6.5	25.6	25.7	8.2	8.2	32.2	32.2	107.5	107.4	7.3	7.3		6.0	6.1		5.8	5.7	
						6.5	25.7	8.2	8.2	32.1	32.1	107.2	107.4	7.3	7.3	6.1		6.1	5.5		5.7		
					Bottom	12.0	25.8	25.8	8.2	8.2	32.1	32.1	108.8	109.7	7.4	7.5		7.1	7.1		3.4	3.6	
						12.0	25.8	8.2	8.2	32.1	32.1	110.5	109.7	7.5	7.5	7.1		7.1	3.8		3.6		
SR5	Fine	Moderate	17:30	10.2	Surface	1.0	25.5	25.5	8.2	8.2	32.5	32.5	116.3	116.3	7.9	7.9	7.9	5.3	5.3	6.2	4.2	4.4	5.2
						1.0	25.4	8.2	8.2	32.5	32.5	116.3	116.3	7.9	7.9	5.3		5.3					
					Middle	5.1	25.4	25.4	8.2	8.2	32.5	32.5	116.2	116.2	7.9	7.9		6.1	6.1		5.3	5.2	
						5.1	25.4	8.2	8.2	32.5	32.5	116.1	116.2	7.9	7.9	6.1		6.1	5.0		5.2		
					Bottom	9.2	25.5	25.5	8.2	8.2	32.5	32.5	115.9	115.9	7.9	7.9		7.2	7.2		6.2	6.0	
						9.2	25.5	8.2	8.2	32.5	32.5	115.8	115.9	7.9	7.9	7.2		7.2	5.8		6.0		
SR6	Fine	Moderate	17:50	12.6	Surface	1.0	25.2	25.2	8.2	8.2	32.5	32.5	101.5	101.4	7.0	7.0	6.9	4.1	4.1	5.3	5.6	5.4	4.7
						1.0	25.2	8.2	8.2	32.5	32.5	101.3	101.3	6.9	6.9	4.1		4.1					
					Middle	6.3	25.1	25.1	8.2	8.2	32.5	32.5	101.2	101.3	6.9	6.9		5.5	5.6		4.7	4.6	
						6.3	25.1	8.2	8.2	32.5	32.5	101.3	101.3	6.9	6.9	5.6		5.6	4.4		4.6		
					Bottom	11.6	25.1	25.1	8.2	8.2	32.5	32.5	101.8	101.9	7.0	7.0		6.1	6.1		4.2	4.1	
						11.6	25.1	8.2	8.2	32.5	32.5	102.0	101.9	7.0	7.0	6.1		6.1	3.9		4.1		
SR7	Fine	Moderate	17:29	21.8	Surface	1.0	25.7	25.7	8.2	8.2	32.1	32.1	108.2	108.0	7.4	7.4	7.3	4.8	4.8	5.5	4.8	4.0	4.7
						1.0	25.7	8.2	8.2	32.1	32.1	107.8	108.0	7.3	7.4	4.8		4.8					
					Middle	10.9	25.7	25.7	8.2	8.2	32.1	32.1	106.9	106.9	7.3	7.3		5.7	5.7		4.3	4.5	
						10.9	25.7	8.2	8.2	32.1	32.1	106.8	106.9	7.3	7.3	5.6		5.7	4.6		4.5		
					Bottom	20.8	25.7	25.7	8.2	8.2	32.1	32.0	106.3	106.3	7.2	7.2		6.1	6.1		5.6	5.8	
						20.8	25.7	8.2	8.2	32.0	32.0	106.2	106.3	7.2	7.2	6.1		6.1	6.0		5.8		

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 05 November 21 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	Moderate	18:07	9.6	Surface	1.0	25.8	25.8	8.1	8.1	32.1	32.1	99.8	99.8	6.8	6.8	6.8	3.1	3.1	4.3	2.7	2.9	4.6						
						1.0	25.8		8.1		32.0		99.8		6.8			3.1			3.0								
						4.8	25.8		8.1		32.0		99.1		6.7			4.2			4.6								
					Middle	4.8	25.8	25.8	8.1	8.1	32.0	32.0	99.4	99.3	6.8	6.8	4.2	4.2	4.2	4.2	4.8	4.7		6.4	6.2				
						8.6	25.8		8.2		31.9		99.7		6.8		5.5												
						8.6	25.9		8.2		31.5		99.8		6.8		5.6		6.0										
					SR9	Fine	Moderate	17:55	9.2	Surface	1.0	25.9	25.9	8.2	8.2	32.1	32.0	104.1	104.2	7.1	7.1	7.1		4.5	4.5	5.4	4.0	3.9	4.6
											1.0	25.9		8.2		32.0		104.3		7.1				4.5			3.8		
											4.6	26.1		8.2		31.9		104.8		7.1				5.3			4.4		
Middle	4.6	26.2	26.2	8.2						8.2	31.8	31.8	105.0	104.9	7.1	7.1	5.4	5.4	5.4	5.4	4.8	4.6	5.4	5.3					
	8.2	26.5		8.2							31.6		107.3		7.2		6.3												
	8.2	26.6		8.2							31.5		112.3		7.6		6.3		5.1										
SR10	Fine	Moderate	16:35	6.2						Surface	1.0	25.6	25.6	8.2	8.2	32.1	32.1	103.1	103.2	7.0	7.0	7.1	3.7	3.7	4.7	3.5	3.7	4.2	
											1.0	25.6		8.2		32.1		103.2		7.0			3.7			3.8			
											3.1	25.6		8.2		32.1		103.4		7.1			4.7			4.4			
					Middle	3.1	25.6	25.6	8.2	8.2	32.1	32.1	103.4	103.4	7.1	7.1	4.7	4.7	4.7	4.7	4.2	4.3	4.7	4.6					
						5.2	25.6		8.2		32.1		103.8		7.1		5.6												
						5.2	25.6		8.2		32.1		104.5		7.1		5.6		4.5										

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 08 November 21 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	Rough	15:08	11.2	Surface	1.0	25.3	25.3	8.1	8.1	31.9	31.9	92.5	92.5	6.3	6.3	6.4	5.5	5.5	5.2	7.1	7.2	6.3	
						1.0	25.3		8.1		31.9		92.5		6.3		6.4	5.4				7.2		
					Middle	5.6	25.3	25.3	8.1	8.1	32.0	32.0	93.4	93.5	6.4	6.4	6.4	5.1	5.1	5.2	6.5	6.3		
						5.6	25.3		8.1		32.0		93.5		6.4		6.4	5.0				6.0		
					Bottom	10.2	25.3	25.3	8.1	8.1	32.0	32.0	92.9	92.8	6.4	6.4	6.4	5.0	5.0	6.6	5.6	5.5		
						10.2	25.3		8.1		32.0		92.7		6.4		6.4	5.0				5.3		
C2	Cloudy	Rough	13:46	10.2	Surface	1.0	25.3	25.3	8.2	8.2	32.2	32.2	96.1	96.1	6.6	6.6	6.6	4.8	4.8	5.0	4.1	4.0	5.0	
						1.0	25.3		8.2		32.2		96.1		6.6		6.6	4.7				3.8		
					Middle	5.1	25.2	25.2	8.2	8.2	32.2	32.2	95.9	95.9	6.6	6.6	6.6	5.1	5.1	6.6	4.9	5.1		
						5.1	25.2		8.2		32.2		95.9		6.6		6.6	5.1				5.3		
					Bottom	9.2	25.3	25.3	8.2	8.2	32.2	32.2	95.9	95.9	6.6	6.6	6.6	5.1	5.1	6.6	6.2	5.9		
						9.2	25.3		8.2		32.2		95.9		6.6		6.6	5.1				5.6		
C3	Cloudy	Rough	14:07	22.3	Surface	1.0	25.3	25.3	8.2	8.2	32.2	32.2	96.2	96.2	6.6	6.6	6.6	4.9	4.9	4.6	7.4	7.6	6.5	
						1.0	25.3		8.2		32.2		96.2		6.6		6.6	4.9				7.8		
					Middle	11.2	25.2	25.2	8.2	8.2	32.2	32.2	96.2	96.2	6.6	6.6	6.6	4.6	4.6	6.6	6.3	6.4		
						11.2	25.2		8.2		32.2		96.2		6.6		6.6	4.5				6.5		
					Bottom	21.3	25.2	25.2	8.2	8.2	32.2	32.2	95.9	95.9	6.6	6.6	6.6	4.4	4.4	6.6	5.5	5.6		
						21.3	25.2		8.2		32.2		95.9		6.6		6.6	4.4				5.6		
SR1	Cloudy	Moderate	15:22	7.7	Surface	1.0	25.2	25.2	8.2	8.2	32.2	32.3	98.4	98.4	6.7	6.7	6.7	5.8	5.8	5.7	7.2	7.4	6.4	
						1.0	25.2		8.2		32.2		98.3		6.7		6.7	5.7				7.6		
					Middle	3.9	25.1	25.1	8.2	8.2	32.4	32.4	97.8	97.8	6.7	6.7	6.7	5.6	5.6	6.7	6.2	6.1		
						3.9	25.1		8.2		32.4		97.7		6.7		6.7	5.6				6.0		
					Bottom	6.7	25.0	25.0	8.2	8.2	32.4	32.4	97.5	97.5	6.7	6.7	6.7	5.7	5.7	6.7	5.7	5.7		
						6.7	25.0		8.2		32.4		97.4		6.7		6.7	5.7				5.7		
SR2	Cloudy	Rough	15:14	6.4	Surface	1.0	25.0	25.0	8.2	8.2	32.4	32.4	100.0	100.0	6.9	6.9	6.9	4.2	4.2	6.9	6.2	6.3	5.8	
						1.0	25.0		8.2		32.4		100.0		6.9		6.9	4.1				6.3		
					Middle	3.2	24.9	24.9	8.2	8.2	32.4	32.4	99.6	99.6	6.9	6.9	6.9	3.5	3.5	6.9	6.0	6.0		
						3.2	24.9		8.2		32.4		99.5		6.9		6.9	3.5				6.0		
					Bottom	5.4	24.9	24.9	8.2	8.2	32.4	32.4	99.4	99.4	6.8	6.8	6.8	3.2	3.3	6.8	5.3	5.3		
						5.4	24.9		8.2		32.4		99.4		6.8		6.8	3.3				5.2		
SR3	Cloudy	Rough	14:57	7.7	Surface	1.0	25.2	25.2	8.2	8.2	32.1	32.1	99.5	99.5	6.8	6.8	6.8	6.0	6.0	6.8	6.1	6.2	5.8	
						1.0	25.2		8.2		32.1		99.5		6.8		6.8	5.9				6.3		
					Middle	3.9	24.9	24.9	8.2	8.2	32.4	32.4	99.1	99.1	6.8	6.8	6.8	5.3	5.3	6.8	5.9	5.8		
						3.9	24.9		8.2		32.4		99.0		6.8		6.8	5.3				5.7		
					Bottom	6.7	24.9	24.9	8.2	8.2	32.4	32.4	98.4	98.4	6.8	6.8	6.8	5.2	5.2	6.8	5.7	5.7		
						6.7	24.9		8.2		32.4		98.4		6.8		6.8	5.2				5.3		
SR4	Cloudy	Rough	14:13	14.5	Surface	1.0	25.3	25.3	8.1	8.1	31.9	31.9	92.2	92.2	6.3	6.3	6.4	5.3	5.3	4.6	5.3	5.2	5.9	
						1.0	25.3		8.1		31.9		92.2		6.3		6.4	5.3				5.0		
					Middle	7.3	25.3	25.3	8.1	8.1	32.0	32.0	94.1	94.2	6.5	6.5	6.5	5.0	5.0	6.5	5.8	5.9		
						7.3	25.3		8.1		32.0		94.2		6.5		6.5	4.9				6.0		
					Bottom	13.5	25.3	25.3	8.1	8.1	32.1	32.1	93.3	93.3	6.4	6.4	6.4	3.5	3.6	6.4	6.5	6.6		
						13.5	25.3		8.1		32.1		93.2		6.4		6.4	3.7				6.6		
SR5	Cloudy	Rough	14:07	9.0	Surface	1.0	25.3	25.3	8.1	8.1	31.9	31.9	92.2	92.3	6.3	6.3	6.4	4.4	4.4	6.4	6.0	6.2	7.0	
						1.0	25.3		8.1		31.9		92.3		6.3		6.4	4.3				6.3		
					Middle	4.5	25.3	25.3	8.1	8.1	32.0	32.0	93.9	94.0	6.4	6.4	6.4	5.1	5.1	6.4	6.8	7.0		
						4.5	25.3		8.1		32.0		94.0		6.4		6.4	5.1				7.1		
					Bottom	8.0	25.3	25.3	8.1	8.1	32.1	32.1	94.7	94.8	6.5	6.5	6.5	4.5	4.5	6.5	7.7	7.8		
						8.0	25.3		8.1		32.1		94.8		6.5		6.5	4.4				7.9		
SR6	Cloudy	Rough	14:44	14.7	Surface	1.0	25.3	25.3	8.2	8.2	32.2	32.2	96.5	96.5	6.6	6.6	6.6	4.6	4.6	6.6	7.7	7.8	6.9	
						1.0	25.3		8.2		32.2		96.5		6.6		6.6	4.6				7.8		
					Middle	7.4	25.3	25.3	8.2	8.2	32.2	32.2	96.0	96.0	6.6	6.6	6.6	5.3	5.3	6.6	6.9	6.7		
						7.4	25.3		8.2		32.2		95.9		6.6		6.6	5.2				6.4		
					Bottom	13.7	25.2	25.2	8.2	8.2	32.3	32.2	95.7	95.8	6.6	6.6	6.6	3.5	3.6	6.6	6.2	6.2		
						13.7	25.2		8.2		32.2		95.8		6.6		6.6	3.6				6.1		
SR7	Cloudy	Rough	14:23	21.6	Surface	1.0	25.3	25.3	8.2	8.2	32.2	32.2	96.3	96.3	6.6	6.6	6.6	5.1	5.1	6.6	7.8	7.7	6.3	
						1.0	25.3		8.2		32.2		96.3		6.6		6.6	5.0				7.5		
					Middle	10.8	25.2	25.2	8.2	8.2	32.2	32.2	95.5	95.5	6.6	6.6	6.6	4.2	4.2	6.6	6.4	6.3		
						10.8	25.2		8.2		32.2		95.5		6.6		6.6	4.2				6.2		
					Bottom	20.6	25.2	25.2	8.2	8.2	32.2	32.2	95.6	95.7	6.6	6.6	6.6	3.3	3.3	6.6	4.7	4.9		
						20.6	25.2		8.2		32.2		95.7		6.6		6.6	3.1				5.0		

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 08 November 21 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	Rough	14:44	9.8	Surface	1.0	25.4	25.4	8.2	8.2	32.1	32.1	99.1	99.1	6.8	6.8	6.8	7.6	7.6	5.5	6.8	6.8	5.6
						1.0	25.4	8.2	8.2	32.1	32.1	99.1	99.1	6.8	6.8	7.6		6.8					
					Middle	4.9	25.4	25.4	8.2	8.2	32.2	32.2	98.9	98.8	6.8	6.8	6.8	6.7	6.6	5.5	6.1	5.9	5.6
						4.9	25.4	8.2	8.2	32.2	32.2	98.7	98.8	6.7	6.8	6.4		5.7					
					Bottom	8.8	25.5	25.5	8.2	8.2	32.3	32.3	98.2	98.3	6.7	6.7	6.7	2.2	2.3	6.7	4.4	4.2	5.6
						8.8	25.4	8.2	8.2	32.2	32.2	98.4	98.3	6.7	6.7	2.3		4.0					
SR9	Cloudy	Rough	14:31	11.2	Surface	1.0	25.4	25.4	8.2	8.2	32.1	32.1	99.0	99.0	6.8	6.8	6.8	7.5	7.5	4.7	7.0	7.2	6.5
						1.0	25.4	8.2	8.2	32.1	32.1	98.9	99.0	6.8	6.8	7.4		7.3					
					Middle	5.6	25.4	25.4	8.2	8.2	32.3	32.3	97.9	97.9	6.7	6.7	6.7	4.3	4.1	4.7	6.4	6.6	6.5
						5.6	25.4	8.2	8.2	32.3	32.3	97.8	97.9	6.7	6.7	3.9		6.8					
					Bottom	10.2	25.4	25.4	8.2	8.2	32.3	32.3	98.2	98.3	6.7	6.7	6.7	2.4	2.5	6.7	5.9	5.8	6.5
						10.2	25.4	8.2	8.2	32.3	32.3	98.3	98.3	6.7	6.7	2.5		5.6					
SR10	Cloudy	Rough	13:19	6.5	Surface	1.0	25.3	25.3	8.1	8.1	32.2	32.2	96.0	96.0	6.6	6.6	6.6	4.7	4.7	4.8	3.8	3.9	4.8
						1.0	25.3	25.3	8.1	8.1	32.2	32.2	96.0	96.0	6.6	6.6		4.7			4.0		
					Middle	3.3	25.3	25.3	8.1	8.1	32.2	32.2	95.7	95.7	6.6	6.6	6.6	4.8	4.8	4.8	4.7	4.8	4.8
						3.3	25.3	8.1	8.1	32.2	32.2	95.7	95.7	6.6	6.6	4.8		4.9					
					Bottom	5.5	25.2	25.2	8.1	8.1	32.2	32.2	95.6	95.6	6.6	6.6	6.6	4.8	4.8	6.6	5.6	5.8	4.8
						5.5	25.2	8.1	8.1	32.2	32.2	95.6	95.6	6.6	6.6	4.8		5.9					

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 08 November 21 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	08:07	10.2	Surface	1.0	25.2	8.0	8.0	32.0	32.0	91.4	91.4	6.3	6.3	6.3	6.6	6.6	5.9	5.8	5.7	5.2
						1.0	25.2	8.0	8.0	32.0	32.0	91.4	91.4	6.3	6.3		6.6			5.5		
					Middle	5.1	25.2	8.0	8.0	32.0	32.0	91.5	91.5	6.3	6.3		5.9	6.1		5.3	5.2	
						5.1	25.2	8.0	8.0	32.0	32.0	91.5	91.5	6.3	6.3		5.9			5.3		
					Bottom	9.2	25.2	8.0	8.0	32.0	32.0	91.8	91.9	6.3	6.3		5.0	5.0		4.4	4.6	
						9.2	25.2	8.0	8.0	32.0	32.0	92.0	91.9	6.3	6.3		5.0			4.8		
C2	Cloudy	Rough	09:30	10.2	Surface	1.0	25.3	8.2	8.2	32.2	32.2	96.6	96.6	6.6	6.6	6.6	5.1	5.1	5.3	6.5	6.3	5.5
						1.0	25.3	8.2	8.2	32.2	32.2	96.6	96.6	6.6	6.6		5.1			6.1		
					Middle	5.1	25.3	8.2	8.2	32.2	32.2	96.2	96.2	6.6	6.6		5.4	5.4		5.3	5.6	
						5.1	25.3	8.2	8.2	32.2	32.2	96.2	96.2	6.6	6.6		5.4			5.8		
					Bottom	9.2	25.3	8.2	8.2	32.2	32.2	96.3	96.3	6.6	6.6		5.3	5.3		4.9	4.7	
						9.2	25.3	8.2	8.2	32.2	32.2	96.3	96.3	6.6	6.6		5.2			4.4		
C3	Cloudy	Rough	09:11	22.3	Surface	1.0	25.3	8.2	8.2	32.2	32.2	96.4	96.4	6.6	6.6	6.6	5.2	5.2	5.1	5.4	5.5	4.6
						1.0	25.3	8.2	8.2	32.2	32.2	96.4	96.4	6.6	6.6		5.2			5.6		
					Middle	11.2	25.2	8.2	8.2	32.2	32.2	96.2	96.2	6.6	6.6		5.1	5.1		4.7	4.8	
						11.2	25.2	8.2	8.2	32.2	32.2	96.2	96.2	6.6	6.6		5.0			4.9		
					Bottom	21.3	25.2	8.2	8.2	32.2	32.2	96.0	96.0	6.6	6.6		5.0	5.0		3.4	3.5	
						21.3	25.2	8.2	8.2	32.2	32.2	96.0	96.0	6.6	6.6		5.0			3.6		
SR1	Cloudy	Moderate	08:01	7.8	Surface	1.0	25.1	8.2	8.2	32.4	32.4	98.5	98.5	6.8	6.8	6.8	5.8	5.8	3.3	5.1	5.0	4.7
						1.0	25.1	8.2	8.2	32.4	32.4	98.5	98.5	6.8	6.8		5.8			4.9		
					Middle	3.9	25.0	8.2	8.2	32.5	32.5	97.3	97.2	6.7	6.7		3.0	3.0		4.8	4.7	
						3.9	25.0	8.2	8.2	32.5	32.5	97.1	97.2	6.7	6.7		2.9			4.6		
					Bottom	6.8	24.9	8.2	8.2	32.5	32.5	96.3	96.3	6.6	6.6		1.1	1.2		4.4	4.5	
						6.8	24.9	8.2	8.2	32.5	32.5	96.3	96.3	6.6	6.6		1.2			4.5		
SR2	Cloudy	Moderate	08:10	6.1	Surface	1.0	25.0	8.2	8.2	32.5	32.5	96.0	96.0	6.6	6.6	6.6	2.4	2.3	1.7	5.2	5.2	4.5
						1.0	25.0	8.2	8.2	32.5	32.5	95.9	96.0	6.6	6.6		2.2			5.1		
					Middle	3.1	25.0	8.2	8.2	32.5	32.5	95.5	95.5	6.6	6.6		1.7	1.7		4.8	4.9	
						3.1	25.0	8.2	8.2	32.5	32.5	95.4	95.5	6.6	6.6		1.6			4.9		
					Bottom	5.1	25.0	8.1	8.1	32.4	32.4	95.1	95.1	6.5	6.5		1.3	1.3		3.5	3.6	
						5.1	25.0	8.1	8.1	32.4	32.4	95.1	95.1	6.5	6.5		1.2			3.6		
SR3	Cloudy	Moderate	08:20	7.5	Surface	1.0	25.0	8.2	8.2	32.4	32.4	99.8	99.9	6.9	6.9	6.9	6.1	6.1	5.2	3.8	4.0	4.5
						1.0	25.0	8.2	8.2	32.4	32.4	99.8	99.9	6.9	6.9		6.1			4.1		
					Middle	3.8	25.0	8.2	8.2	32.4	32.4	98.9	98.9	6.8	6.8		5.8	5.8		4.6	4.6	
						3.8	25.0	8.2	8.2	32.4	32.4	98.8	98.8	6.8	6.8		5.7			4.5		
					Bottom	6.5	24.8	8.2	8.2	32.5	32.5	97.6	97.6	6.7	6.7		4.0	3.8		5.0	5.1	
						6.5	24.8	8.2	8.2	32.5	32.5	97.5	97.6	6.7	6.7		3.5			5.2		
SR4	Cloudy	Rough	08:58	13.4	Surface	1.0	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3	6.3	2.8	2.8	2.3	4.6	4.5	3.4
						1.0	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		2.8			4.4		
					Middle	6.7	25.3	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		2.5	2.4		3.2	3.2	
						6.7	25.3	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		2.2			3.2		
					Bottom	12.4	25.3	8.1	8.1	32.1	32.1	92.8	92.9	6.4	6.4		1.7	1.7		2.6	2.6	
						12.4	25.4	8.1	8.1	32.1	32.1	92.9	92.9	6.4	6.4		1.6			2.5		
SR5	Cloudy	Rough	09:04	9.8	Surface	1.0	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3	6.3	2.5	2.5	1.9	5.4	5.5	4.4
						1.0	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		2.4			5.5		
					Middle	4.9	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		1.4	1.4		4.1	4.3	
						4.9	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		1.4			4.4		
					Bottom	8.8	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		1.7	1.8		3.3	3.4	
						8.8	25.4	8.1	8.1	32.1	32.1	92.7	92.7	6.3	6.3		1.8			3.4		
SR6	Cloudy	Rough	08:33	14.5	Surface	1.0	25.3	8.1	8.1	32.2	32.2	96.0	96.0	6.6	6.6	6.6	4.8	4.8	4.3	5.1	5.1	4.4
						1.0	25.3	8.1	8.1	32.2	32.2	96.0	96.0	6.6	6.6		4.8			5.0		
					Middle	7.3	25.2	8.1	8.1	32.2	32.2	95.7	95.7	6.6	6.6		5.0	5.0		4.7	4.6	
						7.3	25.2	8.1	8.1	32.2	32.2	95.7	95.7	6.6	6.6		5.0			4.5		
					Bottom	13.5	25.2	8.1	8.1	32.2	32.2	95.4	95.4	6.5	6.5		2.9	3.0		3.5	3.4	
						13.5	25.2	8.1	8.1	32.2	32.2	95.4	95.4	6.5	6.5		3.0			3.3		
SR7	Cloudy	Rough	08:52	21.3	Surface	1.0	25.3	8.2	8.2	32.2	32.2	96.3	96.3	6.6	6.6	6.6	4.8	4.8	4.3	2.9	2.9	3.6
						1.0	25.3	8.2	8.2	32.2	32.2	96.3	96.3	6.6	6.6		4.8			2.8		
					Middle	10.7	25.2	8.2	8.2	32.2	32.2	96.1	96.1	6.6	6.6		5.0	5.0		3.8	3.6	
						10.7	25.2	8.2	8.2	32.2	32.2	96.1	96.1	6.6	6.6		4.9			3.3		
					Bottom	20.3	25.2	8.2	8.2	32.2	32.2	95.7	95.7	6.6	6.6		3.2	3.2		4.4	4.3	
						20.3	25.2	8.2	8.2	32.2	32.2	95.7	95.7	6.6	6.6		3.1			4.1		

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 08 November 21 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	Rough	08:28	9.4	Surface	1.0	25.2	25.2	8.0	8.0	32.0	32.0	91.3	91.3	6.3	6.3	6.3	6.6	6.6	6.5	2.4	2.3	4.0						
						1.0	25.2		8.0		32.0		91.3		6.3			6.6			2.2								
						4.7	25.2		8.0		32.0		91.1		6.3			6.6			3.9								
					Middle	4.7	25.2	25.2	8.0	8.0	32.0	32.0	91.1	91.1	6.3	6.3	6.6	6.6	6.6	6.6	4.4	4.2							
						8.4	25.2		8.0		32.1		91.1		6.3		6.3		5.3										
						8.4	25.2		8.0		32.1		91.1		6.3		6.3		5.8										
					SR9	Cloudy	Rough	08:40	9.8	Surface	1.0	25.2	25.2	8.0	8.0	32.1	32.1	91.2	91.2	6.3	6.3	6.3		6.6	6.6	6.7	3.5	3.3	4.1
											1.0	25.2		8.0		32.1		91.2		6.3				6.6			3.1		
											4.9	25.2		8.0		32.1		91.1		6.3				6.7			4.1		
Middle	4.9	25.2	25.2	8.0						8.0	32.1	32.1	91.1	91.1	6.3	6.3	6.6	6.6	6.7	6.7	4.0	4.1							
	8.8	25.2		8.0							32.1		91.2		6.3		6.7		4.9										
	8.8	25.2		8.0							32.1		91.2		6.3		6.7		4.8										
SR10	Cloudy	Rough	09:59	6.2						Surface	1.0	25.3	25.3	8.2	8.2	32.2	32.2	96.8	96.8	6.6	6.6	6.6	5.1	5.1	5.1	5.0	4.9	3.5	
											1.0	25.3		8.2		32.2		96.8		6.6			5.1			4.7			
											3.1	25.3		8.2		32.2		96.6		6.6			5.2			3.4			
					Middle	3.1	25.3	25.3	8.2	8.2	32.2	32.2	96.6	96.6	6.6	6.6	5.2	5.2	5.2	5.2	3.0	3.2							
						5.2	25.3		8.2		32.2		96.5		6.6		5.0		2.5										
						5.2	25.3		8.2		32.2		96.6		6.6		5.0		2.4										

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 10 November 21 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	02:29	11.2	Surface	1.0	25.2	25.2	8.1	8.1	33.1	33.1	94.5	94.5	6.5	6.5	6.5	1.0	1.1	2.4	6.1	6.0	5.1
						1.0	25.2	25.2	8.1	8.1	33.1	33.1	94.5	6.5	6.5	1.1		1.1	5.8				
					Middle	5.6	25.2	25.2	8.1	8.1	33.1	33.1	94.7	94.8	6.5	6.5		2.4	2.5		4.8	4.9	
						5.6	25.2	25.2	8.1	8.1	33.1	33.1	94.8	95.5	6.5	6.5		2.5	2.5		4.9	4.9	
					Bottom	10.2	25.1	25.1	8.1	8.1	33.2	33.2	95.4	95.5	6.5	6.5		3.8	3.8		4.7	4.6	
						10.2	25.1	25.1	8.1	8.1	33.2	33.2	95.6	95.5	6.5	6.5		3.7	3.8		4.4	4.6	
C2	Fine	Moderate	03:58	10.6	Surface	1.0	24.9	24.9	8.4	8.4	33.3	33.3	100.8	100.9	6.9	6.9	7.0	2.0	2.0	2.1	5.2	5.2	4.9
						1.0	24.9	24.9	8.4	8.4	33.3	33.3	100.9	100.9	6.9	6.9		1.9	2.0		5.1	5.2	
					Middle	5.3	24.8	24.8	8.4	8.4	33.3	33.3	101.5	101.7	7.0	7.0		2.1	2.1		4.8	4.9	
						5.3	24.8	24.8	8.4	8.4	33.3	33.3	101.9	103.1	7.0	7.0		2.0	2.1		4.9	4.9	
					Bottom	9.6	24.9	24.9	8.4	8.4	33.2	33.2	103.1	103.6	7.1	7.1		2.2	2.2		4.6	4.6	
						9.6	24.9	24.9	8.4	8.4	33.2	33.2	104.0	103.6	7.1	7.1		2.1	2.2		4.6	4.6	
C3	Fine	Moderate	03:23	23.0	Surface	1.0	24.9	24.9	8.3	8.3	33.2	33.2	101.0	101.0	6.9	6.9	6.9	1.5	1.5	2.3	4.2	4.2	4.8
						1.0	24.9	24.9	8.3	8.3	33.2	33.2	101.0	101.0	6.9	6.9		1.5	1.5		4.2	4.2	
					Middle	11.5	24.9	24.9	8.3	8.3	33.2	33.2	101.0	101.1	6.9	6.9		2.1	2.1		4.9	4.9	
						11.5	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9		2.1	2.1		4.9	4.9	
					Bottom	22.0	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9		3.2	3.2		5.5	5.4	
						22.0	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9		3.1	3.2		5.3	5.4	
SR1	Fine	Moderate	02:17	8.2	Surface	1.0	25.1	25.1	8.1	8.1	32.8	32.8	91.6	91.6	6.3	6.3	6.3	1.4	1.4	2.1	5.2	5.1	4.5
						1.0	25.1	25.1	8.1	8.1	32.7	32.7	91.6	91.9	6.3	6.3		1.4	1.4		4.9	5.1	
					Middle	4.1	25.1	25.1	8.1	8.1	32.7	32.7	91.9	91.9	6.3	6.3		2.1	2.1		4.7	4.7	
						4.1	25.1	25.1	8.1	8.1	32.7	32.7	91.9	91.9	6.3	6.3		2.0	2.1		4.6	4.7	
					Bottom	7.2	25.1	25.1	8.0	8.0	32.6	32.5	92.2	92.4	6.3	6.4		2.8	2.9		3.8	3.8	
						7.2	25.1	25.1	8.0	8.0	32.4	32.5	92.5	92.4	6.4	6.4		3.0	2.9		3.7	3.8	
SR2	Fine	Moderate	02:24	6.4	Surface	1.0	24.8	24.8	8.3	8.3	33.3	33.3	100.5	100.7	6.9	6.9	6.9	1.3	1.3	2.3	7.5	7.4	6.0
						1.0	24.8	24.8	8.3	8.3	33.3	33.3	100.8	100.7	6.9	6.9		1.3	1.3		7.2	7.4	
					Middle	3.2	24.8	24.8	8.3	8.3	33.3	33.3	101.1	101.2	6.9	7.0		2.3	2.3		6.2	6.1	
						3.2	24.8	24.8	8.3	8.3	33.3	33.3	101.3	101.8	7.0	7.0		2.2	2.3		5.9	6.1	
					Bottom	5.4	24.8	24.8	8.3	8.3	33.3	33.3	101.8	102.0	7.0	7.0		3.3	3.3		4.9	4.7	
						5.4	24.8	24.8	8.3	8.3	33.3	33.3	102.1	102.1	7.0	7.0		3.3	3.3		4.4	4.7	
SR3	Fine	Moderate	02:37	7.8	Surface	1.0	24.9	24.9	8.2	8.2	33.2	33.2	99.1	99.2	6.8	6.8	6.8	1.3	1.3	2.4	4.5	4.8	6.0
						1.0	24.9	24.9	8.2	8.2	33.2	33.2	99.2	99.2	6.8	6.8		1.3	1.3		5.0	4.8	
					Middle	3.9	24.9	24.9	8.2	8.2	33.2	33.2	99.2	99.3	6.8	6.8		2.3	2.3		6.0	5.8	
						3.9	24.9	24.9	8.2	8.2	33.2	33.2	99.3	99.3	6.8	6.8		2.3	2.3		5.6	5.8	
					Bottom	6.8	24.9	24.9	8.2	8.2	33.2	33.2	99.3	99.3	6.8	6.8		3.6	3.6		7.4	7.5	
						6.8	24.9	24.9	8.2	8.2	33.2	33.2	99.3	99.3	6.8	6.8		3.6	3.6		7.5	7.5	
SR4	Fine	Moderate	03:25	12.8	Surface	1.0	24.9	24.9	8.2	8.2	32.9	32.9	94.2	95.7	6.5	6.6	6.7	1.1	1.1	1.4	5.0	5.2	4.8
						1.0	24.9	24.9	8.2	8.2	32.9	32.9	97.2	98.7	6.7	6.7		1.0	1.1		5.3	5.2	
					Middle	6.4	24.8	24.8	8.2	8.2	32.9	32.9	98.3	98.7	6.8	6.8		1.6	1.6		4.9	4.8	
						6.4	24.8	24.8	8.2	8.2	33.0	32.9	99.0	101.1	6.8	6.8		1.5	1.6		4.7	4.8	
					Bottom	11.8	24.9	24.9	8.2	8.2	32.9	32.9	101.1	101.9	6.9	7.0		1.7	1.7		4.5	4.6	
						11.8	24.9	24.9	8.3	8.2	32.9	32.9	102.6	101.9	7.0	7.0		1.7	1.7		4.6	4.6	
SR5	Fine	Moderate	03:31	9.8	Surface	1.0	25.1	25.1	8.0	8.0	32.8	32.8	91.7	91.8	6.3	6.3	6.3	1.2	1.2	1.3	4.2	4.2	3.5
						1.0	25.1	25.1	8.0	8.1	32.8	32.8	91.8	92.5	6.3	6.3		1.1	1.3		4.1	4.2	
					Middle	4.9	25.0	25.0	8.1	8.1	32.8	32.8	92.4	92.5	6.3	6.3		1.3	1.3		3.5	3.4	
						4.9	25.0	25.0	8.1	8.1	32.8	32.8	92.5	92.8	6.3	6.3		1.2	1.3		3.2	3.4	
					Bottom	8.8	25.0	25.0	8.1	8.1	32.8	32.8	92.7	92.8	6.4	6.4		1.5	1.5		2.8	2.9	
						8.8	25.0	25.0	8.1	8.1	32.8	32.8	92.8	92.8	6.4	6.4		1.4	1.5		3.0	2.9	
SR6	Fine	Moderate	02:52	12.6	Surface	1.0	24.8	24.8	8.3	8.3	33.2	33.2	101.4	101.5	7.0	7.0	7.0	1.2	1.2	2.3	3.6	3.6	3.3
						1.0	24.8	24.8	8.4	8.4	33.3	33.3	101.5	102.1	7.0	7.0		1.2	1.2		3.6	3.6	
					Middle	6.3	24.8	24.8	8.4	8.4	33.3	33.3	102.1	102.1	7.0	7.0		2.6	2.6		3.3	3.3	
						6.3	24.8	24.8	8.4	8.4	33.3	33.3	102.1	102.7	7.0	7.1		2.6	2.6		3.3	3.3	
					Bottom	11.6	24.7	24.7	8.4	8.4	33.3	33.3	102.7	102.8	7.1	7.1		3.0	3.0		3.1	3.0	
						11.6	24.7	24.7	8.4	8.4	33.3	33.3	102.9	102.9	7.1	7.1		3.0	3.0		2.9	3.0	
SR7	Fine	Moderate	03:10	22.2	Surface	1.0	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9	6.9	1.0	1.1	1.5	3.6	3.8	5.0
						1.0	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9		1.1	1.1		4.0	4.0	
					Middle	11.1	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9		1.1	1.2		4.4	4.6	
						11.1	24.9	24.9	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9		1.2	1.2		4.8	4.6	
					Bottom	21.2	24.9	24.9	8.3	8.3	33.2	33.1	101.1	101.0	6.9	6.9		2.2	2.2		6.4	6.5	
						21.2	24.9	24.9	8.3	8.3	33.1	33.1	100.8	101.0	6.9	6.9		2.2	2.2		6.6	6.5	

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 10 November 21 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	Moderate	02:51	10.6	Surface	1.0	24.8	24.8	8.4	8.4	33.0	33.0	98.1	98.2	6.7	6.8	6.8	1.1	1.1	1.4	5.7	5.9	7.0					
						1.0	24.8		8.4		33.0		98.3		6.8			1.0			6.1							
						5.3	24.7		8.4		33.1		99.8		6.9			1.2			7.0							
					Middle	5.3	24.7	24.7	8.4	8.4	33.1	33.1	100.0	99.9	6.9	6.9	1.2	1.2	7.0	7.0	8.0	8.2						
						9.6	24.7		8.4		33.0		101.0		7.0		2.0		8.0									
						9.6	24.7		8.4		33.0		101.5		7.0		2.0		8.3									
					SR9	Fine	Moderate	03:05	10.4	Surface	1.0	25.0	25.0	8.3	8.3	33.0	33.0	96.0	96.0	6.6	6.6	6.6	1.2	1.2	1.9	5.9	6.1	6.8
											1.0	25.0		8.3		33.0		96.0		6.6			1.2			6.2		
											5.2	25.0		8.3		33.0		96.2		6.6			1.5			6.9		
Middle	5.2	25.0	25.0	8.3						8.3	33.0	33.0	96.3	96.3	6.6	6.6	1.5	1.5	6.8	6.9	7.4	7.6						
	9.4	24.9		8.3							33.0		96.4		6.6		3.0		7.4									
	9.4	24.9		8.3							33.0		96.5		6.6		3.0		7.7									
SR10	Fine	Moderate	04:28	6.2						Surface	1.0	25.0	25.0	8.2	8.2	33.3	33.3	98.3	98.4	6.7	6.7	6.7	1.2	1.2	1.5	7.2	7.1	6.5
											1.0	25.0		8.2		33.3		98.4		6.7			1.1			7.0		
											3.1	25.0		8.3		33.3		98.6		6.7			1.7			6.8		
					Middle	3.1	25.0	25.0	8.3	8.3	33.3	33.3	98.6	98.6	6.8	6.8	1.7	1.7	6.6	6.7	5.8	5.7						
						5.2	25.0		8.3		33.3		98.8		6.8		1.7		5.8									
						5.2	25.0		8.3		33.3		98.9		6.8		1.7		5.6									

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 10 November 21 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	17:06	10.8	Surface	1.0	24.6	24.6	8.4	8.4	33.2	33.2	101.2	101.3	7.0	7.0	7.0	1.0	1.1	1.6	5.2	5.1	4.6
						1.0	24.6	24.6	8.4	8.4	33.2	33.2	101.3	101.3	7.0	7.0		1.1	1.1		5.0	5.1	
					Middle	5.4	24.5	24.5	8.4	8.4	33.2	33.2	101.8	101.9	7.0	7.0	1.4	1.5	4.5	4.5			
						5.4	24.5	24.5	8.4	8.4	33.2	33.2	102.0	101.9	7.0	7.0	1.5	1.5	4.5	4.5			
					Bottom	9.8	24.5	24.6	8.4	8.4	33.2	33.2	103.2	103.5	7.1	7.2	7.2	2.3	2.4	4.1	4.1		
						9.8	24.6	24.6	8.4	8.4	33.2	33.2	103.8	103.5	7.2	7.2	2.4	2.4	4.1	4.1			
C2	Fine	Moderate	15:27	11.2	Surface	1.0	24.9	24.9	8.4	8.4	33.3	33.3	99.9	100.2	6.9	6.9	7.0	1.5	1.5	2.6	2.7	2.6	3.8
						1.0	24.8	24.8	8.4	8.4	33.3	33.3	100.4	100.2	6.9	6.9		1.5	1.5		2.4	2.6	
					Middle	5.6	24.8	24.8	8.4	8.4	33.3	33.3	101.4	101.5	7.0	7.0	2.7	2.7	4.0	4.0			
						5.6	24.8	24.8	8.4	8.4	33.3	33.3	101.6	101.5	7.0	7.0	2.7	2.7	4.0	4.0			
					Bottom	10.2	24.8	24.8	8.4	8.4	33.3	33.3	102.8	103.3	7.1	7.1	7.1	3.7	3.7	4.8	4.8		
						10.2	24.8	24.8	8.4	8.4	33.3	33.3	103.8	103.3	7.1	7.1	3.6	3.6	4.7	4.8			
C3	Fine	Moderate	15:18	23.0	Surface	1.0	25.0	25.0	8.3	8.3	33.2	33.2	98.3	98.3	6.7	6.7	6.7	1.2	1.2	2.5	5.7	5.8	5.0
						1.0	24.9	24.9	8.3	8.3	33.3	33.3	98.3	98.3	6.7	6.7		1.2	1.2		5.8	5.8	
					Middle	11.5	24.9	24.9	8.3	8.3	33.3	33.3	98.4	98.4	6.7	6.7	2.4	2.4	5.1	5.0			
						11.5	24.9	24.9	8.3	8.3	33.3	33.3	98.4	98.4	6.7	6.7	2.3	2.4	4.8	5.0			
					Bottom	22.0	24.9	24.9	8.3	8.3	33.3	33.3	98.5	98.5	6.8	6.8	6.8	4.0	3.9	4.4	4.3		
						22.0	24.9	24.9	8.3	8.3	33.3	33.3	98.5	98.5	6.8	6.8	3.8	3.9	4.2	4.3			
SR1	Fine	Moderate	16:38	9.0	Surface	1.0	24.9	24.9	8.3	8.3	33.2	33.2	100.6	100.6	6.9	6.9	6.9	2.8	2.8	3.6	5.5	5.4	6.9
						1.0	24.9	24.9	8.3	8.3	33.2	33.2	100.6	100.6	6.9	6.9		2.8	2.8		5.3	5.4	
					Middle	4.5	24.9	24.9	8.3	8.3	33.2	33.2	100.6	100.6	6.9	6.9	3.9	3.9	7.2	7.1			
						4.5	24.9	24.9	8.3	8.3	33.2	33.2	100.6	100.6	6.9	6.9	3.8	3.9	7.0	7.1			
					Bottom	8.0	24.9	24.9	8.3	8.3	33.2	33.2	100.6	100.6	6.9	6.9	4.1	4.2	8.4	8.3			
						8.0	24.9	24.9	8.3	8.3	33.2	33.2	100.6	100.6	6.9	6.9	4.2	4.2	8.2	8.3			
SR2	Fine	Moderate	16:26	6.2	Surface	1.0	24.8	24.8	8.3	8.3	33.2	33.2	100.8	100.8	6.9	6.9	6.9	2.9	2.9	3.6	8.9	9.0	8.2
						1.0	24.8	24.8	8.3	8.3	33.2	33.2	100.8	100.8	6.9	6.9		2.8	2.9		9.1	9.0	
					Middle	3.1	24.8	24.8	8.3	8.3	33.2	33.2	100.9	100.9	6.9	6.9	3.9	3.9	8.3	8.3			
						3.1	24.8	24.8	8.3	8.3	33.2	33.2	100.9	100.9	6.9	6.9	3.9	3.9	8.3	8.3			
					Bottom	5.2	24.8	24.8	8.3	8.3	33.2	33.1	100.8	100.7	6.9	6.9	4.1	4.2	7.3	7.2			
						5.2	24.8	24.8	8.3	8.3	33.0	33.1	100.6	100.7	6.9	6.9	4.2	4.2	7.1	7.2			
SR3	Fine	Moderate	16:10	7.8	Surface	1.0	24.8	24.8	8.3	8.3	33.2	33.2	100.9	101.0	6.9	6.9	6.9	1.1	1.1	1.5	6.8	6.7	7.5
						1.0	24.8	24.8	8.3	8.3	33.2	33.2	101.0	101.0	6.9	6.9		1.0	1.1		6.6	6.7	
					Middle	3.9	24.8	24.8	8.3	8.3	33.2	33.2	101.0	101.1	6.9	6.9	1.4	1.5	7.4	7.4			
						3.9	24.8	24.8	8.3	8.3	33.2	33.2	101.1	101.1	6.9	6.9	1.5	1.5	7.4	7.4			
					Bottom	6.8	24.8	24.8	8.3	8.3	33.2	33.2	101.3	101.3	7.0	7.0	7.0	2.0	2.0	8.7	8.5		
						6.8	24.8	24.8	8.3	8.3	33.2	33.2	101.3	101.3	7.0	7.0	1.9	2.0	8.3	8.5			
SR4	Fine	Moderate	16:05	13.0	Surface	1.0	24.6	24.6	8.3	8.3	33.2	33.2	98.5	98.7	6.8	6.8	6.8	3.6	3.6	4.0	6.6	6.6	5.7
						1.0	24.6	24.6	8.3	8.3	33.2	33.2	98.8	98.7	6.8	6.8		3.6	3.6		6.6	6.6	
					Middle	6.5	24.6	24.6	8.3	8.3	33.2	33.2	99.0	99.1	6.8	6.8	4.0	4.0	5.7	5.8			
						6.5	24.5	24.6	8.3	8.3	33.2	33.2	99.2	99.1	6.8	6.8	4.0	4.0	5.8	5.8			
					Bottom	12.0	24.5	24.5	8.3	8.3	33.2	33.2	100.5	100.8	6.9	7.0	7.0	4.2	4.3	4.7	4.9		
						12.0	24.5	24.5	8.3	8.3	33.2	33.2	101.1	100.8	7.0	7.0	4.3	4.3	5.0	4.9			
SR5	Fine	Moderate	15:55	10.2	Surface	1.0	24.9	24.9	8.4	8.4	33.2	33.2	100.1	100.1	6.9	6.9	6.9	2.8	2.8	3.4	6.2	6.0	5.0
						1.0	24.9	24.9	8.4	8.4	33.2	33.2	100.1	100.1	6.9	6.9		2.7	2.8		5.7	6.0	
					Middle	5.1	24.9	24.9	8.4	8.4	33.2	33.2	100.1	100.2	6.9	6.9	3.2	3.2	5.0	5.1			
						5.1	24.9	24.9	8.4	8.4	33.2	33.2	100.2	100.2	6.9	6.9	3.2	3.2	5.2	5.1			
					Bottom	9.2	24.9	24.9	8.3	8.3	33.2	33.2	100.4	100.4	6.9	6.9	4.3	4.3	4.1	4.0			
						9.2	24.9	24.9	8.3	8.3	33.1	33.2	100.4	100.4	6.9	6.9	4.3	4.3	3.9	4.0			
SR6	Fine	Moderate	15:55	12.6	Surface	1.0	24.7	24.7	8.4	8.4	33.3	33.3	102.4	102.5	7.0	7.0	7.1	1.9	1.9	2.6	4.8	4.8	4.3
						1.0	24.7	24.7	8.4	8.4	33.3	33.3	102.5	102.5	7.0	7.0		1.9	1.9		4.7	4.8	
					Middle	6.3	24.7	24.7	8.4	8.4	33.3	33.3	102.7	102.8	7.1	7.1	2.2	2.2	4.3	4.4			
						6.3	24.7	24.7	8.4	8.4	33.3	33.3	102.9	102.9	7.1	7.1	2.2	2.2	4.4	4.4			
					Bottom	11.6	24.6	24.7	8.4	8.5	33.3	33.3	103.5	104.2	7.1	7.2	7.2	3.5	3.6	3.8	3.7		
						11.6	24.7	24.7	8.5	8.5	33.2	33.3	104.9	104.9	7.2	7.2	3.6	3.6	3.6	3.7			
SR7	Fine	Moderate	15:33	21.8	Surface	1.0	25.0	25.0	8.3	8.3	33.2	33.2	98.0	98.0	6.7	6.7	6.7	1.6	1.6	2.5	5.8	5.9	5.1
						1.0	25.0	25.0	8.3	8.3	33.2	33.2	98.0	98.0	6.7	6.7		1.6	1.6		5.9	5.9	
					Middle	10.9	25.0	25.0	8.3	8.3	33.2	33.2	98.1	98.1	6.7	6.7	2.5	2.6	5.3	5.2			
						10.9	25.0	25.0	8.3	8.3	33.2	33.2	98.1	98.1	6.7	6.7	2.6	2.6	5.0	5.2			
					Bottom	20.8	25.0	25.0	8.3	8.3	33.2	33.2	98.2	98.2	6.7	6.7	3.2	3.2	4.3	4.3			
						20.8	25.0	25.0	8.3	8.3	33.2	33.2	98.2	98.2	6.7	6.7	3.2	3.2	4.2	4.3			

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 10 November 21 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	Moderate	16:44	9.6	Surface	1.0	24.8	24.8	8.3	8.3	33.1	33.1	97.9	97.9	6.7	6.7	6.7	1.2	1.2	2.5	2.5	2.5	2.5	3.5	3.5	3.3											
						1.0	24.8		8.3		33.1		97.9		6.7		1.2	3.3																			
						4.8	24.8		8.3		33.1		98.1		6.7		2.5	3.5																			
					Middle	4.8	24.8	24.8	8.3	8.3	33.1	33.1	98.3	98.2	6.8	6.8	6.8	2.5	2.5	2.5	3.5	3.4															
						8.6	24.8	24.8	8.3	8.3	33.1	33.1	98.7	98.8	6.8	6.8	6.8	3.8	3.8	3.8	2.9	2.9															
						8.6	24.8	24.8	8.3	8.3	33.1	33.1	98.9	98.8	6.8	6.8	6.8	3.8	3.8	3.8	2.8	2.8															
					SR9	Fine	Moderate	16:28	9.2	Surface	1.0	24.8	24.8	8.2	8.2	33.2	33.2	97.9	97.9	6.7	6.7	6.7	2.1	2.1	2.2		2.2	2.2	2.2	2.7	2.9	4.1					
											1.0	24.8		8.2		33.2		97.9		6.7		2.1	3.1														
											4.6	24.8		24.8		8.2		8.2		33.1		33.1	98.0		98.0			6.7		6.7			6.7	2.2	2.2	2.2	4.2
Middle	4.6	24.8	24.8	8.2						8.2	33.1	33.1	98.0	98.0	6.7	6.7	6.7	2.2	2.2	2.2	4.0	4.1															
	8.2	24.7	24.7	8.2						8.2	33.1	33.1	98.4	98.6	6.8	6.8	6.8	3.3	3.3	3.3	5.0	5.2															
	8.2	24.7	24.7	8.2						8.2	33.1	33.1	98.7	98.6	6.8	6.8	6.8	3.3	3.3	3.3	5.4	5.2															
SR10	Fine	Moderate	15:00	6.2						Surface	1.0	25.0	25.0	8.3	8.3	33.2	33.2	98.3	98.4	6.7	6.7	6.7	1.0	1.1	1.1	1.3	1.3	1.6	3.5	3.5	4.2						
											1.0	25.0		25.0		8.3		8.3		33.2		33.2	98.4		98.4		6.7		6.7				6.7	1.1	1.1	1.1	3.5
											3.1	25.0		25.0		8.3		8.3		33.2		33.2	98.4		98.5		6.7		6.7				6.7	1.3	1.3	1.3	4.1
					Middle	3.1	25.0	25.0	8.3	8.3	33.3	33.3	98.5	98.5	6.7	6.7	6.7	1.3	1.3	1.3	3.9	4.0															
						5.2	25.0	25.0	8.3	8.3	33.3	33.3	98.7	98.8	6.8	6.8	6.8	2.6	2.6	2.6	5.1	5.1															
						5.2	25.0	25.0	8.3	8.3	33.3	33.3	98.9	98.8	6.8	6.8	6.8	2.5	2.5	2.5	5.0	5.0															

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 12 November 21 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	Rough	21:08	11.0	Surface	1.0	24.9	24.9	8.1	8.1	33.3	33.3	104.3	104.3	7.1	7.1	7.0	3.9	3.9	4.5	6.5	5.6	4.9
						1.0	24.9		8.1		33.3		104.2		7.1			3.9			4.7		
						5.5	24.7	24.7	8.1	8.1	33.4	33.4	99.4	99.4	6.8	6.8		4.4	4.5		4.5	5.3	
					Bottom	10.0	24.7	24.7	8.1	8.1	33.5	33.5	96.7	96.6	6.6	6.6	6.6	4.9	5.1	4.6	3.9		
						10.0	24.7		8.1		33.5		96.5		6.6		5.2		3.1				
C2	Cloudy	Rough	19:50	10.5	Surface	1.0	24.8	24.8	8.2	8.2	33.3	33.3	112.0	112.0	7.7	7.7	7.5	4.4	4.4	5.0	6.0	5.5	5.0
						1.0	24.8		8.2		33.3		111.9		7.7			4.4			4.9		
						5.3	24.3	24.3	8.2	8.2	33.3	33.3	105.6	105.5	7.3	7.3		5.0	5.0		3.9	4.1	
					Bottom	9.5	24.2	24.2	8.2	8.2	33.3	33.3	103.2	103.2	7.2	7.2	7.2	5.4	5.5	5.9	5.5		
						9.5	24.2		8.2		33.3		103.1		7.2		5.6		5.1				
C3	Cloudy	Rough	19:33	22.8	Surface	1.0	24.6	24.6	8.2	8.2	33.7	33.7	115.7	115.6	8.0	8.0	7.7	4.2	4.2	4.6	3.6	3.9	4.4
						1.0	24.6		8.2		33.7		115.5		7.9			4.2			4.1		
						11.4	24.5	24.5	8.2	8.2	33.7	33.7	107.0	106.9	7.4	7.4		4.3	4.3		4.6	4.4	
					Bottom	11.4	24.5		8.2		33.7		106.7		7.4		4.3		4.2				
						21.8	24.5	24.5	8.2	8.2	33.7	33.7	103.1	103.1	7.1	7.1	7.1	5.4	5.4	4.1	4.9		
						21.8	24.5		8.2		33.7		103.0		7.1		5.4		5.6				
SR1	Cloudy	Moderate	20:49	7.9	Surface	1.0	24.8	24.8	8.2	8.2	33.7	33.7	120.3	120.3	8.2	8.2	7.9	4.3	4.3	5.4	3.7	3.8	4.7
						1.0	24.8		8.2		33.7		120.3		8.2			4.3			3.9		
						4.0	24.4	24.4	8.2	8.2	33.7	33.7	109.9	109.9	7.6	7.6		5.6	5.6		5.7	4.9	
					Bottom	4.0	24.4		8.2		33.7		109.9		7.6		5.6		4.0				
						6.9	24.4	24.4	8.2	8.2	33.7	33.7	106.9	106.8	7.4	7.4	7.4	6.1	6.2	4.5	5.3		
						6.9	24.4		8.2		33.7		106.7		7.4		6.2		6.1				
SR2	Cloudy	Rough	20:37	6.5	Surface	1.0	24.7	24.7	8.2	8.2	33.6	33.6	122.8	122.8	8.4	8.4	8.4	5.8	5.8	5.9	3.2	4.0	4.0
						1.0	24.7		8.2		33.6		122.8		8.4			5.8			4.7		
						3.3	24.7	24.7	8.2	8.2	33.6	33.6	122.0	122.0	8.4	8.4		5.7	5.8		3.4	3.4	
					Bottom	3.3	24.7		8.2		33.6		121.9		8.4		5.8		3.3				
						5.5	24.2	24.2	8.2	8.2	33.6	33.5	103.6	103.6	7.2	7.2	7.2	6.0	6.1	5.1	4.8		
						5.5	24.2		8.2		33.5		103.6		7.2		6.1		4.5				
SR3	Cloudy	Rough	20:20	7.6	Surface	1.0	24.9	24.9	8.2	8.2	33.7	33.7	120.4	120.4	8.2	8.2	8.1	4.1	4.1	4.7	4.6	4.9	6.3
						1.0	24.9		8.2		33.7		120.3		8.2			4.1			5.2		
						3.8	24.5	24.5	8.2	8.2	33.7	33.7	115.6	115.5	8.0	8.0		4.7	4.8		5.8	7.1	
					Bottom	3.8	24.5		8.2		33.7		115.4		7.9		4.8		8.3				
						6.6	24.3	24.3	8.2	8.2	33.7	33.7	105.8	105.8	7.3	7.3	7.3	5.3	5.3	8.0	6.8		
						6.6	24.3		8.2		33.7		105.7		7.3		5.3		5.6				
SR4	Cloudy	Rough	20:20	13.1	Surface	1.0	24.8	24.8	8.1	8.1	33.4	33.4	105.6	105.6	7.3	7.3	7.1	4.4	4.4	4.9	3.9	4.4	4.3
						1.0	24.8		8.1		33.4		105.5		7.2			4.3			4.8		
						6.6	24.6	24.6	8.1	8.1	33.5	33.5	102.5	102.5	7.0	7.0		4.8	5.0		4.6	4.7	
					Bottom	6.6	24.6		8.1		33.5		102.4		7.0		5.1		4.8				
						12.1	24.6	24.6	8.1	8.1	33.6	33.6	101.7	101.7	7.0	7.0	7.0	5.4	5.4	4.2	4.0		
						12.1	24.6		8.1		33.6		101.6		7.0		5.4		3.7				
SR5	Cloudy	Rough	20:14	8.8	Surface	1.0	24.9	24.9	8.1	8.1	33.4	33.4	110.4	110.4	7.6	7.6	7.5	4.6	4.6	5.2	3.7	4.3	4.8
						1.0	24.9		8.1		33.4		110.3		7.6			4.6			4.9		
						4.4	24.8	24.8	8.1	8.1	33.4	33.4	107.4	107.4	7.4	7.4		5.2	5.2		5.0	4.8	
					Bottom	4.4	24.8		8.1		33.4		107.3		7.4		5.2		4.6				
						7.8	24.8	24.8	8.2	8.2	33.4	33.4	104.9	104.8	7.2	7.2	7.2	5.8	5.8	4.6	5.3		
						7.8	24.8		8.2		33.4		104.7		7.2		5.8		5.9				
SR6	Cloudy	Rough	20:11	14.4	Surface	1.0	24.8	24.8	8.2	8.2	33.5	33.5	117.8	117.8	8.1	8.1	7.9	3.8	3.8	4.5	4.4	4.1	4.0
						1.0	24.8		8.2		33.5		117.8		8.1			3.8			3.7		
						7.2	24.6	24.6	8.2	8.2	33.7	33.7	111.6	111.5	7.7	7.7		4.2	4.3		3.9	4.3	
					Bottom	7.2	24.6		8.2		33.7		111.4		7.7		4.4		4.7				
						13.4	24.5	24.5	8.2	8.2	33.7	33.7	105.3	105.3	7.3	7.3	7.3	5.4	5.3	3.5	3.6		
						13.4	24.5		8.2		33.7		105.2		7.2		5.2		3.6				
SR7	Cloudy	Rough	19:50	21.4	Surface	1.0	24.7	24.7	8.2	8.2	33.7	33.7	117.0	117.0	8.0	8.0	7.7	4.1	4.1	5.1	4.3	4.1	4.3
						1.0	24.7		8.2		33.7		116.9		8.0			4.1			3.8		
						10.7	24.5	24.5	8.2	8.2	33.7	33.7	106.4	106.4	7.3	7.3		5.0	5.1		5.2	4.6	
					Bottom	10.7	24.5		8.2		33.7		106.4		7.3		5.1		3.9				
						20.4	24.5	24.5	8.2	8.2	33.7	33.7	106.6	106.6	7.3	7.3	7.3	6.0	6.0	4.0	4.6		
						20.4	24.5		8.2		33.7		106.6		7.3		6.0		4.5				

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 12 November 21 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	20:50	10.8	Surface	1.0	25.0	25.0	8.2	8.2	33.6	33.6	112.1	112.2	7.7	7.7	7.7	3.8	3.9	4.0	3.6	3.4	3.8					
						1.0	25.0		8.2		33.6		112.2		7.7			3.9			3.2							
						5.4	24.8		8.2		33.6		111.8		7.7			3.8			4.2							
					Middle	5.4	24.8	24.8	8.2	8.2	33.6	33.6	111.7	111.8	7.7	7.7	3.8	3.8	4.0	3.8	3.8	4.0	3.8	4.0	3.8			
						9.8	24.8		8.2		33.7		102.2		7.0		4.4			3.9								
						9.8	24.8		8.2		33.7		102.3		7.0		4.3			4.1								
					SR9	Cloudy	Moderate	20:40	10.5	Surface	1.0	25.0	25.0	8.2	8.2	33.4	33.4	119.1	119.1	8.1	8.1	8.0	3.7	3.8	3.8	4.1	4.2	4.1
											1.0	25.0		8.2		33.4		119.1		8.1			3.8			4.2		
											5.3	24.8		8.2		33.5		113.5		7.8			3.8			4.2		
Middle	5.3	24.8	24.8	8.2						8.2	33.5	33.5	113.5	113.5	7.8	7.8	3.8	3.8	4.1	3.8	3.8	4.1	4.0	4.1	4.1			
	9.5	24.7		8.2							33.6		106.4		7.3		3.9			4.2								
	9.5	24.7		8.2							33.6		106.4		7.3		3.8			3.8								
SR10	Cloudy	Rough	19:22	6.6						Surface	1.0	23.9	23.9	8.2	8.2	33.1	33.1	122.7	122.6	8.6	8.6	8.5	5.2	5.2	5.3	5.3	5.2	5.3
											1.0	23.9		8.2		33.1		122.5		8.6			5.1			5.0		
											3.3	23.8		8.2		33.0		119.9		8.4			5.1			4.8		
					Middle	3.3	23.8	23.8	8.2	8.2	33.0	33.0	119.8	119.9	8.4	8.4	5.1	5.2	5.3	5.3	5.2	5.3	5.2	5.0	5.3			
						5.6	23.5		8.2		33.0		114.8		8.1		5.5			5.1								
						5.6	23.5		8.2		32.9		110.8		7.8		5.7			6.2								

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 12 November 21 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	Rough	13:09	11.0	Surface	1.0	24.6	24.6	8.0	8.0	33.3	33.3	97.4	97.4	6.7	6.7	6.7	3.5	3.5	4.0	4.6	4.1	4.2		
						1.0	24.6	8.0	33.3	97.4	6.7	3.4	3.5	4.6	4.1										
					Middle	5.5	24.7	24.7	8.0	8.0	33.3	33.3	97.6	97.6	6.7	6.7		3.8	3.8		3.9	3.9		4.3	4.5
						5.5	24.7	8.0	33.3	97.6	6.7	3.8	3.9	4.3	4.5										
					Bottom	10.0	24.7	24.7	8.0	8.0	33.3	33.3	97.5	97.5	6.7	6.7		4.6	4.6		4.7	4.5			
						10.0	24.7	8.0	33.3	97.5	6.7	4.6	4.7	4.7	4.5										
C2	Fine	Rough	14:34	10.7	Surface	1.0	23.6	23.6	8.2	8.2	33.0	33.0	121.7	121.7	8.5	8.6	8.5	4.6	4.7	5.1	5.0	5.4	5.2		
						1.0	23.6	8.2	33.0	121.6	8.6	4.7	5.0	5.8	5.4										
					Middle	5.4	23.5	23.5	8.2	8.2	33.0	33.0	120.2	120.1	8.5	8.5		5.0	5.1		5.7	5.6			
						5.4	23.5	8.2	33.0	119.9	8.4	5.2	5.5	5.5	5.6										
					Bottom	9.7	23.5	23.5	8.2	8.2	33.0	33.0	110.6	110.7	7.8	7.8		5.5	5.5		4.8	4.5			
						9.7	23.5	8.2	33.0	110.7	7.8	5.5	4.2	4.2	4.5										
C3	Fine	Rough	14:29	22.5	Surface	1.0	24.3	24.3	8.1	8.1	33.2	33.2	106.6	106.6	7.4	7.4	7.4	4.8	4.8	5.3	5.0	4.8	5.0		
						1.0	24.3	8.1	33.2	106.5	7.4	4.8	5.0	5.6	4.8										
					Middle	11.3	24.2	24.2	8.1	8.1	33.2	33.2	105.0	105.0	7.3	7.3		5.0	5.1		4.1	4.9			
						11.3	24.2	8.1	33.2	105.0	7.3	5.2	6.0	4.1	4.9										
					Bottom	21.5	24.1	24.1	8.1	8.1	33.2	33.2	104.7	104.7	7.3	7.3		6.0	6.1		4.7	5.4			
						21.5	24.1	8.1	33.2	104.6	7.3	6.1	4.7	4.7	5.4										
SR1	Fine	Calm	13:18	7.3	Surface	1.0	24.6	24.6	8.2	8.2	33.7	33.7	105.6	105.6	7.3	7.3	7.3	4.5	4.5	4.9	3.8	3.9	3.6		
						1.0	24.6	8.2	33.7	105.6	7.3	4.5	3.9	3.9	3.9										
					Middle	3.7	24.5	24.5	8.2	8.2	33.7	33.7	105.2	105.1	7.2	7.2		4.8	4.8		3.4	3.7			
						3.7	24.5	8.2	33.7	105.0	7.2	4.8	4.0	4.0	3.7										
					Bottom	6.3	24.4	24.4	8.2	8.2	33.7	33.7	103.5	103.5	7.1	7.1		5.5	5.5		3.6	3.1			
						6.3	24.4	8.2	33.7	103.4	7.1	5.5	2.6	2.6	3.1										
SR2	Fine	Moderate	13:25	6.1	Surface	1.0	24.3	24.3	8.2	8.2	33.6	33.6	112.6	112.6	7.8	7.8	7.8	5.0	5.0	5.1	2.1	2.6	3.2		
						1.0	24.3	8.2	33.6	112.6	7.8	5.0	3.1	3.1	2.6										
					Middle	3.1	24.3	24.3	8.2	8.2	33.5	33.5	111.2	111.2	7.7	7.7		5.0	5.0		3.9	3.7			
						3.1	24.3	8.2	33.5	111.1	7.7	5.0	3.5	3.5	3.7										
					Bottom	5.1	24.2	24.2	8.2	8.2	33.5	33.5	107.9	107.9	7.5	7.5		5.4	5.4		3.3	3.2			
						5.1	24.2	8.2	33.5	107.8	7.5	5.3	3.1	3.1	3.2										
SR3	Fine	Moderate	13:39	6.9	Surface	1.0	24.4	24.4	8.2	8.2	33.7	33.7	107.5	107.5	7.4	7.4	7.4	5.3	5.3	5.3	4.1	4.6	3.8		
						1.0	24.4	8.2	33.7	107.4	7.4	5.3	3.0	3.0	4.6										
					Middle	3.5	24.3	24.3	8.2	8.2	33.7	33.7	105.9	105.9	7.3	7.3		5.3	5.3		3.3	3.2			
						3.5	24.3	8.2	33.7	105.9	7.3	5.3	3.8	3.8	3.2										
					Bottom	5.9	24.3	24.3	8.2	8.2	33.7	33.7	102.9	102.9	7.1	7.1		5.2	5.2		3.6	3.7			
						5.9	24.3	8.2	33.7	102.8	7.1	5.2	3.6	3.6	3.7										
SR4	Fine	Rough	14:01	13.5	Surface	1.0	24.6	24.6	8.1	8.1	33.3	33.3	102.1	102.1	7.0	7.0	7.0	4.4	4.4	4.7	4.3	3.8	3.3		
						1.0	24.6	8.1	33.3	102.1	7.0	4.4	3.1	3.1	3.8										
					Middle	6.8	24.6	24.6	8.1	8.1	33.4	33.4	101.0	101.0	7.0	7.0		4.7	4.7		2.8	3.0			
						6.8	24.6	8.1	33.4	101.0	7.0	4.7	3.1	3.1	3.0										
					Bottom	12.5	24.6	24.6	8.1	8.1	33.4	33.4	99.3	99.3	6.8	6.8		4.9	5.0		3.3	3.2			
						12.5	24.6	8.1	33.4	99.2	6.8	5.1	3.1	3.1	3.2										
SR5	Fine	Rough	14:08	9.6	Surface	1.0	24.6	24.6	8.1	8.1	33.3	33.3	101.1	101.1	7.0	7.0	7.0	4.7	4.7	5.1	3.9	3.9	3.8		
						1.0	24.6	8.1	33.3	101.1	7.0	4.7	3.8	3.8	3.9										
					Middle	4.8	24.6	24.6	8.1	8.1	33.3	33.3	100.8	100.8	6.9	6.9		4.5	4.6		3.5	3.6			
						4.8	24.6	8.1	33.3	100.8	6.9	4.6	3.6	3.6	3.6										
					Bottom	8.6	24.6	24.6	8.1	8.1	33.3	33.3	100.1	100.1	6.9	6.9		6.1	6.1		4.4	4.0			
						8.6	24.6	8.1	33.3	100.0	6.9	6.1	3.5	3.5	4.0										
SR6	Fine	Rough	13:54	14.0	Surface	1.0	24.5	24.5	8.2	8.2	33.6	33.6	110.4	110.4	7.6	7.6	7.5	4.0	4.0	5.0	4.3	3.9	3.7		
						1.0	24.5	8.2	33.6	110.3	7.6	4.0	3.4	3.4	3.9										
					Middle	7.0	24.5	24.5	8.2	8.2	33.7	33.7	107.7	107.7	7.4	7.4		5.1	5.1		3.5	3.7			
						7.0	24.5	8.2	33.7	107.6	7.4	5.1	4.0	4.0	3.7										
					Bottom	13.0	24.4	24.4	8.2	8.2	33.7	33.7	106.0	106.0	7.3	7.3		5.9	6.0		3.3	3.7			
						13.0	24.4	8.2	33.7	105.9	7.3	6.0	3.3	3.3	3.7										
SR7	Fine	Rough	14:11	21.6	Surface	1.0	24.4	24.4	8.2	8.2	33.6	33.6	109.8	109.8	7.6	7.6	7.5	4.1	4.1	5.0	5.5	4.7	4.1		
						1.0	24.4	8.2	33.6	109.8	7.6	4.1	3.8	3.8	4.7										
					Middle	10.8	24.5	24.5	8.2	8.2	33.7	33.7	105.6	105.6	7.3	7.3		4.9	5.0		3.6	3.6			
						10.8	24.5	8.2	33.7	105.6	7.3	5.0	3.5	3.5	3.6										
					Bottom	20.6	24.4	24.4	8.1	8.1	33.7	33.7	103.4	103.4	7.1	7.1		5.8	5.8		3.7	4.0			
						20.6	24.4	8.1	33.7	103.3	7.1	5.8	4.3	4.3	4.0										

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 12 November 21 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	13:28	10.5	Surface	1.0	24.6	24.6	8.1	8.1	33.6	33.6	103.4	103.4	7.1	7.1	7.1	7.1	4.1	4.1	4.6	1.8	2.0	2.8																
						1.0	24.6		8.1		33.6		103.3		7.1		7.1		4.1		2.2																			
						5.3	24.7		24.7		8.1		8.1		33.6		33.6		103.1		103.1	7.1			7.1	7.1	7.1	4.5	4.5	4.6	4.6	2.6	2.7							
						5.3	24.7				8.1				33.6				103.1			7.1				7.1		4.5		2.8										
						9.5	24.7				24.7				8.1				8.1			33.7				33.7		102.8		102.8		7.1		7.1	7.1	7.1	5.1	5.1	3.1	3.8
						9.5	24.7								8.1							33.7						102.7				7.1			7.1		5.1		4.4	
					Middle	1.0	24.7	24.7	8.1	8.1	33.6	33.6	100.2	100.3	6.9	6.9	7.0	7.0	3.9	3.9	4.3	4.3	5.0	5.7																
						1.0	24.7		8.1		33.6		100.4		6.9		7.0		3.9		6.4																			
						5.1	24.7		24.8		8.1		8.1		33.6		33.6		102.6		102.7		7.0		7.0	7.0	7.0	3.9	3.9	4.3	4.5									
						5.1	24.8				8.1				33.6				102.7				7.0			7.0		3.9		3.9										
						9.2	24.8				24.8				8.1				8.1				33.7			33.7		102.7		102.7		7.0	7.0	7.0	7.0	5.1	5.1	4.3	4.4	
						9.2	24.8								8.1								33.7					102.6				7.0		7.0		5.0		4.5		
SR9	Fine	Calm	13:38	10.2	Surface	1.0	23.4	23.4	8.2	8.2	32.9	32.9	113.8	113.8	8.0	8.0	8.1	8.1	4.9	4.9	5.3	4.5	5.0	4.5																
						1.0	23.4		8.2		32.9		113.8		8.0		8.1		4.9		5.4																			
						3.3	23.4		23.4		8.2		8.2		32.9		32.9		115.6		115.7	8.1			8.2	8.1	8.1	4.9	4.9	5.3	5.3	4.3	4.0							
						3.3	23.4				8.2				32.9				115.7			8.2				8.2		4.9		3.7										
						5.5	23.4				23.4				8.2				8.2			33.0				33.0		112.5		112.6		7.9		7.9	7.9	7.9	6.1	6.1	4.5	4.6
						5.5	23.4								8.2							33.0						112.6				7.9			7.9		6.0		4.7	
					Middle	1.0	23.4	23.4	8.2	8.2	32.9	32.9	113.8	113.8	8.0	8.0	8.1	8.1	4.9	4.9	5.3	5.3	4.5	5.0																
						1.0	23.4		8.2		32.9		113.8		8.0		8.1		4.9		5.4																			
						3.3	23.4		23.4		8.2		8.2		32.9		32.9		115.6		115.7		8.1		8.2	8.1	8.1	4.9	4.9	5.3	5.3	4.3	4.0							
						3.3	23.4				8.2				32.9				115.7				8.2			8.2		4.9		3.7										
						5.5	23.4				23.4				8.2				8.2				33.0			33.0		112.5		112.6		7.9		7.9	7.9	7.9	6.1	6.1	4.5	4.6
						5.5	23.4								8.2								33.0					112.6				7.9			7.9		6.0		4.7	
Bottom	1.0	23.4	23.4	8.2	8.2	32.9	32.9	113.8	113.8	8.0	8.0	8.1	8.1	4.9	4.9	5.3	5.3	4.5	5.0																					
	1.0	23.4		8.2		32.9		113.8		8.0		8.1		4.9		5.4																								
	3.3	23.4		23.4		8.2		8.2		32.9		32.9		115.6		115.7		8.1		8.2	8.1	8.1	4.9	4.9	5.3	5.3	4.3	4.0												
	3.3	23.4				8.2				32.9				115.7				8.2			8.2		4.9		3.7															
	5.5	23.4				23.4				8.2				8.2				33.0			33.0		112.5		112.6		7.9		7.9	7.9	7.9	6.1	6.1	4.5	4.6					
	5.5	23.4								8.2								33.0					112.6				7.9			7.9		6.0		4.7						

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 15 November 21 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	08:08	10.4	Surface	1.0	23.5	23.5	8.0	8.0	32.0	32.0	115.2	115.1	8.1	8.1	7.6	3.4	3.4	3.3	4.8	4.8	4.0			
						1.0	23.5		8.0		32.1		115.0		8.1		7.6	3.3				4.8				
					Middle	5.2	23.4	23.4	8.0	8.0	32.4	32.4	101.1	101.1	7.1	7.1	7.1	3.4	3.5	3.3	4.1	3.9		3.3		
						5.2	23.4		8.0		32.4		101.1		7.1		7.1	3.5				3.6				
					Bottom	9.4	23.3	23.3	8.0	8.0	32.7	32.7	98.9	98.9	7.0	7.0	7.0	3.1	3.2	3.0	3.2	3.3		3.3	3.0	
						9.4	23.3		8.0		32.7		98.9		7.0		7.0	3.2				3.3				
C2	Fine	Moderate	09:33	10.2	Surface	1.0	23.6	23.6	8.1	8.1	32.1	32.1	105.9	106.1	7.4	7.5	7.3	2.8	2.8	2.9	2.9	4.3				
						1.0	23.6		8.1		32.1		106.2		7.5		7.3	2.8					3.0	3.0		
					Middle	5.1	23.5	23.5	8.1	8.1	32.8	32.8	101.4	101.4	7.1	7.1	7.1	3.0	3.0	2.9	4.6		4.6	2.9		
						5.1	23.5		8.1		32.8		101.4		7.1		7.1	3.0					4.6			
					Bottom	9.2	23.5	23.5	8.1	8.1	32.8	32.7	102.9	103.1	7.2	7.2	7.2	3.0	3.0	3.0	5.3		5.3	5.4	3.0	
						9.2	23.5		8.1		32.6		103.2		7.2		7.2	3.0					5.4			
C3	Fine	Moderate	09:16	23.1	Surface	1.0	23.6	23.6	8.1	8.1	32.3	32.3	102.5	102.4	7.2	7.2	7.2	3.1	3.1	4.4	2.3	2.4	3.4			
						1.0	23.5		8.1		32.4		102.2		7.2		7.2	3.1				2.4				
					Middle	11.6	23.5	23.5	8.2	8.2	33.3	33.3	102.4	102.5	7.2	7.2	7.2	4.7	4.7	4.4	3.7	3.6		4.4		
						11.6	23.5		8.2		33.3		102.5		7.2		7.2	4.7				3.4				
					Bottom	22.1	23.6	23.6	8.2	8.2	33.6	33.5	105.6	105.5	7.4	7.4	7.4	5.3	5.4	7.4	4.1	4.3		4.5	4.3	
						22.1	23.6		8.2		33.4		105.3		7.3		7.4	5.4				4.5				
SR1	Fine	Moderate	08:11	7.6	Surface	1.0	23.5	23.5	8.1	8.1	32.2	32.2	102.3	102.2	7.2	7.2	7.2	3.3	3.3	3.4	3.8	3.8	2.6			
						1.0	23.5		8.1		32.3		102.1		7.2		7.2	3.3				3.8				
					Middle	3.8	23.4	23.4	8.1	8.1	32.5	32.5	101.4	101.4	7.1	7.1	7.1	3.4	3.4	3.4	2.4	2.3		3.4		
						3.8	23.4		8.1		32.5		101.3		7.1		7.1	3.4				2.1				
					Bottom	6.6	23.5	23.5	8.1	8.1	32.5	32.5	101.1	101.1	7.1	7.1	7.1	3.5	3.5	7.1	1.8	1.7		1.6	3.5	
						6.6	23.5		8.1		32.5		101.0		7.1		7.1	3.5				1.6				
SR2	Fine	Moderate	08:21	6.3	Surface	1.0	23.6	23.6	8.1	8.1	32.1	32.1	103.0	102.9	7.2	7.2	7.2	3.1	3.2	3.3	1.7	1.8	2.4			
						1.0	23.5		8.1		32.1		102.7		7.2		7.2	3.2				1.8				
					Middle	3.2	23.4	23.4	8.1	8.1	32.4	32.4	101.4	101.4	7.1	7.1	7.1	3.2	3.3	3.3	2.4	2.3		3.3		
						3.2	23.4		8.1		32.4		101.4		7.1		7.1	3.3				2.2				
					Bottom	5.3	23.4	23.4	8.1	8.1	32.4	32.4	101.5	101.6	7.1	7.2	7.2	3.3	3.4	7.2	3.3	3.2		3.0	3.4	
						5.3	23.4		8.1		32.4		101.7		7.2		7.2	3.4				3.0				
SR3	Fine	Moderate	08:36	7.8	Surface	1.0	23.6	23.6	8.1	8.1	32.1	32.1	102.9	102.8	7.2	7.2	7.2	3.3	3.3	3.3	1.9	2.0	2.7			
						1.0	23.6		8.1		32.1		102.6		7.2		7.2	3.2				2.0				
					Middle	3.9	23.4	23.4	8.1	8.1	32.5	32.5	101.2	101.2	7.1	7.1	7.1	3.3	3.3	3.3	2.7	2.7		3.3		
						3.9	23.4		8.1		32.5		101.2		7.1		7.1	3.3				2.6				
					Bottom	6.8	23.5	23.5	8.1	8.1	32.3	32.3	102.8	103.0	7.2	7.2	7.2	3.4	3.4	7.2	3.4	3.4		3.5	3.6	3.4
						6.8	23.5		8.1		32.3		103.1		7.2		7.2	3.4				3.6				
SR4	Fine	Moderate	09:01	13.6	Surface	1.0	23.6	23.6	8.1	8.1	32.2	32.2	102.6	102.5	7.2	7.2	7.2	2.8	2.8	3.3	4.7	4.7	4.0			
						1.0	23.5		8.1		32.2		102.4		7.2		7.2	2.8				4.7				
					Middle	6.8	23.4	23.4	8.1	8.1	32.8	32.8	101.7	101.8	7.1	7.1	7.1	3.1	3.1	7.1	4.3	4.2		3.3		
						6.8	23.4		8.1		32.8		101.8		7.1		7.1	3.1				4.1				
					Bottom	12.6	23.5	23.5	8.1	8.1	32.8	32.8	102.3	102.3	7.2	7.2	7.2	4.0	4.0	7.2	3.0	3.1		3.2	4.0	
						12.6	23.5		8.1		32.8		102.3		7.2		7.2	4.0				3.2				
SR5	Fine	Moderate	09:09	9.5	Surface	1.0	23.7	23.7	8.1	8.1	31.9	31.9	105.3	105.4	7.4	7.4	7.3	3.0	3.0	3.1	2.8	3.0	2.3			
						1.0	23.7		8.1		31.9		105.4		7.4		7.3	3.0				3.1				
					Middle	4.8	23.4	23.4	8.1	8.1	32.6	32.6	100.9	101.0	7.1	7.1	7.1	3.1	3.1	7.1	2.2	2.2		3.1		
						4.8	23.4		8.1		32.6		101.0		7.1		7.1	3.1				2.1				
					Bottom	8.5	23.5	23.5	8.1	8.1	32.5	32.4	102.4	102.5	7.2	7.2	7.2	3.3	3.3	7.2	1.9	1.8		1.7	3.3	
						8.5	23.5		8.1		32.4		102.6		7.2		7.2	3.3				1.7				
SR6	Fine	Moderate	08:47	14.3	Surface	1.0	23.6	23.6	8.1	8.1	32.1	32.1	102.6	102.4	7.2	7.2	7.2	2.8	2.8	3.3	1.7	1.8	2.5			
						1.0	23.5		8.1		32.2		102.2		7.2		7.2	2.8				1.9				
					Middle	7.2	23.5	23.5	8.1	8.1	32.8	32.8	101.2	101.2	7.1	7.1	7.1	3.2	3.3	7.1	2.8	2.7		3.3		
						7.2	23.5		8.1		32.8		101.2		7.1		7.1	3.3				2.6				
					Bottom	13.3	23.5	23.5	8.1	8.1	32.9	32.9	101.5	101.5	7.1	7.1	7.1	3.8	3.8	7.1	3.1	3.1		3.0	4.1	
						13.3	23.5		8.1		32.9		101.5		7.1		7.1	3.7				3.0				
SR7	Fine	Moderate	09:03	22.4	Surface	1.0	23.6	23.6	8.1	8.1	32.3	32.3	106.0	104.4	7.4	7.3	7.3	3.3	3.4	4.1	2.2	2.1	3.2			
						1.0	23.5		8.1		32.4		102.7		7.2		7.3	3.4				2.0				
					Middle	11.2	23.5	23.6	8.2	8.2	33.4	33.4	103.0	103.2	7.2	7.2	7.2	4.2	4.2	7.2	4.2	4.2		4.0	4.1	
						11.2	23.6		8.2		33.5		103.3		7.2		7.2	4.2				3.3				
					Bottom	21.4	23.6	23.6	8.2	8.2	33.6	33.6	106.5	106.4	7.4	7.4	7.4	4.8	4.8	7.4	4.0	4.0		3.9	4.8	
						21.4	23.6		8.2		33.5		106.3		7.4		7.4	4.8				3.9				

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 15 November 21 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	Moderate	08:27	9.2	Surface	1.0	23.5	23.5	8.0	8.0	32.1	32.2	112.5	112.3	7.9	7.9	7.5	3.0	3.0	3.2	2.8	2.8	3.0
						1.0	23.5		8.0		32.2		112.1		7.9			3.0			2.8		
						4.6	23.4		8.0		32.4		101.3		7.1			3.2			2.9		
						4.6	23.4		8.0		32.4		100.9		7.1			3.2			3.0		
						8.2	23.3		8.0		32.8		99.9		7.0			3.3			3.1		
						8.2	23.3		8.0		32.8		100.1		7.0			3.3			3.1		
					Middle	4.6	23.4	8.0	32.4	101.6	7.1	3.2	3.0										
						4.6	23.4	8.0	32.4	101.4	7.1	3.2	3.0										
						8.2	23.3	8.0	32.8	100.0	7.0	3.3	3.1										
						8.2	23.3	8.0	32.8	100.1	7.0	3.3	3.1										
						8.2	23.3	8.0	32.8	100.1	7.0	3.3	3.1										
						8.2	23.3	8.0	32.8	100.1	7.0	3.3	3.1										
SR9	Fine	Moderate	08:39	9.3	Surface	1.0	23.5	23.5	8.0	8.0	32.0	32.0	104.3	104.1	7.3	7.3	7.2	3.2	3.2	3.6	3.5	3.5	2.9
						1.0	23.5		8.0		32.1		103.9		7.3			3.2			3.4		
						4.7	23.4		8.0		32.3		101.7		7.2			3.3			3.1		
						4.7	23.4		8.0		32.4		101.4		7.1			3.3			3.0		
						8.3	23.4		8.0		32.5		100.4		7.1			4.2			2.2		
						8.3	23.4		8.0		32.5		100.5		7.1			4.2			2.3		
					Middle	4.7	23.4	8.0	32.4	101.6	7.2	3.3	3.1										
						4.7	23.4	8.0	32.4	101.4	7.1	3.3	3.0										
						8.3	23.4	8.0	32.5	100.4	7.1	4.2	2.2										
						8.3	23.4	8.0	32.5	100.5	7.1	4.2	2.3										
						8.3	23.4	8.0	32.5	100.4	7.1	4.2	2.2										
						8.3	23.4	8.0	32.5	100.5	7.1	4.2	2.3										
SR10	Fine	Moderate	09:57	6.2	Surface	1.0	23.6	23.6	8.1	8.1	32.1	32.1	105.1	105.2	7.4	7.4	7.3	2.7	2.8	2.9	3.0	3.0	3.3
						1.0	23.5		8.1		32.1		105.2		7.4			2.8			3.0		
						3.1	23.5		8.1		32.4		102.2		7.2			2.9			3.3		
						3.1	23.5		8.1		32.5		102.3		7.2			2.9			3.2		
						5.2	23.6		8.1		32.2		104.4		7.3			3.0			3.6		
						5.2	23.6		8.1		32.2		104.8		7.4			3.0			3.4		
					Middle	3.1	23.5	8.1	32.4	102.3	7.2	2.9	3.3										
						3.1	23.5	8.1	32.5	102.3	7.2	2.9	3.2										
						5.2	23.6	8.1	32.2	104.4	7.3	3.0	3.6										
						5.2	23.6	8.1	32.2	104.8	7.4	3.0	3.4										
						5.2	23.6	8.1	32.2	104.4	7.3	3.0	3.6										
						5.2	23.6	8.1	32.2	104.8	7.4	3.0	3.4										
Bottom	5.2	23.6	8.1	32.2	104.4	7.3	3.0	3.6															
	5.2	23.6	8.1	32.2	104.8	7.4	3.0	3.4															
	5.2	23.6	8.1	32.2	104.4	7.3	3.0	3.6															
	5.2	23.6	8.1	32.2	104.8	7.4	3.0	3.4															
	5.2	23.6	8.1	32.2	104.4	7.3	3.0	3.6															
	5.2	23.6	8.1	32.2	104.8	7.4	3.0	3.4															

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel

Water Quality Monitoring

Water Quality Monitoring Results on 15 November 21 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	16:38	10.1	Surface	1.0	24.7	24.7	8.1	8.1	32.1	32.2	106.7	106.6	7.3	7.3	7.2	2.6	2.6	3.0	2.7	2.7	3.0		
						1.0	24.6		8.1		32.2		106.4		7.3			2.6			2.6			2.8	
						5.1	24.5		8.1		32.7		101.2		7.0			3.1			3.1			3.1	
					Middle	5.1	24.5	24.5	8.1	8.1	32.7	32.7	101.2	101.2	7.0	7.0	3.1	3.1	3.0	3.1	3.0	3.0		3.0	
						9.1	24.5	24.5	8.1	8.1	32.7	32.6	102.2	102.3	7.0	7.0	7.0	3.2	3.3	3.4	3.4	3.4		3.4	3.4
						9.1	24.5		8.1		32.6		102.3		7.0		3.3	3.4		3.4					
C2	Fine	Moderate	15:06	10.8	Surface	1.0	24.5	24.5	8.1	8.1	32.5	32.5	101.0	101.0	7.0	7.0	7.0	3.7	3.7	3.9	3.8	3.9	3.1		
						1.0	24.5		8.1		32.5		101.0		7.0			3.7			3.9			3.1	
						5.4	24.5		8.1		32.4		101.7		7.0			3.9			3.1			3.1	
					Middle	5.4	24.5	24.5	8.1	8.1	32.4	32.4	101.7	101.7	7.0	7.0	3.8	3.9	3.9	3.1	3.1	3.1		3.1	
						9.8	24.5	24.5	8.1	8.1	32.9	32.9	101.0	101.1	6.9	7.0	7.0	4.2	4.2	2.3	2.4	2.3		2.4	2.4
						9.8	24.5		8.1		32.9		101.1		7.0		4.2	2.4		2.4					
C3	Fine	Moderate	15:24	23.5	Surface	1.0	24.5	24.5	8.1	8.1	32.4	32.4	101.4	101.4	7.0	7.0	7.0	3.7	3.7	4.4	2.9	2.9	3.2		
						1.0	24.5		8.1		32.5		101.3		7.0			3.7			2.8			2.8	
						11.8	24.5		8.2		33.3		102.0		7.0			4.4			3.3			3.3	
					Middle	11.8	24.5	24.5	8.2	8.2	33.3	33.3	102.1	102.1	7.0	7.0	4.3	4.4	4.4	3.0	3.2	3.0		3.2	
						22.5	24.6	24.6	8.2	8.2	33.6	33.5	106.5	106.5	7.3	7.3	7.3	5.1	5.1	3.6	3.7	3.6		3.7	3.7
						22.5	24.6		8.2		33.5		106.4		7.3		5.1	3.8		3.7					
SR1	Fine	Moderate	16:33	7.9	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.3	102.1	101.9	7.0	7.0	7.0	2.9	2.9	3.1	1.6	1.8	2.4		
						1.0	24.5		8.1		32.3		101.7		7.0			2.9			1.9			1.9	
						4.0	24.4		8.1		32.6		100.6		6.9			3.1			2.2			2.2	
					Middle	4.0	24.4	24.4	8.1	8.1	32.6	32.6	100.7	100.7	7.0	7.0	3.1	3.1	3.1	2.6	2.4	2.6		2.4	
						6.9	24.5	24.5	8.1	8.1	32.5	32.4	100.8	100.8	7.0	7.0	7.0	3.4	3.4	2.9	2.9	2.9		2.9	2.9
						6.9	24.5		8.1		32.4		100.8		7.0		3.4	2.9		2.9					
SR2	Fine	Moderate	16:25	6.3	Surface	1.0	24.7	24.7	8.1	8.1	32.0	32.0	105.5	105.6	7.3	7.3	7.2	3.2	3.2	3.3	2.8	2.9	2.6		
						1.0	24.7		8.1		32.0		105.6		7.3			3.2			3.0			2.9	
						3.2	24.5		8.1		32.3		102.7		7.1			3.4			2.8			2.8	
					Middle	3.2	24.5	24.5	8.1	8.1	32.3	32.3	102.7	102.7	7.1	7.1	3.3	3.4	3.3	2.5	2.7	2.5		2.7	
						5.3	24.6	24.6	8.1	8.1	32.2	32.1	104.4	104.5	7.2	7.2	7.2	3.4	3.4	2.0	2.1	2.2		2.1	2.1
						5.3	24.6		8.1		32.1		104.6		7.2		3.4	2.2		2.2					
SR3	Fine	Moderate	16:11	7.8	Surface	1.0	24.6	24.6	8.1	8.1	32.1	32.2	103.2	103.0	7.1	7.1	7.0	2.9	3.0	3.1	3.0	3.0	2.6		
						1.0	24.6		8.1		32.2		102.7		7.1			3.0			2.9			2.9	
						3.9	24.5		8.1		32.6		100.7		6.9			3.0			2.7			2.7	
					Middle	3.9	24.5	24.5	8.1	8.1	32.6	32.6	100.6	100.6	6.9	6.9	3.0	3.0	3.0	2.6	2.7	2.6		2.7	
						6.8	24.5	24.5	8.1	8.1	32.7	32.7	101.4	101.6	7.0	7.0	7.0	3.2	3.3	2.3	2.2	2.3		2.2	2.2
						6.8	24.5		8.1		32.7		101.7		7.0		3.3	2.0		2.2					
SR4	Fine	Moderate	15:37	13.5	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.3	101.9	101.8	7.0	7.0	7.0	2.7	2.7	2.9	2.6	2.7	2.5		
						1.0	24.5		8.1		32.3		101.6		7.0			2.7			2.7			2.7	
						6.8	24.5		8.1		32.8		101.3		7.0			3.0			2.6			2.6	
					Middle	6.8	24.5	24.5	8.1	8.1	32.9	32.9	101.4	101.4	7.0	7.0	3.0	3.0	3.0	2.5	2.6	2.5		2.6	
						12.5	24.5	24.5	8.1	8.1	33.0	33.0	101.6	101.6	7.0	7.0	7.0	3.1	3.1	2.3	2.3	2.3		2.3	2.3
						12.5	24.5		8.1		33.0		101.6		7.0		3.1	2.3		2.3					
SR5	Fine	Moderate	15:29	9.4	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.3	102.3	102.2	7.1	7.1	7.0	2.7	2.7	3.1	4.4	4.6	3.5		
						1.0	24.5		8.1		32.3		102.0		7.0			2.7			4.8			4.8	
						4.7	24.5		8.1		32.6		101.0		7.0			3.1			3.5			3.5	
					Middle	4.7	24.5	24.5	8.1	8.1	32.6	32.6	100.9	101.0	7.0	7.0	3.1	3.1	3.1	3.5	3.5	3.5		3.5	
						8.4	24.5	24.5	8.1	8.1	32.5	32.5	102.1	102.2	7.0	7.1	7.1	3.4	3.4	2.5	2.5	2.5		2.5	2.5
						8.4	24.5		8.1		32.4		102.3		7.1		3.4	2.4		2.5					
SR6	Fine	Moderate	15:58	14.3	Surface	1.0	24.6	24.6	8.1	8.1	32.2	32.2	102.6	102.4	7.1	7.1	7.0	3.5	3.5	3.6	4.8	4.9	4.3		
						1.0	24.6		8.1		32.2		102.2		7.0			3.5			4.9			4.9	
						7.2	24.5		8.1		33.0		101.1		7.0			3.5			4.3			4.3	
					Middle	7.2	24.5	24.5	8.1	8.1	33.0	33.0	101.1	101.1	7.0	7.0	3.5	3.5	3.5	4.5	4.4	4.5		4.4	
						13.3	24.5	24.5	8.1	8.1	32.8	32.8	101.7	101.8	7.0	7.0	7.0	3.8	3.8	3.7	3.7	3.7		3.7	3.7
						13.3	24.5		8.1		32.8		101.9		7.0		3.8	3.6		3.7					
SR7	Fine	Moderate	15:40	22.1	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.4	101.9	101.9	7.0	7.0	7.1	3.6	3.7	4.0	3.4	3.5	3.8		
						1.0	24.5		8.1		32.5		101.8		7.0			3.7			3.5			3.5	
						11.1	24.5		8.2		33.2		103.5		7.1			3.9			3.7			3.7	
					Middle	11.1	24.5	24.5	8.2	8.2	33.2	33.2	103.9	103.7	7.1	7.1	3.9	3.9	3.9	3.8	3.8	3.8		3.8	
						21.1	24.5	24.5	8.2	8.2	33.5	33.4	105.8	105.8	7.3	7.3	7.3	4.3	4.3	4.3	4.3	4.3		4.3	4.3
						21.1	24.5		8.2		33.4		105.7		7.3		4.3	4.3		4.3					

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 15 November 21 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	Moderate	16:16	10.2	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.3	102.1	102.0	7.0	7.0	7.0	2.7	2.7	2.9	2.6	2.8	3.2	
						1.0	24.5		8.1		32.3		101.9		7.0			2.7			2.9			
					Middle	5.1	24.5	24.5	8.1	8.1	32.7	32.7	101.1	101.1	7.0	7.0	7.0	7.0	2.9	2.9	3.0	3.2		3.1
						5.1	24.5		8.1		32.7		101.1		7.0		2.9					3.0		
					Bottom	9.2	24.5	24.5	8.1	8.1	32.5	32.5	102.3	102.4	7.1	7.1	7.1	7.1	3.1	3.1	3.1	3.9		3.7
						9.2	24.5		8.1		32.4		102.5		7.1		3.0		3.4					
SR9	Fine	Moderate	16:02	9.5	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.3	102.2	102.1	7.1	7.1	7.0	2.9	2.9	3.3	4.7	4.8	3.6	
						1.0	24.5		8.1		32.3		102.0		7.0			2.9			4.9			
					Middle	4.8	24.5	24.5	8.1	8.1	32.6	32.6	101.4	101.4	7.0	7.0	7.0	7.0	3.3	3.3	3.4	3.8		3.6
						4.8	24.5		8.1		32.6		101.4		7.0		3.3					3.4		
					Bottom	8.5	24.5	24.5	8.1	8.1	32.5	32.5	102.4	102.5	7.1	7.1	7.1	7.1	3.8	3.8	3.8	2.2		2.4
						8.5	24.5		8.1		32.5		102.6		7.1		3.7		2.5					
SR10	Fine	Moderate	14:39	6.1	Surface	1.0	24.5	24.5	8.1	8.1	32.3	32.4	102.0	101.9	7.0	7.0	7.0	3.0	3.0	3.2	2.9	3.0	3.3	
						1.0	24.5		8.1		32.4		101.8		7.0			3.0			3.0			
					Middle	3.1	24.4	24.4	8.1	8.1	32.5	32.5	101.7	101.9	7.0	7.0	7.0	7.0	3.1	3.1	3.1	3.2		3.3
						3.1	24.4		8.1		32.5		102.0		7.0		3.1					3.4		
					Bottom	5.1	24.6	24.6	8.1	8.1	32.2	32.2	104.2	104.4	7.2	7.2	7.2	7.2	3.4	3.4	3.4	3.9		3.7
						5.1	24.6		8.1		32.2		104.5		7.2		3.4		3.5					

DA: Depth-averaged
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**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 17 November 21 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	09:27	10.7	Surface	1.0	24.4	24.4	8.0	8.0	33.0	33.0	94.0	94.0	6.5	6.5	6.5	6.5	6.5	0.7	0.7	1.0	0.9	2.9	3.0		
						1.0	24.4		8.0		33.0		94.0		6.5												
					Middle	5.4	24.4	24.4	8.0	8.0	33.0	33.0	93.7	93.7	6.5	6.5										0.9	0.9
						5.4	24.4		8.0		33.0		93.7		6.5												
					Bottom	9.7	24.4	24.4	7.9	7.9	33.1	33.1	94.1	94.2	6.5	6.5										1.5	1.5
						9.7	24.4		7.9		33.1		94.2		6.5												
C2	Cloudy	Rough	10:55	11.2	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	102.1	102.1	7.1	7.1	7.1	7.1	7.1	1.6	1.6	2.2	3.3	3.2			
						1.0	24.1		8.1		33.3		102.1		7.1												
					Middle	5.6	24.1	24.1	8.1	8.1	33.3	33.3	101.1	101.1	7.0	7.0									2.1	2.1	
						5.6	24.1		8.1		33.3		101.1		7.0												
					Bottom	10.2	24.2	24.2	8.1	8.1	33.3	33.3	100.3	100.4	7.0	7.0									3.0	3.0	
						10.2	24.2		8.1		33.4		100.4		7.0												
C3	Cloudy	Rough	10:47	23.1	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	102.0	102.0	7.1	7.1	7.1	7.1	7.1	1.4	1.4	2.2	2.7	2.7			
						1.0	24.1		8.1		33.3		102.0		7.1												
					Middle	11.6	24.1	24.1	8.1	8.1	33.3	33.3	101.1	101.1	7.0	7.0									1.7	1.8	
						11.6	24.1		8.1		33.3		101.1		7.0												
					Bottom	22.1	24.2	24.2	8.1	8.1	33.4	33.4	100.2	100.2	7.0	7.0									3.5	3.5	
						22.1	24.2		8.1		33.4		100.2		7.0												
SR1	Cloudy	Moderate	09:33	8.3	Surface	1.0	24.4	24.4	8.2	8.2	33.3	33.3	101.0	101.0	7.0	7.0	7.0	7.0	7.0	1.9	1.9	2.2	3.7	3.6			
						1.0	24.4		8.2		33.3		101.0		7.0												
					Middle	4.2	24.4	24.4	8.1	8.1	33.3	33.3	100.8	100.8	7.0	7.0									2.2	2.2	
						4.2	24.4		8.1		33.3		100.8		7.0												
					Bottom	7.3	24.2	24.2	8.1	8.1	33.3	33.3	100.1	100.1	6.9	6.9									2.6	2.6	
						7.3	24.2		8.1		33.3		100.1		6.9												
SR2	Cloudy	Moderate	09:43	6.1	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	99.6	99.6	6.9	6.9	6.9	6.9	6.9	2.2	2.2	3.8	2.5	3.0			
						1.0	24.1		8.1		33.3		99.6		6.9												
					Middle	3.1	24.1	24.1	8.1	8.1	33.3	33.3	99.4	99.4	6.9	6.9									2.6	2.6	
						3.1	24.1		8.1		33.3		99.4		6.9												
					Bottom	5.1	24.0	24.0	8.0	8.0	33.3	33.3	97.4	97.4	6.8	6.8									6.7	6.7	
						5.1	24.0		8.0		33.3		97.4		6.8												
SR3	Cloudy	Moderate	09:58	8.0	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	100.6	100.6	7.0	7.0	6.9	6.9	6.9	0.7	0.7	2.3	3.0	3.0			
						1.0	24.1		8.1		33.3		100.6		7.0												
					Middle	4.0	24.0	24.0	8.0	8.0	33.3	33.3	97.6	97.6	6.8	6.8									1.3	1.4	
						4.0	24.0		8.0		33.3		97.6		6.8												
					Bottom	7.0	24.0	24.0	8.0	8.0	33.3	33.3	96.2	96.3	6.7	6.7									5.0	5.0	
						7.0	24.0		7.9	7.9	33.3		96.4		6.7												
SR4	Cloudy	Moderate	10:17	13.6	Surface	1.0	24.4	24.4	8.4	8.4	33.2	33.2	102.5	102.5	7.1	7.1	7.1	7.1	7.1	1.0	1.0	2.0	3.2	3.2			
						1.0	24.4		8.4		33.2		102.5		7.1												
					Middle	6.8	24.4	24.4	8.4	8.4	33.2	33.2	101.8	101.8	7.0	7.0									1.5	1.5	
						6.8	24.4		8.4		33.2		101.8		7.0												
					Bottom	12.6	24.2	24.2	8.2	8.2	33.2	33.2	98.8	98.9	6.9	6.9									3.5	3.5	
						12.6	24.2		8.2		33.2		98.9		6.9												
SR5	Cloudy	Moderate	10:27	9.5	Surface	1.0	24.2	24.2	8.4	8.4	33.2	33.2	101.8	101.8	7.1	7.1	7.1	7.1	7.1	0.9	0.9	1.4	2.7	2.9			
						1.0	24.2		8.4		33.2		101.8		7.1												
					Middle	4.8	24.2	24.2	8.4	8.4	33.2	33.2	101.4	101.4	7.0	7.0									1.2	1.2	
						4.8	24.2		8.4		33.2		101.4		7.0												
					Bottom	8.5	24.2	24.2	8.3	8.3	33.2	33.2	100.5	100.5	7.0	7.0									1.9	2.0	
						8.5	24.2		8.3		33.2		100.5		7.0												
SR6	Cloudy	Moderate	10:08	14.6	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	101.9	101.9	7.1	7.1	7.1	7.1	7.1	1.1	1.1	2.1	2.8	2.8			
						1.0	24.1		8.1		33.3		101.9		7.1												
					Middle	7.3	24.1	24.1	8.0	8.0	33.3	33.3	100.6	100.6	7.0	7.0									1.7	1.7	
						7.3	24.1		8.0		33.3		100.6		7.0												
					Bottom	13.6	24.1	24.1	7.9	7.9	33.3	33.3	98.9	98.9	6.9	6.9									3.5	3.6	
						13.6	24.1		7.9		33.3		98.8		6.9												
SR7	Cloudy	Rough	10:28	21.8	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	102.1	102.1	7.1	7.1	7.1	7.1	7.1	1.2	1.2	2.1	2.8	2.7			
						1.0	24.1		8.1		33.3		102.1		7.1												
					Middle	10.9	24.1	24.1	8.0	8.0	33.3	33.3	101.1	101.1	7.0	7.0									1.6	1.6	
						10.9	24.1		8.0		33.3		101.1		7.0												
					Bottom	20.8	24.1	24.1	8.0	8.0	33.3	33.3	99.5	99.5	6.9	6.9									3.3	3.4	
						20.8	24.1		8.0		33.3		99.5		6.9												

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**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 17 November 21 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	09:47	10.3	Surface	1.0	24.3	24.3	8.2	8.2	33.2	33.2	100.4	100.4	7.0	7.0	7.0	0.5	0.6	0.9	2.5	2.6	3.1					
						1.0	24.3	24.3	8.2	8.2	33.2	33.2	100.4	100.4	7.0	7.0		0.6	0.6		2.6	2.6						
						5.2	24.3	24.3	8.2	8.2	33.2	33.2	99.3	99.3	6.9	6.9		0.9	0.9		3.1	3.1						
					Middle	5.2	24.3	24.3	8.2	8.2	33.2	33.2	99.3	99.3	6.9	6.9	6.9	6.9	6.9	6.9	0.9	0.9	0.9	3.1	3.1	3.1		
						9.3	24.3	24.3	8.2	8.2	33.2	33.2	98.6	98.6	6.8	6.8	6.8	6.8	6.8	6.8	1.3	1.4	1.4	3.4	3.6	3.6		
						9.3	24.3	24.3	8.2	8.2	33.2	33.2	98.6	98.6	6.8	6.8	6.8	6.8	6.8	6.8	1.4	1.4	1.4	3.7	3.7	3.7		
					SR9	Cloudy	Moderate	09:58	9.8	Surface	1.0	24.4	24.4	8.2	8.2	33.2	33.2	102.6	102.6	7.1	7.1	7.1	0.2	0.2	0.9	2.6	2.7	3.5
											1.0	24.4	24.4	8.2	8.2	33.2	33.2	102.6	102.6	7.1	7.1		0.2	0.2		2.8	2.8	
											4.9	24.4	24.4	8.2	8.2	33.2	33.2	102.7	102.7	7.1	7.1		0.3	0.3		3.4	3.5	
Middle	4.9	24.4	24.4	8.2						8.2	33.2	33.2	102.6	102.6	7.1	7.1	7.1	7.1	7.1	7.1	0.3	0.3	0.3	3.5	3.5	3.5		
	8.8	24.4	24.4	8.1						8.1	33.3	33.3	99.7	99.7	6.9	6.9	6.9	6.9	6.9	6.9	2.2	2.2	2.2	4.3	4.3	4.3		
	8.8	24.4	24.4	8.1						8.1	33.3	33.3	99.7	99.7	6.9	6.9	6.9	6.9	6.9	6.9	2.2	2.2	2.2	4.3	4.3	4.3		
SR10	Cloudy	Rough	11:25	6.3						Surface	1.0	24.2	24.2	8.1	8.1	33.4	33.4	101.5	101.5	7.0	7.0	7.0	1.3	1.3	1.8	3.6	3.7	4.1
											1.0	24.2	24.2	8.1	8.1	33.4	33.4	101.5	101.5	7.0	7.0		1.3	1.3		3.7	3.7	
											3.2	24.2	24.2	8.1	8.1	33.3	33.3	101.4	101.4	7.0	7.0		1.8	1.8		4.0	4.1	
					Middle	3.2	24.2	24.2	8.1	8.1	33.3	33.3	101.4	101.4	7.0	7.0	7.0	7.0	7.0	7.0	1.8	1.8	1.8	4.2	4.1	4.1		
						5.3	24.1	24.1	8.1	8.1	33.3	33.3	101.4	101.4	7.0	7.0	7.0	7.0	7.0	7.0	2.2	2.3	2.3	4.4	4.6	4.6		
						5.3	24.1	24.1	8.1	8.1	33.3	33.3	101.4	101.4	7.0	7.0	7.0	7.0	7.0	7.0	2.3	2.3	2.3	4.7	4.7	4.7		

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Improvement Dredging for Lamma Power Station Navigatin Channel

Water Quality Monitoring

Water Quality Monitoring Results on 17 November 21 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	Value	Average	DA	Value	Average	DA	Value	Average	DA	
C1	Cloudy	Moderate	17:35	10.7	Surface	1.0	24.5	24.5	8.1	8.1	33.2	33.2	106.5	106.5	7.4	7.4	7.2	0.4	0.4	1.2	3.2	3.3	3.9			
						1.0	24.5		8.1		33.2		106.5		7.4			0.4			3.4					
						5.4	24.3		8.1		33.2		101.1		7.0			1.1			3.6					
					Middle	5.4	24.3	24.3	8.1	8.1	33.2	33.2	101.1	101.1	7.0	7.0	7.0	1.1	1.1	1.2	1.1	1.1	2.0	3.8	3.7	4.8
						9.7	24.3		8.1		33.2		97.2		6.7			1.9			4.6					
						9.7	24.3		8.1		33.2		97.2		6.7			2.0			4.9					
C2	Cloudy	Rough	16:07	11.2	Surface	1.0	24.2	24.2	8.1	8.1	33.3	33.3	101.5	101.5	7.0	7.0	7.0	1.6	1.6	1.9	3.2	3.1	3.6			
						1.0	24.2		8.1		33.3		101.5		7.0			1.6			3.0					
						5.6	24.2		8.1		33.3		100.6		7.0			1.8			3.8					
					Middle	5.6	24.2	24.2	8.1	8.1	33.3	33.3	100.6	100.6	7.0	7.0	7.0	1.9	1.9	2.1	1.9	1.9	2.1	3.5	3.7	4.1
						10.2	24.2		8.1		33.3		100.2		7.0			2.1			4.0					
						10.2	24.2		8.1		33.3		100.2		7.0			2.1			4.2					
C3	Cloudy	Rough	16:07	23.1	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	100.6	100.6	7.0	7.0	7.0	1.1	1.1	1.5	2.7	2.7	2.5			
						1.0	24.1		8.1		33.3		100.6		7.0			1.1			2.6					
						11.6	24.1		8.1		33.3		100.2		7.0			1.5			2.5					
					Middle	11.6	24.1	24.1	8.1	8.1	33.3	33.3	100.3	100.3	7.0	7.0	7.0	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5
						22.1	24.1		8.1		33.3		100.0		6.9			1.8			2.3					
						22.1	24.1		8.1		33.3		100.0		6.9			1.8			2.5					
SR1	Cloudy	Moderate	17:24	8.3	Surface	1.0	24.3	24.3	8.0	8.0	33.3	33.3	100.2	100.3	6.9	6.9	7.0	1.4	1.4	1.9	3.6	3.5	3.2			
						1.0	24.3		8.0		33.3		100.3		6.9			1.4			3.4					
						4.2	24.3		7.9		33.3		100.8		7.0			1.7			3.4					
					Middle	4.2	24.3	24.3	7.9	7.9	33.3	33.3	100.8	100.8	7.0	7.0	7.0	1.9	1.8	2.4	1.9	1.8	2.4	3.1	3.3	2.9
						7.3	24.1		7.9		33.3		100.5		7.0			2.3			3.0					
						7.3	24.1		7.9		33.3		100.5		7.0			2.4			2.8					
SR2	Cloudy	Moderate	17:17	6.1	Surface	1.0	24.2	24.2	8.0	7.9	33.3	33.3	101.5	101.5	7.0	7.0	7.0	3.6	3.6	4.6	3.7	3.7	3.3			
						1.0	24.2		7.9		33.3		101.4		7.0			3.6			3.7					
						3.1	24.1		7.9		33.3		99.2		6.9			4.9			3.6					
					Middle	3.1	24.1	24.1	7.9	7.9	33.3	33.3	99.2	99.2	6.9	6.9	6.9	4.9	4.9	5.3	4.9	4.9	5.3	3.6	3.6	2.5
						5.1	24.0		7.9		33.3		97.3		6.8			5.3			2.6					
						5.1	24.0		7.9		33.3		97.2		6.8			5.3			2.4					
SR3	Cloudy	Moderate	17:00	8.0	Surface	1.0	24.1	24.1	7.9	7.9	33.3	33.3	99.9	99.9	6.9	6.9	6.9	1.3	1.3	2.8	4.0	4.0	3.2			
						1.0	24.1		7.9		33.3		99.9		6.9			1.2			4.0					
						4.0	24.1		7.9		33.3		98.8		6.9			1.5			3.2					
					Middle	4.0	24.1	24.1	7.9	7.9	33.3	33.3	98.6	98.7	6.9	6.9	6.9	1.5	1.5	1.5	1.5	1.5	2.8	2.9	3.1	2.5
						7.0	24.0		7.8		33.3		95.9		6.7			5.6			2.4					
						7.0	24.0		7.8		33.3		95.9		6.7			5.6			2.6					
SR4	Cloudy	Moderate	16:38	13.6	Surface	1.0	24.6	24.6	8.0	8.0	33.0	33.0	109.1	109.1	7.5	7.5	7.3	0.1	0.1	2.7	2.6	2.5	2.9			
						1.0	24.6		8.0		33.0		109.1		7.5			0.1			2.4					
						6.8	24.3		8.0		33.0		102.1		7.1			0.6			2.8					
					Middle	6.8	24.3	24.3	8.0	8.0	33.0	33.0	102.1	102.1	7.1	7.1	7.1	0.7	0.7	7.3	0.7	0.7	7.3	2.8	2.8	3.4
						12.6	24.3		8.0		33.2		100.2		6.9			3.5			3.2					
						12.6	24.3		8.0		33.2		100.2		6.9			3.2			3.4					
SR5	Cloudy	Moderate	16:30	9.5	Surface	1.0	24.5	24.5	8.1	8.1	33.0	33.0	115.8	115.8	8.0	8.0	7.7	0.3	0.3	0.5	4.1	4.0	3.4			
						1.0	24.5		8.1		33.0		115.8		8.0			0.3			3.8					
						4.8	24.4		8.1		33.0		107.1		7.4			0.6			3.4					
					Middle	4.8	24.4	24.4	8.1	8.1	33.0	33.0	107.1	107.1	7.4	7.4	7.4	0.6	0.6	0.7	0.6	0.6	0.7	3.4	3.4	2.9
						8.5	24.3		8.1		33.1		104.2		7.2			2.8			3.0					
						8.5	24.3		8.1		33.1		104.2		7.2			2.8			3.0					
SR6	Cloudy	Moderate	16:45	14.6	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	99.5	99.5	6.9	6.9	6.9	1.9	1.9	2.1	2.8	2.7	3.3			
						1.0	24.1		8.1		33.3		99.4		6.9			1.9			2.6					
						7.3	24.1		8.1		33.3		98.6		6.8			2.0			3.3					
					Middle	7.3	24.1	24.1	8.1	8.1	33.3	33.3	98.7	98.7	6.9	6.9	6.9	2.1	2.1	2.5	2.1	2.1	2.5	3.4	3.4	3.8
						13.6	24.1		8.1		33.3		99.2		6.9			2.5			3.7					
						13.6	24.1		8.1		33.3		99.2		6.9			2.4			3.8					
SR7	Cloudy	Rough	16:21	21.8	Surface	1.0	24.1	24.1	8.1	8.1	33.3	33.3	100.0	100.0	6.9	6.9	6.9	1.7	1.7	2.2	3.6	3.6	4.3			
						1.0	24.1		8.1		33.3		99.9		6.9			1.7			3.6					
						10.9	24.1		8.1		33.3		99.8		6.9			2.2			4.5					
					Middle	10.9	24.1	24.1	8.1	8.1	33.3	33.3	99.8	99.8	6.9	6.9	6.9	2.1	2.2	2.7	2.1	2.2	2.7	4.6	4.6	4.8
						20.8	24.1		8.1		33.3		99.4		6.9			2.7			4.8					
						20.8	24.1		8.1		33.3		99.4		6.9			2.7			4.7					

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 17 November 21 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	17:15	10.3	Surface	1.0	24.5	24.5	8.1	8.1	33.2	33.2	106.3	106.3	7.3	7.3	7.1	0.4	0.4	1.3	3.5	3.6	3.1					
						1.0	24.5		8.1		33.2		106.2		7.3			0.4			3.6							
						5.2	24.3		24.3		8.1		8.1		33.2			100.3			100.3			6.9	7.0	1.5	2.8	
					Middle	5.2	24.3	24.3	8.1	8.1	33.2	33.2	100.3	100.3	7.0	7.0	1.5	1.5	1.9	1.9	3.2	3.0	2.7					
						9.3	24.3		8.1		33.2		98.3		6.8		1.9		2.8									
						9.3	24.3		8.1		33.2		98.3		6.8		1.9		2.6									
					SR9	Cloudy	Moderate	17:00	9.8	Surface	1.0	24.5	24.5	8.3	8.3	33.2	33.2	107.4	107.4	7.4	7.4	7.4	0.3	0.3	1.2	4.2	4.2	3.8
											1.0	24.5		8.3		33.2		107.4		7.4			0.3			4.2		
											4.9	24.4		24.4		8.4		8.4		33.2			33.2			105.9		
4.9	24.4	8.4	33.2	105.9						7.3	0.5	3.9																
8.8	24.4	24.4	8.4	8.4						33.3	33.3	99.5	99.6	6.9	6.9	2.7	2.7		3.4	3.4								
8.8	24.4	8.4	33.3							99.7		6.9		2.6		3.4												
8.8	24.4	8.4	33.3							99.7		6.9		2.6		3.4												
SR10	Cloudy	Rough	15:38	6.3						Surface	1.0	24.2	24.2	8.1	8.1	33.4	33.4	101.3	101.3	7.0	7.0	7.0	1.9	1.9	2.0	2.4	2.5	3.3
											1.0	24.2		8.1		33.4		101.3		7.0			1.9			2.5		
					3.2	24.2	24.2	8.1	8.1		33.3	33.3		101.0		101.0		7.0		7.0			2.0			2.0		
					3.2	24.2	8.1	33.3		101.0	7.0		2.0	3.4														
					5.3	24.2	24.2	8.1		8.1	33.3		33.3	100.5	100.5		7.0	7.0	2.2		2.2	3.7	3.9					
					5.3	24.2	8.1	33.3	100.5		7.0	2.2		4.0														
					5.3	24.2	8.1	33.3	100.5		7.0	2.2		4.0														

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 19 November 21 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	Rough	10:42	11.5	Surface	1.0	24.3	24.3	8.2	8.2	33.0	33.0	89.4	89.5	6.2	6.2	6.3	1.3	1.3	1.7	5.9	6.1	5.1
						1.0	24.3		8.2		33.0		89.5		6.2		6.3	1.3		1.7	6.2		
					Middle	5.8	24.3	24.3	8.1	8.1	33.1	33.1	91.4	91.4	6.3	6.3	6.3	1.3	1.3	1.7	5.3	5.2	
						5.8	24.3		8.1		33.1		91.4		6.3		6.3	1.3		1.7	5.1		
					Bottom	10.5	24.3	24.3	8.0	8.0	33.1	33.1	91.6	91.6	6.3	6.3	6.3	2.6	2.6	2.6	3.9	4.1	
						10.5	24.3		8.0		33.1		91.6		6.3		6.3	2.6		2.6	4.2		
C2	Sunny	Rough	12:05	11.5	Surface	1.0	24.3	24.3	8.0	8.0	33.2	33.2	105.0	104.8	7.3	7.3	7.2	1.7	1.7	1.8	3.1	3.2	2.7
						1.0	24.2		8.0		33.2		104.6		7.3		7.2	1.7		1.8	3.2		
					Middle	5.8	24.1	24.1	8.1	8.1	33.2	33.2	102.6	102.7	7.1	7.1	7.0	1.5	1.5	1.8	2.5	2.7	
						5.8	24.1		8.1		33.2		102.7		7.1		7.0	1.4		1.8	2.8		
					Bottom	10.5	24.1	24.1	8.1	8.1	33.2	33.2	100.2	100.3	7.0	7.0	7.0	2.3	2.3	2.3	2.3	2.3	
						10.5	24.1		8.1		33.2		100.3		7.0		7.0	2.3		2.3	2.2		
C3	Sunny	Rough	11:59	22.3	Surface	1.0	24.2	24.2	8.1	8.1	33.2	33.2	103.4	103.2	7.2	7.2	7.0	1.2	1.2	3.3	2.8	2.8	2.4
						1.0	24.2		8.1		33.2		102.9		7.1		7.0	1.2		3.3	2.8		
					Middle	11.2	24.1	24.1	8.1	8.1	33.2	33.2	100.0	100.0	6.9	6.9	6.9	3.5	3.6	3.3	2.4	2.3	
						11.2	24.1		8.1		33.2		99.9		6.9		6.9	3.6		3.3	2.2		
					Bottom	21.3	24.1	24.1	8.2	8.2	33.2	33.2	99.5	99.5	6.9	6.9	6.9	5.1	5.1	3.3	1.9	2.0	
						21.3	24.1		8.2		33.2		99.5		6.9		6.9	5.1		3.3	2.1		
SR1	Sunny	Moderate	10:50	8.5	Surface	1.0	24.3	24.3	8.1	8.1	33.2	33.2	95.8	95.8	6.6	6.6	6.7	1.1	1.1	1.3	3.7	3.7	3.2
						1.0	24.3		8.1		33.2		95.8		6.6		6.7	1.1		1.3	3.6		
					Middle	4.3	24.3	24.3	8.1	8.1	33.2	33.2	96.2	96.2	6.7	6.7	6.9	1.3	1.3	1.3	3.3	3.4	
						4.3	24.3		8.1		33.2		96.2		6.7		6.9	1.3		1.3	3.4		
					Bottom	7.5	24.3	24.3	8.1	8.1	33.3	33.3	99.5	99.5	6.9	6.9	6.9	1.4	1.4	6.9	2.3	2.5	
						7.5	24.3		8.1		33.3		99.4		6.9		6.9	1.4		6.9	2.7		
SR2	Sunny	Moderate	10:58	6.9	Surface	1.0	24.3	24.3	8.1	8.1	33.1	33.1	96.0	96.0	6.7	6.7	6.7	1.9	2.0	2.5	1.9	1.8	2.7
						1.0	24.3		8.1		33.1		95.9		6.7		6.7	2.0		2.5	1.7		
					Middle	3.5	24.3	24.3	8.1	8.1	33.1	33.1	95.9	95.9	6.6	6.7	6.7	2.6	2.6	2.5	2.6	2.8	
						3.5	24.3		8.1		33.1		95.9		6.7		6.7	2.6		2.5	2.9		
					Bottom	5.9	24.3	24.3	8.1	8.1	33.2	33.2	96.2	96.2	6.7	6.7	6.7	2.8	2.9	6.7	3.4	3.4	
						5.9	24.3		8.1		33.2		96.2		6.7		6.7	2.9		6.7	3.4		
SR3	Sunny	Moderate	11:09	6.5	Surface	1.0	24.3	24.3	8.2	8.2	33.1	33.1	96.5	96.5	6.7	6.7	6.7	1.8	1.8	2.3	3.1	3.1	2.7
						1.0	24.3		8.2		33.1		96.5		6.7		6.7	1.8		2.3	3.0		
					Middle	3.3	24.3	24.3	8.2	8.2	33.1	33.1	95.7	95.7	6.6	6.6	6.6	2.2	2.2	6.6	2.8	2.8	
						3.3	24.3		8.2		33.1		95.7		6.6		6.6	2.2		6.6	2.8		
					Bottom	5.5	24.3	24.3	8.2	8.2	33.2	33.2	95.8	95.8	6.6	6.6	6.6	2.8	2.9	6.6	2.2	2.2	
						5.5	24.3		8.2		33.2		95.8		6.6		6.6	2.9		6.6	2.1		
SR4	Sunny	Rough	11:34	10.5	Surface	1.0	24.2	24.2	8.2	8.2	33.2	33.2	97.5	97.5	6.8	6.8	6.8	1.6	1.6	1.9	2.2	2.3	2.7
						1.0	24.2		8.2		33.2		97.5		6.8		6.8	1.6		1.9	2.4		
					Middle	5.3	24.2	24.2	8.1	8.1	33.2	33.2	97.7	97.7	6.8	6.8	6.8	1.1	1.1	6.8	2.6	2.5	
						5.3	24.2		8.1		33.2		97.7		6.8		6.8	1.1		6.8	2.4		
					Bottom	9.5	24.3	24.3	8.1	8.1	33.2	33.2	98.5	98.5	6.8	6.8	6.8	2.9	2.9	6.8	3.1	3.2	
						9.5	24.3		8.1		33.2		98.5		6.8		6.8	2.9		6.8	3.2		
SR5	Sunny	Rough	11:41	11.5	Surface	1.0	24.3	24.3	8.0	8.0	33.2	33.2	97.5	97.6	6.8	6.8	6.8	1.2	1.3	1.3	3.2	3.2	2.8
						1.0	24.3		8.0		33.2		97.7		6.8		6.8	1.3		1.3	3.2		
					Middle	5.8	24.3	24.3	8.0	8.0	33.3	33.3	98.9	98.9	6.8	6.8	6.8	1.4	1.4	6.8	2.9	2.8	
						5.8	24.3		8.0		33.3		98.9		6.8		6.8	1.4		6.8	2.7		
					Bottom	10.5	24.3	24.3	8.0	8.0	33.4	33.4	98.6	98.6	6.8	6.8	6.8	1.2	1.2	6.8	2.3	2.4	
						10.5	24.3		8.0		33.4		98.6		6.8		6.8	1.2		6.8	2.4		
SR6	Sunny	Rough	11:24	14.5	Surface	1.0	24.3	24.3	8.1	8.1	33.1	33.1	101.0	100.9	7.0	7.0	7.0	1.7	1.7	3.0	2.3	1.8	
						1.0	24.2		8.1		33.1		100.8		7.0		7.0	1.7		3.0	2.3		
					Middle	7.3	24.2	24.2	8.1	8.1	33.2	33.2	99.0	99.0	6.9	6.9	6.9	2.9	2.9	6.9	1.6		1.7
						7.3	24.2		8.1		33.2		99.0		6.9		6.9	2.9		6.9	1.7		
					Bottom	13.5	24.1	24.1	8.1	8.1	33.2	33.2	98.7	98.8	6.9	6.9	6.9	4.4	4.5	6.9	1.2		1.3
						13.5	24.1		8.1		33.2		98.8		6.9		6.9	4.5		6.9	1.4		
SR7	Sunny	Rough	11:43	21.5	Surface	1.0	24.3	24.3	8.2	8.2	33.1	33.1	102.1	102.0	7.1	7.1	7.0	1.5	1.6	2.7	1.5	1.5	1.9
						1.0	24.3		8.2		33.1		101.9		7.1		7.0	1.6		2.7	1.5		
					Middle	10.8	24.2	24.2	8.2	8.2	33.1	33.1	99.7	99.7	6.9	6.9	6.9	2.7	2.7	6.9	1.8	1.9	
						10.8	24.2		8.2		33.1		99.7		6.9		6.9	2.7		6.9	1.9		
					Bottom	20.5	24.2	24.2	8.1	8.1	33.2	33.2	98.7	98.8	6.9	6.9	6.9	3.7	3.7	6.9	2.2	2.2	
						20.5	24.2		8.1		33.2		98.8		6.9		6.9	3.7		6.9	2.2		

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 19 November 21 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	11:04	9.9	Surface	1.0	24.3	24.3	8.2	8.2	33.0	33.0	89.1	89.2	6.2	6.2	6.3	1.2	1.3	1.7	2.0	2.0	3.1					
						1.0	24.3		8.2		33.0		89.2		6.2			1.3			1.9							
						5.0	24.3		8.2		33.0		91.0		6.3			1.9			3.5							
					Middle	5.0	24.3	24.3	8.2	8.2	33.0	33.0	91.1	91.1	6.3	6.3	1.9	1.9	2.0	2.0	3.3	3.4	4.1	4.0				
						8.9	24.4		8.2		33.1		91.4		6.3		2.0		4.1									
						8.9	24.4		8.2		33.1		91.4		6.3		2.0		3.9									
					SR9	Sunny	Moderate	11:16	9.7	Surface	1.0	24.2	24.2	8.1	8.1	33.2	33.2	98.3	98.3	6.8	6.8	6.8	1.7	1.7	1.9	2.3	2.2	2.5
											1.0	24.2		8.1		33.2		98.3		6.8			1.7			2.0		
											4.9	24.2		8.1		33.2		97.8		6.8			1.2			2.4		
Middle	4.9	24.2	24.2	8.1						8.1	33.2	33.2	97.8	97.8	6.8	6.8	1.2	1.2	2.6	2.6	3.0	2.9						
	8.7	24.2		8.1							33.2		97.8		6.8		2.8		2.8									
	8.7	24.2		8.1							33.2		97.8		6.8		2.8		2.8									
SR10	Sunny	Rough	12:37	7.8						Surface	1.0	24.4	24.4	8.1	8.1	33.2	33.2	109.7	109.7	7.6	7.6	7.6	5.4	5.4	4.0	2.6	2.6	2.6
											1.0	24.4		8.1		33.2		109.6		7.6			5.4			2.6		
											3.9	24.3		8.1		33.2		109.1		7.6			3.0			2.6		
					Middle	3.9	24.2	24.3	8.1	8.1	33.2	33.2	109.0	109.1	7.6	7.6	3.1	3.1	2.6	2.6	2.6	2.6						
						6.8	24.2		8.1		33.2		102.7		7.1		3.4		2.6									
						6.8	24.2		8.1		33.2		102.9		7.1		3.4		2.7									

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 19 November 21 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	Rough	18:10	10.1	Surface	1.0	24.1	24.1	8.0	8.0	32.7	32.7	98.8	98.8	6.9	6.9	6.9	3.8	3.8	3.5	2.1	2.1	1.9
						1.0	24.1		8.0		32.7		98.8		6.9		6.9	3.8			2.0		
					Middle	5.1	24.1	24.1	8.0	8.0	32.8	32.8	98.0	98.0	6.8	6.8	6.8	2.9	2.9	3.0	2.0	2.1	
						5.1	24.1		8.0		32.8		98.0		6.8		6.8	3.0			2.0		
					Bottom	9.1	24.1	24.1	8.0	8.0	32.8	32.8	98.1	98.1	6.8	6.8	6.8	3.8	3.8	3.8	1.8	1.7	
						9.1	24.1		8.0		32.8		98.1		6.8		6.8	3.8			1.6		
C2	Fine	Rough	16:43	11.5	Surface	1.0	24.3	24.3	8.2	8.2	33.2	33.2	110.1	110.0	7.6	7.6	7.3	2.4	2.4	4.5	3.0	3.0	2.7
						1.0	24.3		8.2		33.2		109.9		7.6		7.3	3.0			2.8		
					Middle	5.8	24.2	24.2	8.2	8.2	33.3	33.3	99.4	99.3	6.9	6.9	6.9	5.1	5.1	5.0	2.7	2.8	
						5.8	24.2		8.2		33.3		99.2		6.9		6.9	5.0			2.7		
					Bottom	10.5	24.2	24.2	8.2	8.2	33.3	33.3	99.0	99.1	6.9	6.9	6.9	6.0	6.0	6.0	2.5	2.3	
						10.5	24.2		8.2		33.3		99.2		6.9		6.9	6.0			2.1		
C3	Fine	Rough	16:46	21.9	Surface	1.0	24.3	24.3	8.1	8.1	33.2	33.2	106.9	106.9	7.4	7.4	7.4	1.6	1.6	1.6	2.9	2.9	2.6
						1.0	24.3		8.1		33.2		106.9		7.4		7.4	1.6			2.9		
					Middle	11.0	24.2	24.2	8.1	8.1	33.2	33.2	106.9	106.9	7.4	7.4	7.4	1.7	1.7	1.7	2.7	2.6	
						11.0	24.2		8.1		33.2		106.9		7.4		7.4	1.7			2.4		
					Bottom	20.9	24.2	24.2	8.1	8.1	33.2	33.2	106.6	106.6	7.4	7.4	7.4	1.6	1.6	1.6	2.3	2.2	
						20.9	24.2		8.1		33.2		106.5		7.4		7.4	1.6			2.1		
SR1	Fine	Moderate	17:51	6.5	Surface	1.0	24.5	24.5	8.0	8.0	33.1	33.1	100.5	100.6	6.9	6.9	7.0	1.4	1.4	2.5	3.2	3.1	2.7
						1.0	24.5		8.1		33.1		100.6		6.9		7.0	1.4			3.0		
					Middle	3.3	24.5	24.5	8.1	8.1	33.1	33.1	100.7	100.7	7.0	7.0	7.0	2.6	2.7	2.6	2.8	2.8	
						3.3	24.5		8.1		33.1		100.7		7.0		7.0	2.7			2.7		
					Bottom	5.5	24.5	24.5	8.0	8.0	33.1	33.1	100.3	100.3	6.9	6.9	6.9	3.5	3.5	3.5	2.2	2.3	
						5.5	24.5		8.0		33.1		100.2		6.9		6.9	3.5			2.4		
SR2	Fine	Moderate	17:44	7.2	Surface	1.0	24.3	24.3	8.2	8.2	33.2	33.2	107.1	107.1	7.4	7.4	7.4	2.7	2.7	3.5	2.6	2.7	2.5
						1.0	24.3		8.2		33.2		107.1		7.4		7.4	2.7			2.8		
					Middle	3.6	24.2	24.2	8.2	8.2	33.2	33.2	106.1	106.1	7.4	7.4	7.4	3.5	3.6	3.6	2.4	2.5	
						3.6	24.2		8.2		33.2		106.0		7.4		7.4	3.6			2.6		
					Bottom	6.2	24.1	24.1	8.2	8.2	33.2	33.2	103.7	103.7	7.2	7.2	7.2	4.2	4.2	4.2	2.1	2.2	
						6.2	24.1		8.2		33.2		103.7		7.2		7.2	4.2			2.2		
SR3	Fine	Rough	17:34	7.5	Surface	1.0	24.3	24.3	8.2	8.2	33.2	33.2	107.4	107.4	7.4	7.4	7.4	1.7	1.7	2.7	5.5	5.6	4.6
						1.0	24.3		8.2		33.2		107.3		7.4		7.4	1.7			5.7		
					Middle	3.8	24.2	24.2	8.2	8.2	33.2	33.2	106.2	106.2	7.4	7.4	7.4	2.7	2.7	2.7	4.3	4.3	
						3.8	24.2		8.2		33.2		106.2		7.4		7.4	2.7			4.3		
					Bottom	6.5	24.2	24.2	8.2	8.2	33.2	33.2	107.0	107.0	7.4	7.4	7.4	3.8	3.8	3.8	3.8	3.9	
						6.5	24.2		8.2		33.2		106.9		7.4		7.4	3.8			3.9		
SR4	Fine	Rough	17:17	12.5	Surface	1.0	24.6	24.6	8.1	8.1	33.1	33.1	100.5	100.6	6.9	6.9	6.9	1.4	1.4	1.9	4.6	4.5	3.4
						1.0	24.6		8.1		33.1		100.6		6.9		6.9	1.4			4.4		
					Middle	6.3	24.4	24.4	8.1	8.1	33.1	33.1	100.1	100.1	6.9	6.9	6.9	1.6	1.6	1.6	3.3	3.5	
						6.3	24.4		8.1		33.1		100.0		6.9		6.9	1.6			3.6		
					Bottom	11.5	24.3	24.3	8.2	8.2	33.1	33.1	97.6	97.6	6.8	6.8	6.8	2.6	2.6	2.6	2.2	2.3	
						11.5	24.3		8.2		33.1		97.6		6.8		6.8	2.6			2.4		
SR5	Fine	Rough	17:11	9.8	Surface	1.0	24.6	24.6	8.1	8.1	33.1	33.1	100.3	100.3	6.9	6.9	6.9	1.4	1.4	1.7	4.4	4.4	3.3
						1.0	24.6		8.1		33.1		100.3		6.9		6.9	1.4			4.3		
					Middle	4.9	24.3	24.3	8.2	8.2	33.1	33.1	98.2	98.1	6.8	6.8	6.8	1.8	1.9	1.9	3.4	3.3	
						4.9	24.3		8.2		33.1		97.9		6.8		6.8	2.0			3.2		
					Bottom	8.8	24.3	24.3	8.1	8.1	33.2	33.2	96.7	96.8	6.7	6.7	6.7	1.8	1.9	1.9	2.0	2.2	
						8.8	24.3		8.1		33.2		96.8		6.7		6.7	1.9			2.3		
SR6	Fine	Rough	17:22	13.8	Surface	1.0	24.3	24.3	8.2	8.2	33.2	33.2	107.0	107.0	7.4	7.4	7.4	1.6	1.6	1.6	4.6	4.5	3.4
						1.0	24.3		8.2		33.2		107.0		7.4		7.4	1.6			4.3		
					Middle	6.9	24.2	24.2	8.2	8.2	33.2	33.2	106.3	106.3	7.4	7.4	7.4	1.8	1.8	1.8	3.5	3.3	
						6.9	24.2		8.2		33.2		106.3		7.4		7.4	1.8			3.1		
					Bottom	12.8	24.1	24.1	8.2	8.2	33.2	33.2	105.8	105.8	7.3	7.3	7.3	1.4	1.4	1.4	2.4	2.5	
						12.8	24.1		8.2		33.2		105.8		7.3		7.3	1.4			2.6		
SR7	Fine	Rough	17:04	21.2	Surface	1.0	24.2	24.2	8.2	8.2	33.2	33.2	105.9	105.8	7.4	7.4	7.3	1.8	1.9	1.6	3.6	3.8	2.9
						1.0	24.2		8.2		33.2		105.7		7.3		7.3	1.9			4.0		
					Middle	10.6	24.1	24.1	8.1	8.1	33.2	33.2	104.8	104.7	7.3	7.3	7.3	1.1	1.1	1.1	2.5	2.6	
						10.6	24.1		8.1		33.2		104.6		7.3		7.3	1.1			2.6		
					Bottom	20.2	24.1	24.1	8.1	8.1	33.2	33.2	104.0	104.0	7.2	7.2	7.2	1.8	1.9	1.9	2.0	2.2	
						20.2	24.1		8.1		33.2		103.9		7.2		7.2	1.9			2.4		

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 19 November 21 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	Moderate	17:51	10.7	Surface	1.0	24.4	8.0	8.0	33.1	33.1	98.0	98.0	6.8	6.8	6.8	3.5	3.5	3.7	2.6	2.4	3.0						
						1.0	24.4	8.0	8.0	33.1	33.1	98.0	6.8	3.5	2.2													
						5.4	24.5	8.0	8.0	33.2	33.2	96.9	6.7	3.5	2.8													
					Middle	5.4	24.5	8.0	8.0	33.2	33.2	96.9	6.7	6.7	6.7	3.5	3.5	3.0	2.9									
						9.7	24.6	8.0	8.0	33.2	33.2	96.3	6.6	6.6	6.6	3.9	4.0	3.4	3.6									
						9.7	24.6	8.0	8.0	33.2	33.2	96.3	6.6	6.6	6.6	4.0	4.0	3.7	3.6									
					SR9	Fine	Moderate	17:39	9.2	Surface	1.0	24.7	8.2	8.2	33.1	33.1	99.7	99.7	6.9	6.9	6.9	3.0	3.0	3.1	1.9	2.0	2.4	
											1.0	24.7	8.2	8.2	33.1	33.1	99.7	6.9	3.0	2.1								
											4.6	24.3	8.2	8.2	33.1	33.1	97.8	6.8	2.8	2.2								
Middle	4.6	24.3	8.2	8.2						33.1	33.1	97.8	6.8	6.8	6.8	2.7	2.8	2.5	2.4									
	8.2	24.3	8.2	8.2						33.2	33.2	96.0	6.7	6.7	6.7	3.4	3.4	2.7	2.7									
	8.2	24.3	8.2	8.2						33.2	33.2	96.0	6.7	6.7	6.7	3.4	3.4	2.7	2.7									
SR10	Fine	Rough	16:12	6.9						Surface	1.0	24.3	8.2	8.2	33.3	33.3	108.7	108.4	7.5	7.5	7.3	3.6	3.7	4.0	2.0	1.9	2.5	
											1.0	24.3	8.2	8.2	33.3	33.3	108.1	7.5	7.5	7.5		3.7			3.7			1.8
											3.5	24.2	8.1	8.1	33.2	33.2	102.2	7.1	7.1	7.1		4.7			4.7			2.8
					Middle	3.5	24.2	8.1	8.1	33.2	33.2	102.1	7.1	7.1	7.1	4.7	4.7	2.4	2.6									
						5.9	24.2	8.1	8.1	33.3	33.3	100.0	6.9	7.0	7.0	3.7	3.7	3.2	3.1									
						5.9	24.2	8.1	8.1	33.3	33.3	100.2	7.0	7.0	7.0	3.7	3.7	3.0	3.1									

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 22 November 21 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	Rough	14:12	10.5	Surface	1.0	23.5	23.5	8.2	8.2	32.5	32.5	90.4	90.4	6.4	6.4	6.4	2.3	2.3	2.9	5.5	5.5	5.1					
						1.0	23.5		8.2		32.5		90.4		6.4		6.4	2.3		6.4	5.4							
						5.3	23.5	23.5	8.2	8.2	32.5	32.5	89.9	89.9	6.3	6.3	6.3	3.2	3.2	3.2	5.3	5.2						
					5.3	23.5		8.2		32.5		89.9		6.3		6.3	3.2		6.3	5.0								
					Bottom	9.5	23.5	23.5	8.2	8.2	32.5	32.5	90.1	90.1	6.4	6.4	6.4	3.1	3.1	3.1	4.7	4.7						
						9.5	23.5		8.2		32.5		90.1		6.4		6.4	3.0		6.4	4.7							
					C2	Cloudy	Rough	12:39	10.5	Surface	1.0	23.5	23.5	8.2	8.2	32.8	32.8	95.6	95.6	6.7	6.7	6.7		4.1	4.2	6.0	3.9	4.7
											1.0	23.5		8.2		32.8		95.5		6.7		6.7		4.2		6.7	3.7	
5.3	23.5	23.5	8.2	8.2							32.8	32.8	95.0	95.1	6.7	6.7	6.7	4.4	4.5	4.5	4.6	4.8						
5.3	23.5		8.2							32.8		95.1		6.7		6.7	4.5		6.7	4.9								
Bottom	9.5	23.5	23.5	8.2						8.2	32.8	32.8	95.8	95.9	6.7	6.8	6.8	9.3	9.3	9.3	5.6	5.6						
	9.5	23.5		8.2							32.8		96.0		6.8		6.8	9.3		6.8	5.6							
C3	Cloudy	Rough	12:31	23.4						Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.3	96.3	6.8	6.8	6.8	4.2	4.2	5.9	5.6	5.2	
											1.0	23.5		8.2		32.8		96.3		6.8		6.8	4.2		6.8	5.4		
					11.7	23.5	23.5	8.2	8.2		32.8	32.8	95.8	95.8	6.7	6.7	6.7	5.7	5.9	5.9	5.3	5.4						
					11.7	23.5		8.2		32.8		95.8		6.7		6.7	6.0		6.7	5.4								
					Bottom	22.4	23.5	23.5	8.2	8.2	32.8	32.8	96.0	96.0	6.8	6.8	6.8	7.5	7.7	7.7	4.6	4.7						
						22.4	23.5		8.2		32.8		96.0		6.8		6.8	7.8		6.8	4.8							
					SR1	Fine	Moderate	13:52	8.1	Surface	1.0	23.4	23.4	8.2	8.2	32.8	32.8	96.2	96.2	6.8	6.8	6.8	3.4	3.5	4.5	5.5		7.7
											1.0	23.4		8.2		32.8		96.2		6.8		6.8	3.6		6.8	5.2		
4.1	23.4	23.4	8.2	8.2							32.8	32.8	96.0	96.0	6.8	6.8	6.8	4.5	4.6	4.6	8.2	8.3						
4.1	23.4		8.2							32.8		95.9		6.8		6.8	4.6		6.8	8.3								
Bottom	7.1	23.4	23.4	8.2						8.2	32.8	32.8	95.2	95.2	6.7	6.7	6.7	5.5	5.5	5.5	9.3	9.4						
	7.1	23.4		8.2							32.8		95.2		6.7		6.7	5.5		6.7	9.4							
SR2	Cloudy	Moderate	13:44	6.5						Surface	1.0	23.4	23.4	8.2	8.2	32.8	32.8	94.0	94.0	6.6	6.6	6.6	4.4	4.4	4.5	7.7	6.7	
											1.0	23.4		8.2		32.8		94.0		6.6		6.6	4.4		6.6	7.6		
					3.3	23.4	23.4	8.2	8.2		32.8	32.8	93.8	93.8	6.6	6.6	6.6	4.5	4.5	4.5	6.7	6.7						
					3.3	23.4		8.2		32.8		93.8		6.6		6.6	4.5		6.6	6.6								
					Bottom	5.5	23.3	23.3	8.2	8.2	32.8	32.8	93.7	93.7	6.6	6.6	6.6	4.6	4.6	4.6	5.7	5.8						
						5.5	23.3		8.2		32.8		93.7		6.6		6.6	4.5		6.6	5.9							
					SR3	Cloudy	Moderate	13:32	8.3	Surface	1.0	23.5	23.5	8.2	8.2	32.8	32.8	96.5	96.5	6.8	6.8	6.8	4.1	4.1	4.2	6.2		7.6
											1.0	23.5		8.2		32.8		96.5		6.8		6.8	4.1		6.8	6.3		
4.2	23.5	23.5	8.2	8.2							32.8	32.8	96.5	96.5	6.8	6.8	6.8	4.3	4.3	4.3	7.3	7.4						
4.2	23.5		8.2							32.8		96.5		6.8		6.8	4.2		6.8	7.4								
Bottom	7.3	23.5	23.5	8.2						8.2	32.7	32.7	96.6	96.6	6.8	6.8	6.8	4.3	4.2	4.2	9.3	9.2						
	7.3	23.5		8.2							32.7		96.6		6.8		6.8	4.3		6.8	9.3							
SR4	Cloudy	Rough	13:13	14.6						Surface	1.0	23.5	23.5	8.2	8.2	32.4	32.4	89.3	89.3	6.3	6.3	6.3	2.6	2.6	5.7	7.8	6.5	
											1.0	23.5		8.2		32.4		89.3		6.3		6.3	2.6		6.3	7.4		
					7.3	23.6	23.6	8.2	8.2		32.5	32.5	88.9	88.9	6.3	6.3	6.3	4.9	5.1	5.1	6.2	6.4						
					7.3	23.6		8.2		32.5		88.9		6.3		6.3	5.3		6.3	6.5								
					Bottom	13.6	23.6	23.6	8.2	8.2	32.5	32.5	89.0	89.0	6.3	6.3	6.3	9.4	9.4	9.4	5.6	5.4						
						13.6	23.6		8.2		32.5		89.0		6.3		6.3	9.3		6.3	5.2							
					SR5	Cloudy	Rough	13:06	9.9	Surface	1.0	23.5	23.5	8.2	8.2	32.4	32.4	89.6	89.6	6.3	6.3	6.3	2.5	2.5	2.7	5.9		6.9
											1.0	23.5		8.2		32.4		89.5		6.3		6.3	2.5		6.3	5.6		
5.0	23.5	23.5	8.1	8.1							32.4	32.4	89.7	89.8	6.3	6.3	6.3	2.8	2.8	2.8	7.2	7.2						
5.0	23.5		8.1							32.4		89.9		6.3		6.3	2.8		6.3	7.2								
Bottom	8.9	23.5	23.5	8.1						8.1	32.4	32.4	90.6	90.7	6.4	6.4	6.4	2.8	2.8	2.8	7.7	7.8						
	8.9	23.5		8.1							32.4		90.7		6.4		6.4	2.8		6.4	7.9							
SR6	Cloudy	Rough	13:17	14.6						Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.7	96.7	6.8	6.8	6.8	3.8	3.8	3.8	5.0	5.5	
											1.0	23.5		8.2		32.7		96.6		6.8		6.8	3.8		6.8	4.8		
					7.3	23.5	23.5	8.2	8.2		32.8	32.8	96.5	96.5	6.8	6.8	6.8	3.9	3.9	3.9	5.5	5.6						
					7.3	23.5		8.2		32.8		96.5		6.8		6.8	3.9		6.8	5.6								
					Bottom	13.6	23.5	23.5	8.2	8.2	32.8	32.8	96.5	96.5	6.8	6.8	6.8	3.8	3.8	3.8	6.0	6.0						
						13.6	23.5		8.2		32.8		96.5		6.8		6.8	3.8		6.8	5.9							
					SR7	Cloudy	Rough	12:49	22.1	Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.5	96.5	6.8	6.8	6.8	3.9	3.9	5.0	5.3		6.4
											1.0	23.5		8.2		32.7		96.4		6.8		6.8	3.9		6.8	5.4		
11.1	23.5	23.5	8.2	8.2							32.8	32.8	96.1	96.1	6.8	6.8	6.8	5.5	5.5	5.5	5.9	6.1						
11.1	23.5		8.2							32.8		96.1		6.8		6.8	5.5		6.8	6.2								
Bottom	21.1	23.5	23.5	8.2						8.2	32.8	32.8	96.2	96.2	6.8	6.8	6.8	5.5	5.5	5.5	7.8	7.8						
	21.1	23.5		8.2							32.8		96.2		6.8		6.8	5.5		6.8	7.8							

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 22 November 21 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	Rough	13:51	9.7	Surface	1.0	23.5	23.5	8.2	8.2	32.5	32.5	90.3	90.3	6.4	6.4	6.4	2.4	2.5	3.4	6.7	6.7	7.5						
						1.0	23.5	23.5	8.2	8.2	32.5	32.5	90.3	90.3	6.4	6.4	6.4	2.6	2.5	3.4	6.7	6.7							
						4.9	23.5	23.5	8.2	8.2	32.5	32.5	90.5	90.6	6.4	6.4	6.4	3.5	3.6	3.4	7.7	7.8							
					Middle	4.9	23.5	23.5	8.2	8.2	32.5	32.5	90.6	90.6	6.4	6.4	6.4	3.6	3.6	3.4	7.9	7.8		7.5					
						8.7	23.5	23.5	8.2	8.2	32.4	32.4	91.2	91.3	6.4	6.5	6.5	4.2	4.2	3.4	8.1	8.0							
						8.7	23.5	23.5	8.2	8.2	32.4	32.4	91.4	91.3	6.5	6.5	6.5	4.1	4.2	3.4	7.9	8.0							
					SR9	Fine	Rough	13:37	9.4	Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	93.6	93.7	6.6	6.6	6.6		1.2	1.2	2.5	7.8	8.0	7.2
											1.0	23.5	23.5	8.2	8.2	32.7	32.7	93.8	93.7	6.6	6.6	6.6		1.2	1.2	2.5	8.2	8.0	
											4.7	23.5	23.5	8.2	8.2	32.7	32.7	94.3	94.4	6.6	6.7	6.7		2.2	2.3	2.5	7.4	7.3	
Middle	4.7	23.5	23.5	8.2						8.2	32.7	32.7	94.4	94.4	6.7	6.7	6.7	2.3	2.3	2.5	7.2	7.3	7.2						
	8.4	23.5	23.5	8.2						8.2	32.7	32.7	94.4	94.4	6.6	6.7	6.7	3.7	3.9	2.5	6.2	6.4							
	8.4	23.5	23.5	8.2						8.2	32.7	32.7	94.4	94.4	6.7	6.7	6.7	4.1	3.9	2.5	6.6	6.4							
SR10	Cloudy	Rough	12:08	6.3						Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.5	96.5	6.8	6.8	6.8	4.1	4.1	4.2	7.4	7.5	6.5	
											1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.4	96.4	6.8	6.8	6.8	4.1	4.1	4.2	7.5	7.5		
											3.2	23.5	23.5	8.2	8.2	32.7	32.7	96.4	96.4	6.8	6.8	6.8	4.2	4.2	4.2	6.8	6.7		
					Middle	3.2	23.5	23.5	8.2	8.2	32.7	32.7	96.4	96.4	6.8	6.8	6.8	4.2	4.2	4.2	6.6	6.7	6.5						
						5.3	23.5	23.5	8.2	8.2	32.7	32.7	96.4	96.4	6.8	6.8	6.8	4.2	4.2	4.2	5.5	5.5							
						5.3	23.5	23.5	8.2	8.2	32.7	32.7	96.4	96.4	6.8	6.8	6.8	4.2	4.2	4.2	5.4	5.5							

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 22 November 21 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	07:16	11.2	Surface	1.0	23.5	23.5	8.1	8.1	32.6	32.6	92.3	92.4	6.5	6.5	6.6	1.5	1.5	2.1	6.8	6.7	5.9
						1.0	23.5		8.1	8.1	32.6	32.6	92.5	92.4	6.5	6.5		1.5	1.5		6.6	6.7	
					Middle	5.6	23.6	23.6	8.1	8.1	32.8	32.8	95.2	95.2	6.7	6.7	6.7	1.7	1.8	6.6	5.6	5.7	
						5.6	23.6		8.1	8.1	32.8	32.8	95.2	95.2	6.7	6.7		1.8	1.8		5.8	5.7	
					Bottom	10.2	23.5	23.5	8.0	8.0	32.7	32.7	94.6	94.6	6.7	6.7	6.7	3.0	3.0	6.7	5.2	5.3	
						10.2	23.5		8.0	8.0	32.7	32.7	94.6	94.6	6.7	6.7		3.0	3.0		5.4	5.3	
C2	Cloudy	Moderate	08:39	10.6	Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	95.5	95.4	6.7	6.7	6.7	5.0	5.0	6.7	5.3	5.2	6.3
						1.0	23.5		8.2	8.2	32.8	32.8	95.3	95.4	6.7	6.7		5.0	5.0		5.1	5.2	
					Middle	5.3	23.5	23.5	8.2	8.2	32.8	32.8	94.6	94.7	6.7	6.7	6.7	5.5	5.7	6.7	6.1	6.3	
						5.3	23.5		8.2	8.2	32.8	32.8	94.7	94.7	6.7	6.7		5.8	6.4				
					Bottom	9.6	23.5	23.5	8.2	8.2	32.8	32.8	95.2	95.3	6.7	6.7	6.7	9.5	9.3	6.7	7.6	7.4	
						9.6	23.5		8.2	8.2	32.8	32.8	95.4	95.3	6.7	6.7		9.1	7.2		7.2	7.4	
C3	Cloudy	Moderate	08:27	23.5	Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.2	96.2	6.8	6.8	6.8	4.5	4.5	5.7	5.0	4.9	5.6
						1.0	23.5		8.2	8.2	32.7	32.7	96.1	96.2	6.8	6.8		4.4	4.8				
					Middle	11.8	23.5	23.5	8.2	8.2	32.8	32.8	94.8	94.8	6.7	6.7	6.8	4.2	4.2	6.8	5.8	5.8	
						11.8	23.5		8.2	8.2	32.8	32.8	94.8	94.8	6.7	6.7		4.2	5.8				
					Bottom	22.5	23.5	23.5	8.2	8.2	32.8	32.8	95.9	95.9	6.8	6.8	6.8	8.2	8.4	6.8	6.2	6.2	
						22.5	23.5		8.2	8.2	32.7	32.7	96.0	96.0	6.8	6.8		8.5	6.2				
SR1	Cloudy	Moderate	07:16	7.8	Surface	1.0	23.3	23.3	8.2	8.2	32.8	32.8	95.9	95.9	6.8	6.8	6.8	4.2	4.2	4.4	5.8	5.8	4.8
						1.0	23.3		8.2	8.2	32.8	32.8	95.8	95.9	6.8	6.8		4.2	5.7				
					Middle	3.9	23.3	23.3	8.2	8.2	32.8	32.8	95.7	95.8	6.8	6.8	6.8	4.3	4.3	6.8	5.3	5.2	
						3.9	23.3		8.2	8.2	32.8	32.8	95.8	95.8	6.8	6.8		4.3	5.1				
					Bottom	6.8	23.3	23.3	8.2	8.2	32.8	32.8	95.7	95.7	6.8	6.8	6.8	4.6	4.6	6.8	3.5	3.4	
						6.8	23.3		8.2	8.2	32.8	32.8	95.7	95.7	6.8	6.8		4.5	3.3				
SR2	Cloudy	Moderate	07:24	6.2	Surface	1.0	23.3	23.3	8.2	8.2	32.8	32.8	96.3	96.3	6.8	6.8	6.8	3.9	4.0	3.9	3.8	3.9	4.3
						1.0	23.3		8.2	8.2	32.8	32.8	96.3	96.3	6.8	6.8		4.0	3.9				
					Middle	3.1	23.3	23.3	8.2	8.2	32.8	32.8	96.1	96.1	6.8	6.8	6.8	3.9	3.9	6.8	4.4	4.3	
						3.1	23.3		8.2	8.2	32.8	32.8	96.1	96.1	6.8	6.8		3.9	4.1				
					Bottom	5.2	23.3	23.3	8.2	8.2	32.8	32.8	96.0	96.0	6.8	6.8	6.8	3.9	3.9	6.8	4.7	4.7	
						5.2	23.3		8.2	8.2	32.8	32.8	96.0	96.0	6.8	6.8		3.8	4.6				
SR3	Cloudy	Moderate	07:39	8.2	Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	95.8	95.8	6.7	6.7	6.7	4.8	4.9	4.7	5.5	5.4	4.4
						1.0	23.5		8.2	8.2	32.7	32.7	95.7	95.8	6.7	6.7		4.9	5.2				
					Middle	4.1	23.4	23.4	8.2	8.2	32.8	32.8	94.0	94.0	6.6	6.6	6.6	4.5	4.6	6.6	4.2	4.3	
						4.1	23.4		8.2	8.2	32.8	32.8	93.9	94.0	6.6	6.6		4.7	4.3				
					Bottom	7.2	23.4	23.4	8.2	8.2	32.7	32.7	93.9	94.0	6.6	6.6	6.6	4.6	4.6	6.6	3.6	3.7	
						7.2	23.4		8.2	8.2	32.7	32.7	94.1	94.0	6.6	6.6		4.5	3.8				
SR4	Cloudy	Moderate	08:07	13.2	Surface	1.0	23.5	23.5	8.1	8.1	32.4	32.4	88.4	88.4	6.2	6.2	6.3	4.0	4.1	4.9	3.9	3.8	4.6
						1.0	23.5		8.1	8.1	32.4	32.4	88.4	88.4	6.2	6.2		4.1	3.7				
					Middle	6.6	23.5	23.5	8.1	8.1	32.5	32.5	88.7	88.8	6.3	6.3	6.3	4.9	5.0	6.3	4.4	4.5	
						6.6	23.5		8.1	8.1	32.5	32.5	88.8	88.8	6.3	6.3		5.0	4.5				
					Bottom	12.2	23.5	23.5	8.1	8.1	32.5	32.5	89.2	89.2	6.3	6.3	6.3	5.6	5.8	6.3	5.6	5.6	
						12.2	23.5		8.1	8.1	32.5	32.5	89.2	89.2	6.3	6.3		6.0	5.5				
SR5	Fine	Rough	08:17	9.9	Surface	1.0	23.6	23.6	8.1	8.1	32.4	32.4	88.1	88.1	6.2	6.2	6.2	3.4	3.5	3.9	3.2	3.1	4.1
						1.0	23.6		8.1	8.1	32.4	32.4	88.1	88.1	6.2	6.2		3.5	3.0				
					Middle	5.0	23.6	23.6	8.1	8.1	32.4	32.4	88.2	88.3	6.2	6.2	6.2	4.0	4.1	6.2	3.4	3.6	
						5.0	23.6		8.1	8.1	32.5	32.4	88.3	88.3	6.2	6.2		4.1	3.7				
					Bottom	8.9	23.6	23.6	8.1	8.1	32.5	32.4	88.2	88.3	6.2	6.2	6.2	4.1	4.1	6.2	5.8	5.8	
						8.9	23.5		8.1	8.1	32.4	32.4	88.3	88.3	6.2	6.2		4.1	5.7				
SR6	Cloudy	Rough	07:50	14.5	Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	95.8	95.8	6.7	6.7	6.7	4.7	4.8	6.6	3.0	3.1	3.6
						1.0	23.5		8.2	8.2	32.7	32.7	95.7	95.8	6.7	6.7		4.8	3.2				
					Middle	7.3	23.5	23.5	8.2	8.2	32.8	32.8	93.9	93.9	6.6	6.6	6.6	5.4	5.5	6.6	3.7	3.7	
						7.3	23.5		8.2	8.2	32.8	32.8	93.8	93.8	6.6	6.6		5.5	3.6				
					Bottom	13.5	23.4	23.5	8.2	8.2	32.8	32.8	94.4	94.6	6.7	6.7	6.7	9.7	9.7	6.7	4.0	4.2	
						13.5	23.5		8.2	8.2	32.8	32.8	94.7	94.6	6.7	6.7		9.7	4.3				
SR7	Cloudy	Rough	08:10	22.3	Surface	1.0	23.5	23.5	8.2	8.2	32.8	32.8	95.8	95.8	6.7	6.7	6.7	4.5	4.5	6.1	2.9	2.8	3.5
						1.0	23.5		8.2	8.2	32.8	32.8	95.7	95.8	6.7	6.7		4.5	2.7				
					Middle	11.2	23.5	23.5	8.2	8.2	32.8	32.8	95.1	95.1	6.7	6.7	6.7	7.3	7.3	6.1	3.3	3.4	
						11.2	23.5		8.2	8.2	32.8	32.8	95.1	95.1	6.7	6.7		7.3	3.5				
					Bottom	21.3	23.5	23.5	8.2	8.2	32.8	32.7	95.8	95.9	6.7	6.8	6.8	6.9	6.6	6.8	4.2	4.2	
						21.3	23.5		8.2	8.2	32.7	32.7	95.9	95.9	6.8	6.8		6.2	4.1				

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 22 November 21 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														
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value
SR8	Cloudy	Moderate	07:36	9.8	Surface	1.0	23.5	23.6	8.1	8.1	32.7	32.7	94.4	94.5	6.6	6.7	6.7	6.7	1.3	1.3	1.6	3.6	3.7	5.3													
						1.0	23.6		8.1		32.8		94.6		6.7		1.3		3.7																		
						4.9	23.6		8.1		32.8		94.9		6.7		1.5		5.5																		
					Middle	4.9	23.6	23.6	8.1	8.1	32.8	32.8	94.9	94.9	6.7	6.7	6.7	6.7	1.5	1.5	1.5	1.5	5.5	5.5													
						8.8	23.5		8.1		32.8		93.5		6.6		2.0		6.8																		
						8.8	23.5		8.1		32.8		93.2		6.6		1.9		6.4																		
					SR9	Cloudy	Moderate	07:49	10.4	Surface	1.0	23.5	23.5	8.1	8.1	32.7	32.7	93.7	93.8	6.6	6.6	6.6	6.7	1.2	1.2	2.2	5.4	5.3	4.9								
											1.0	23.5		8.1		32.7		93.9		6.6		1.2		5.2													
											5.2	23.6		8.1		32.8		94.8		6.7		2.4		4.7													
Middle	5.2	23.6	23.6	8.1						8.1	32.8	32.8	94.8	94.8	6.7	6.7	6.7	6.7	2.5	2.5	2.5	2.5	4.9	4.8													
	9.4	23.6		8.1							32.8		94.1		6.6		2.9		4.5																		
	9.4	23.6		8.1							32.8		94.0		6.6		2.7		4.4																		
SR10	Cloudy	Rough	09:05	6.2						Surface	1.0	23.5	23.5	8.2	8.2	32.7	32.7	96.4	96.4	6.8	6.8	6.8	6.8	4.3	4.3	4.4	7.4	7.4	6.5								
											1.0	23.5		8.2		32.7		96.3		6.8		4.3		7.4													
											3.1	23.5		8.2		32.7		96.2		6.8		4.4		6.5													
					Middle	3.1	23.5	23.5	8.2	8.2	32.7	32.7	96.2	96.2	6.8	6.8	6.8	6.8	4.4	4.4	4.4	4.4	6.4	6.5													
						5.2	23.5		8.2		32.7		96.1		6.8		4.5		5.8																		
						5.2	23.5		8.2		32.7		96.1		6.8		4.5		5.7																		

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel

Water Quality Monitoring

Water Quality Monitoring Results on 24 November 21 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	00:38	10.7	Surface	1.0	22.9	22.9	8.2	8.2	32.7	32.7	90.7	90.7	6.5	6.5	6.5	2.0	2.0	3.4	6.2	5.9	5.4
						1.0	22.9		8.2		32.7		90.7		6.5		6.5	1.9			5.5		
					Middle	5.4	22.9	22.9	8.2	8.2	32.7	32.7	90.6	90.6	6.5	6.5	6.5	2.7	2.7	3.4	5.9	5.5	
						5.4	22.9		8.2		32.7		90.6		6.5		6.5	2.6			5.0		
					Bottom	9.7	22.9	22.9	8.2	8.2	32.7	32.7	90.5	90.5	6.4	6.4	6.4	5.4	5.5	6.4	5.0	4.8	
						9.7	22.9		8.2		32.7		90.5		6.4		6.4	5.6			4.6		
C2	Sunny	Rough	02:09	11.2	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.4	94.4	6.7	6.7	6.7	4.4	4.5	4.6	5.2	5.6	6.0
						1.0	22.6		8.2		32.9		94.4		6.7		6.7	4.5			6.0		
					Middle	5.6	22.6	22.6	8.2	8.2	32.9	32.9	94.0	94.0	6.7	6.7	6.7	4.5	4.6	4.6	5.5	5.9	
						5.6	22.6		8.2		32.9		93.9		6.7		6.7	4.6			6.2		
					Bottom	10.2	22.6	22.6	8.2	8.2	32.9	32.9	93.5	93.5	6.7	6.7	6.7	4.9	4.9	6.7	6.3	6.6	
						10.2	22.6		8.2		32.9		93.5		6.7		6.7	4.9			6.9		
C3	Sunny	Rough	01:49	23.1	Surface	1.0	22.6	22.6	8.3	8.3	32.9	32.9	94.4	94.4	6.7	6.7	6.7	4.3	4.4	4.9	5.0	5.0	5.7
						1.0	22.6		8.3		32.9		94.3		6.7		6.7	4.4			4.9		
					Middle	11.6	22.6	22.6	8.2	8.2	32.9	32.9	93.7	93.7	6.7	6.7	6.7	4.5	4.5	4.9	5.2	5.6	
						11.6	22.6		8.2		32.9		93.7		6.7		6.7	4.5			6.0		
					Bottom	22.1	22.6	22.6	8.3	8.3	32.9	32.9	93.4	93.5	6.7	6.7	6.7	5.8	5.8	6.7	6.1	6.6	
						22.1	22.6		8.3		32.9		93.5		6.7		6.7	5.8			7.0		
SR1	Sunny	Moderate	00:47	8.3	Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	92.8	92.8	6.6	6.6	6.6	3.7	3.7	4.7	8.0	7.6	6.2
						1.0	22.5		8.2		32.9		92.7		6.6		6.6	3.7			7.1		
					Middle	4.2	22.5	22.5	8.2	8.2	32.9	32.9	92.6	92.6	6.6	6.6	6.6	4.8	4.8	4.7	5.9	5.7	
						4.2	22.5		8.2		32.9		92.6		6.6		6.6	4.8			5.4		
					Bottom	7.3	22.5	22.5	8.2	8.2	32.9	32.9	92.8	92.8	6.7	6.7	6.7	5.4	5.5	6.6	4.9	5.3	
						7.3	22.5		8.2		32.9		92.8		6.7		6.7	5.5			5.7		
SR2	Sunny	Moderate	00:53	6.1	Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	92.8	92.8	6.6	6.6	6.6	4.7	4.8	6.3	6.2	6.4	6.5
						1.0	22.5		8.2		32.9		92.8		6.6		6.6	4.8			6.5		
					Middle	3.1	22.5	22.5	8.2	8.2	32.9	32.9	92.7	92.7	6.6	6.6	6.6	5.9	5.9	6.3	6.7	6.4	
						3.1	22.5		8.2		32.9		92.7		6.6		6.6	5.9			6.1		
					Bottom	5.1	22.5	22.5	8.2	8.2	32.9	32.9	92.5	92.5	6.6	6.6	6.6	8.2	8.3	6.6	6.9	6.7	
						5.1	22.5		8.2		32.9		92.5		6.6		6.6	8.3			6.4		
SR3	Sunny	Moderate	01:05	8.0	Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	93.0	93.0	6.7	6.7	6.7	4.1	4.2	4.9	6.2	6.2	7.3
						1.0	22.5		8.2		32.9		92.9		6.7		6.7	4.2			6.1		
					Middle	4.0	22.5	22.5	8.2	8.2	32.9	32.9	92.7	92.8	6.6	6.6	6.6	4.6	4.6	6.6	7.5	7.4	
						4.0	22.5		8.2		32.9		92.8		6.6		6.6	4.6			7.3		
					Bottom	7.0	22.5	22.5	8.2	8.2	32.9	32.9	92.6	92.6	6.6	6.6	6.6	8.0	8.0	6.6	8.4	8.2	
						7.0	22.5		8.2		32.9		92.6		6.6		6.6	8.0			8.0		
SR4	Cloudy	Moderate	01:35	13.6	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	87.5	87.5	6.2	6.2	6.2	3.4	3.4	5.6	6.0	5.8	5.4
						1.0	22.8		8.2		32.7		87.5		6.2		6.2	3.3			5.6		
					Middle	6.8	22.8	22.8	8.2	8.2	32.7	32.7	87.4	87.4	6.2	6.2	6.2	3.7	3.7	5.6	5.4	5.6	
						6.8	22.8		8.2		32.7		87.4		6.2		6.2	3.7			5.8		
					Bottom	12.6	22.8	22.8	8.2	8.2	32.7	32.7	88.5	88.5	6.3	6.3	6.3	9.9	9.8	6.3	4.9	4.7	
						12.6	22.8		8.2		32.7		88.5		6.3		6.3	9.7			4.5		
SR5	Cloudy	Moderate	01:45	9.5	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	87.3	87.3	6.2	6.2	6.3	2.1	2.1	3.2	5.0	4.7	4.7
						1.0	22.8		8.2		32.7		87.3		6.2		6.2	2.1			4.3		
					Middle	4.8	22.8	22.8	8.2	8.2	32.7	32.7	87.6	87.6	6.3	6.3	6.3	3.3	3.3	6.3	4.7	4.8	
						4.8	22.8		8.2		32.7		87.6		6.3		6.3	3.3			4.9		
					Bottom	8.5	22.9	22.9	8.2	8.2	32.7	32.7	88.4	88.3	6.3	6.3	6.3	4.2	4.2	6.3	4.7	4.6	
						8.5	22.9		8.2		32.7		88.2		6.3		6.3	4.2			4.5		
SR6	Sunny	Moderate	01:14	14.6	Surface	1.0	22.7	22.7	8.3	8.3	32.9	32.9	94.4	94.4	6.7	6.7	6.7	4.3	4.3	5.9	5.2	5.4	5.1
						1.0	22.7		8.3		32.9		94.4		6.7		6.7	4.3			5.5		
					Middle	7.3	22.6	22.6	8.3	8.3	32.9	32.9	93.6	93.6	6.7	6.7	6.7	4.9	5.0	6.7	5.2	5.1	
						7.3	22.6		8.3		32.9		93.6		6.7		6.7	5.0			5.0		
					Bottom	13.6	22.6	22.6	8.2	8.2	32.9	32.9	93.5	93.5	6.7	6.7	6.7	8.5	8.5	6.7	4.7	4.9	
						13.6	22.6		8.2		32.9		93.5		6.7		6.7	8.4			5.0		
SR7	Sunny	Rough	01:32	21.8	Surface	1.0	22.7	22.7	8.3	8.3	32.9	32.9	94.4	94.4	6.7	6.7	6.7	4.2	4.2	5.6	6.1	5.7	5.2
						1.0	22.7		8.3		32.9		94.4		6.7		6.7	4.2			5.3		
					Middle	10.9	22.6	22.6	8.3	8.3	32.9	32.9	93.7	93.7	6.7	6.7	6.7	4.8	4.8	5.6	5.1	5.0	
						10.9	22.6		8.3		32.9		93.7		6.7		6.7	4.8			4.9		
					Bottom	20.8	22.6	22.6	8.3	8.3	32.9	32.9	93.3	93.3	6.7	6.7	6.7	7.6	7.7	6.7	5.0	4.8	
						20.8	22.6		8.3		32.9		93.3		6.7		6.7	7.7			4.5		

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 24 November 21 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	01:01	10.3	Surface	1.0	22.6	22.6	8.2	8.2	32.7	32.7	90.2	90.2	6.5	6.5	6.5	2.9	3.0	3.4	5.4	5.3	4.7						
						1.0	22.6	22.6	8.2	8.2	32.7	32.7	90.2	90.2	6.5	6.5	6.5	3.0	3.0	3.4	5.1	5.3							
						5.2	22.6	22.6	8.2	8.2	32.8	32.8	91.3	91.2	6.5	6.5	6.5	3.2	3.2	3.4	5.2	4.8							
					Middle	5.2	22.6	22.6	8.2	8.2	32.8	32.8	91.3	91.2	6.5	6.5	6.5	3.2	3.2	3.4	4.3	4.8		3.4					
						9.3	22.6	22.6	8.2	8.2	32.9	32.9	89.2	89.3	6.4	6.4	6.4	4.0	4.0	4.0	4.0	4.2							
						9.3	22.6	22.6	8.2	8.2	32.9	32.9	89.3	89.3	6.4	6.4	6.4	4.0	4.0	4.0	4.3	4.2							
					SR9	Cloudy	Moderate	01:12	9.8	Surface	1.0	22.6	22.6	8.2	8.2	32.7	32.7	81.6	81.6	5.8	5.8	5.8		2.0	2.0	2.5	5.0	5.4	4.6
											1.0	22.6	22.6	8.2	8.2	32.7	32.7	81.6	81.6	5.8	5.8	5.8		1.9	1.9	2.5	5.8	5.4	
											4.9	22.6	22.6	8.2	8.2	32.7	32.7	80.6	80.6	5.8	5.8	5.8		2.6	2.6	2.5	4.6	4.2	
Middle	4.9	22.6	22.6	8.2						8.2	32.7	32.7	80.6	80.6	5.8	5.8	5.8	2.6	2.6	2.5	3.8	4.2	2.5						
	8.8	22.6	22.6	8.2						8.2	32.7	32.7	82.1	82.1	5.9	5.9	5.9	3.0	3.0	3.0	3.9	4.2							
	8.8	22.6	22.6	8.2						8.2	32.7	32.7	82.1	82.1	5.9	5.9	5.9	3.0	3.0	3.0	4.5	4.2							
SR10	Sunny	Rough	02:37	6.3						Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.5	94.5	6.8	6.8	6.8	2.4	2.4	3.5	4.4	4.6	4.2	
											1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.5	94.5	6.8	6.8	6.8	2.4	2.4	3.5	4.8	4.6		
											3.2	22.6	22.6	8.2	8.2	32.9	32.9	94.3	94.3	6.7	6.7	6.7	3.6	3.6	3.5	3.8	4.1		
					Middle	3.2	22.6	22.6	8.2	8.2	32.9	32.9	94.3	94.3	6.7	6.7	6.7	3.6	3.6	3.5	4.3	4.1	3.5						
						5.3	22.6	22.6	8.2	8.2	32.9	32.9	93.9	93.9	6.7	6.7	6.7	4.5	4.5	3.5	3.6	3.8							
						5.3	22.6	22.6	8.2	8.2	32.9	32.9	93.9	93.9	6.7	6.7	6.7	4.5	4.5	3.5	4.0	3.8							

DA: Depth-averaged

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

Improvement Dredging for Lamma Power Station Navigatin Channel

Water Quality Monitoring

Water Quality Monitoring Results on 24 November 21 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	Value	Average	DA	Value	Average	DA	Value	Average	DA
C1	Sunny	Moderate	14:56	10.7	Surface	1.0	22.7	8.2	8.2	32.7	32.7	86.3	86.3	6.2	6.2	6.2	2.5	2.5	3.1	3.9	3.8	4.0			
						1.0	22.7	8.2	8.2	32.7	32.7	86.3	86.3	6.2	6.2	2.5	2.5	3.6		3.8					
						5.4	22.7	8.2	8.2	32.7	32.7	85.7	85.8	6.1	6.1	2.7	2.7	4.0		3.8					
					Middle	5.4	22.7	8.2	8.2	32.7	32.7	85.8	85.8	6.1	6.1	2.7	2.7	3.5	3.8						
						9.7	22.8	8.2	8.2	32.8	32.8	86.0	86.0	6.1	6.1	4.1	4.1	4.1	4.5						
						9.7	22.8	8.2	8.2	32.8	32.8	86.0	86.0	6.1	6.1	4.1	4.1	4.9	4.5						
C2	Sunny	Rough	13:25	11.2	Surface	1.0	22.6	8.3	8.3	32.9	32.9	94.6	94.6	6.8	6.8	6.8	4.5	4.5	4.9	4.0	4.3	3.7			
						1.0	22.6	8.3	8.3	32.9	32.9	94.6	94.6	6.8	6.8	4.5	4.5	4.5		4.3					
						5.6	22.6	8.3	8.3	32.9	32.9	93.8	93.8	6.7	6.7	4.9	4.9	3.1		3.6					
					Middle	5.6	22.6	8.3	8.3	32.9	32.9	93.8	93.8	6.7	6.7	4.9	4.9	4.0	3.6						
						10.2	22.6	8.3	8.3	32.9	32.9	93.4	93.4	6.7	6.7	5.4	5.4	3.1	3.4						
						10.2	22.6	8.3	8.3	32.9	32.9	93.3	93.3	6.7	6.7	5.4	5.4	3.6	3.4						
C3	Sunny	Rough	13:36	23.1	Surface	1.0	22.6	8.3	8.3	32.9	32.9	94.8	94.8	6.8	6.8	6.8	5.1	5.1	5.7	4.2	4.4	3.9			
						1.0	22.6	8.3	8.3	32.9	32.9	94.7	94.7	6.8	6.8	5.1	5.1	4.6		4.4					
						11.6	22.6	8.3	8.3	32.9	32.9	94.1	94.1	6.7	6.7	5.5	5.5	4.4		4.0					
					Middle	11.6	22.6	8.3	8.3	32.9	32.9	94.1	94.1	6.7	6.7	5.5	5.5	3.6	4.0						
						22.1	22.6	8.3	8.3	32.9	32.9	93.4	93.4	6.7	6.7	6.5	6.5	3.0	3.3						
						22.1	22.6	8.3	8.3	32.9	32.9	93.4	93.4	6.7	6.7	6.5	6.5	3.5	3.3						
SR1	Sunny	Moderate	14:43	8.3	Surface	1.0	22.7	8.3	8.3	32.9	32.9	95.0	95.0	6.8	6.8	6.8	3.3	3.3	4.4	3.5	3.9	4.1			
						1.0	22.7	8.3	8.3	32.9	32.9	94.9	94.9	6.8	6.8	3.3	3.3	4.2		3.9					
						4.2	22.6	8.3	8.3	32.9	32.9	94.4	94.4	6.8	6.8	4.2	4.2	4.5		5.5					
					Middle	4.2	22.6	8.3	8.3	32.9	32.9	94.4	94.4	6.8	6.8	4.2	4.2	6.4	5.5						
						7.3	22.6	8.3	8.3	32.9	32.9	94.3	94.3	6.7	6.7	5.6	5.7	3.0	3.1						
						7.3	22.6	8.3	8.3	32.9	32.9	94.3	94.3	6.7	6.7	5.7	5.7	3.2	3.1						
SR2	Sunny	Moderate	14:32	6.1	Surface	1.0	22.7	8.3	8.3	32.9	32.9	95.2	95.2	6.8	6.8	6.8	5.3	5.4	6.4	4.9	4.6	4.2			
						1.0	22.7	8.3	8.3	32.9	32.9	95.2	95.2	6.8	6.8	5.4	5.4	4.2		4.6					
						3.1	22.6	8.3	8.3	32.9	32.9	94.9	94.9	6.8	6.8	5.9	5.9	4.2		4.1					
					Middle	3.1	22.6	8.3	8.3	32.9	32.9	94.9	94.9	6.8	6.8	5.9	5.9	4.0	4.1						
						5.1	22.6	8.3	8.3	32.9	32.9	94.3	94.3	6.7	6.7	8.0	8.1	4.2	4.0						
						5.1	22.6	8.3	8.3	32.9	32.9	94.3	94.3	6.7	6.7	8.1	8.1	3.8	4.0						
SR3	Sunny	Moderate	14:22	8.0	Surface	1.0	22.7	8.3	8.3	32.9	32.9	95.1	95.1	6.8	6.8	6.8	4.5	4.6	6.1	5.1	4.8	4.3			
						1.0	22.7	8.3	8.3	32.9	32.9	95.0	95.0	6.8	6.8	4.6	4.6	4.5		4.8					
						4.0	22.6	8.3	8.3	32.9	32.9	94.3	94.3	6.7	6.7	5.8	6.0	4.6		4.2					
					Middle	4.0	22.6	8.3	8.3	32.9	32.9	94.3	94.3	6.7	6.7	6.1	6.1	3.7	4.2						
						7.0	22.6	8.3	8.3	32.9	32.9	94.1	94.1	6.7	6.7	7.8	7.8	4.1	3.9						
						7.0	22.6	8.3	8.3	32.9	32.9	94.1	94.1	6.7	6.7	7.7	7.8	3.7	3.9						
SR4	Sunny	Moderate	13:57	13.6	Surface	1.0	22.7	8.2	8.2	32.6	32.6	83.8	83.8	6.0	6.0	6.1	2.9	2.9	3.8	3.9	3.8	3.9			
						1.0	22.7	8.2	8.2	32.6	32.6	83.8	83.8	6.0	6.0	2.9	2.9	3.6		3.8					
						6.8	22.7	8.2	8.2	32.7	32.7	86.0	86.0	6.1	6.1	3.8	3.8	4.0		3.9					
					Middle	6.8	22.7	8.2	8.2	32.7	32.7	86.0	86.0	6.1	6.1	3.8	3.8	3.8	3.9						
						12.6	22.8	8.2	8.2	32.8	32.8	86.1	86.1	6.1	6.1	4.7	4.7	4.2	4.1						
						12.6	22.8	8.2	8.2	32.8	32.8	86.1	86.1	6.1	6.1	4.6	4.7	3.9	4.1						
SR5	Sunny	Moderate	13:50	9.5	Surface	1.0	22.8	8.2	8.2	32.7	32.7	86.9	87.0	6.2	6.2	6.3	3.3	3.3	4.5	3.4	4.0	4.6			
						1.0	22.8	8.2	8.2	32.7	32.7	87.0	87.0	6.2	6.2	3.3	3.3	4.5		4.0					
						4.8	22.8	8.2	8.2	32.7	32.7	88.6	88.6	6.3	6.3	4.2	4.3	4.7		5.0					
					Middle	4.8	22.8	8.2	8.2	32.7	32.7	88.6	88.6	6.3	6.3	4.3	4.3	5.2	5.0						
						8.5	22.7	8.2	8.2	32.7	32.7	86.7	86.8	6.2	6.2	5.9	5.9	4.6	5.0						
						8.5	22.7	8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	5.8	5.9	5.3	5.0						
SR6	Sunny	Moderate	14:08	14.6	Surface	1.0	22.6	8.3	8.3	32.9	32.9	94.8	94.8	6.8	6.8	6.8	4.7	4.7	5.2	4.0	4.4	4.6			
						1.0	22.6	8.3	8.3	32.9	32.9	94.8	94.8	6.8	6.8	4.7	4.7	4.7		4.4					
						7.3	22.6	8.3	8.3	32.9	32.9	93.9	93.9	6.7	6.7	5.1	5.1	4.2		4.5					
					Middle	7.3	22.6	8.3	8.3	32.9	32.9	93.9	93.9	6.7	6.7	5.0	5.0	4.7	4.5						
						13.6	22.6	8.2	8.2	32.9	32.9	92.9	92.9	6.6	6.6	6.0	6.0	4.5	4.9						
						13.6	22.6	8.2	8.2	32.9	32.9	92.9	92.9	6.6	6.6	5.9	6.0	5.2	4.9						
SR7	Sunny	Rough	13:49	21.8	Surface	1.0	22.6	8.3	8.3	32.9	32.9	94.8	94.8	6.8	6.8	6.8	4.5	4.5	5.2	3.0	3.1	3.5			
						1.0	22.6	8.3	8.3	32.9	32.9	94.7	94.8	6.8	6.8	4.5	4.5	3.2		3.1					
						10.9	22.6	8.2	8.2	32.9	32.9	93.7	93.7	6.7	6.7	5.1	5.1	3.2		3.3					
					Middle	10.9	22.6	8.2	8.2	32.9	32.9	93.7	93.7	6.7	6.7	5.0	5.1	3.4	3.3						
						20.8	22.6	8.3	8.3	32.9	32.9	94.1	94.1	6.7	6.7	5.9	5.9	4.1	4.1						
						20.8	22.6	8.3	8.3	32.9	32.9	94.1	94.1	6.7	6.7	5.9	5.9	4.0	4.1						

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

Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring

Water Quality Monitoring Results on 24 November 21 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	Moderate	14:29	10.3	Surface	1.0	22.7	22.7	8.2	8.2	32.7	32.7	85.4	85.4	6.1	6.1	6.2	2.5	2.5	3.0	3.0	2.6	3.7						
						1.0	22.7		8.2		32.7		85.4		6.1			2.5			2.1								
						5.2	22.7		8.2		32.7		87.0		6.2			2.8			3.9								
					Middle	5.2	22.7	22.7	8.2	8.2	32.7	32.7	87.0	87.0	6.2	6.2	6.1	6.1	6.1	2.8	2.8	3.0		4.6	4.3				
						9.3	22.7		8.2		32.7		85.8		6.1					3.7				3.7					
						9.3	22.7		8.2		32.7		85.8		6.1					3.8				4.8					
					SR9	Sunny	Moderate	14:19	9.8	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	87.2	87.2	6.2	6.2	6.2		2.3	2.3	3.1	4.2	4.0	4.2
											1.0	22.8		8.2		32.7		87.2		6.2				2.3			3.8		
											4.9	22.7		8.2		32.7		86.5		6.2				2.9			4.0		
Middle	4.9	22.7	22.7	8.2						8.2	32.7	32.7	86.4	86.5	6.2	6.2	6.1	6.1	6.1	2.9	2.9	3.1	4.5	4.3					
	8.8	22.8		8.2							32.8		85.7		6.1					4.1			4.2						
	8.8	22.8		8.2							32.8		85.7		6.1					4.1			4.6						
SR10	Sunny	Rough	12:57	6.3						Surface	1.0	22.6	22.6	8.2	8.2	32.8	32.8	95.0	95.0	6.8	6.8	6.8	3.7	3.7	4.4	4.5	4.4	3.8	
											1.0	22.6		8.2		32.8		95.0		6.8			3.7			4.2			
											3.2	22.6		8.3		32.8		94.9		6.8			4.3			3.8			
					Middle	3.2	22.6	22.6	8.3	8.3	32.8	32.8	94.9	94.9	6.8	6.8	6.8	6.8	6.8	4.4	4.4	4.4	4.2	4.0					
						5.3	22.6		8.3		32.9		94.3		6.7					5.0			2.8						
						5.3	22.6		8.3		32.9		94.4		6.8					5.0			3.5						

DA: Depth-averaged

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

**Improvement Dredging for Lamna Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 26 November 21 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	02:09	10.7	Surface	1.0	22.7	22.7	8.0	8.0	32.7	32.7	86.4	86.4	6.2	6.2	6.2	1.4	1.4		2.8	2.8	3.0
						1.0	22.7		8.0		32.7		86.4		6.2		6.2	1.4			2.8		
					Middle	5.4	22.7	22.7	8.0	8.0	32.7	32.7	86.2	86.2	6.2	6.2	6.2	1.6	1.6	1.7	2.9	3.0	
						5.4	22.7		8.0		32.7		86.2		6.2		6.2	1.6			3.0		
					Bottom	9.7	22.7	22.7	8.0	8.0	32.7	32.7	86.0	86.0	6.1	6.1	6.1	2.2	2.2		3.1	3.2	
						9.7	22.7		8.0		32.7		86.0		6.1		6.1	2.2			3.2		
C2	Sunny	Rough	03:34	11.2	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.3	94.3	6.7	6.7	6.7	2.1	2.1		4.0	3.9	3.4
						1.0	22.6		8.2		32.9		94.3		6.7		6.7	2.1			3.7		
					Middle	5.6	22.5	22.5	8.2	8.2	32.9	32.9	94.0	94.0	6.7	6.7	6.7	2.6	2.6	2.7	3.4	3.3	
						5.6	22.5		8.2		32.9		94.0		6.7		6.7	2.5			3.4		
					Bottom	10.2	22.5	22.5	8.2	8.2	32.9	32.9	93.9	93.9	6.7	6.7	6.7	3.5	3.5		3.1	3.2	
						10.2	22.5		8.2		32.9		93.9		6.7		6.7	3.5			3.2		
C3	Sunny	Rough	03:27	23.1	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.4	94.4	6.8	6.8	6.8	2.0	2.1		4.5	4.4	3.5
						1.0	22.6		8.2		32.9		94.4		6.8		6.8	2.1			4.2		
					Middle	11.6	22.6	22.6	8.2	8.2	32.9	32.9	94.0	94.0	6.7	6.7	6.7	2.5	2.5	2.9	3.1	3.3	
						11.6	22.6		8.2		32.9		94.0		6.7		6.7	2.4			3.4		
					Bottom	22.1	22.5	22.5	8.2	8.2	32.9	32.9	93.3	93.3	6.7	6.7	6.7	4.2	4.2		2.8	2.8	
						22.1	22.5		8.2		32.9		93.3		6.7		6.7	4.1			2.7		
SR1	Sunny	Moderate	02:24	8.3	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	90.8	90.8	6.5	6.5	6.6	2.2	2.3		5.8	5.8	6.4
						1.0	22.6		8.2		32.9		90.8		6.5		6.6	2.3			5.7		
					Middle	4.2	22.4	22.4	8.2	8.2	32.9	32.9	91.8	91.8	6.6	6.6	6.6	2.8	2.8	2.8	6.4	6.4	
						4.2	22.4		8.2		32.9		91.8		6.6		6.6	2.8			6.4		
					Bottom	7.3	22.4	22.4	8.2	8.2	32.9	32.9	93.9	93.9	6.7	6.7	6.7	3.3	3.3		7.2	7.2	
						7.3	22.4		8.2		32.9		93.9		6.7		6.7	3.2			7.1		
SR2	Sunny	Moderate	02:33	6.1	Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	91.4	91.4	6.6	6.6	6.6	2.9	2.9		2.2	2.2	2.7
						1.0	22.5		8.2		32.9		91.4		6.6		6.6	2.9			2.1		
					Middle	3.1	22.5	22.5	8.2	8.2	32.9	32.9	92.3	92.3	6.6	6.6	6.6	3.2	3.2	4.5	2.6	2.5	
						3.1	22.5		8.2		32.9		92.3		6.6		6.6	3.2			2.4		
					Bottom	5.1	22.5	22.5	8.2	8.2	32.9	32.9	94.2	94.2	6.7	6.7	6.7	7.4	7.4		3.5	3.6	
						5.1	22.5		8.2		32.9		94.2		6.7		6.7	7.3			3.6		
SR3	Sunny	Moderate	02:46	8.0	Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	91.4	91.4	6.5	6.5	6.6	1.4	1.4		3.4	3.3	2.4
						1.0	22.5		8.2		32.9		91.3		6.5		6.6	1.4			3.2		
					Middle	4.0	22.5	22.5	8.2	8.2	32.9	32.9	93.3	93.3	6.7	6.7	6.7	2.0	2.0	3.0	2.1	2.1	
						4.0	22.5		8.2		32.9		93.3		6.7		6.7	1.9			2.1		
					Bottom	7.0	22.5	22.5	8.2	8.2	33.0	33.0	94.3	94.3	6.8	6.8	6.8	5.6	5.6		1.9	1.8	
						7.0	22.5		8.2		33.0		94.3		6.8		6.8	5.6			1.6		
SR4	Sunny	Moderate	03:00	13.6	Surface	1.0	22.7	22.7	8.1	8.1	32.5	32.5	78.6	78.6	5.6	5.6	5.8	1.7	1.7		2.9	2.9	2.5
						1.0	22.7		8.1		32.5		78.6		5.6		5.8	1.7			2.9		
					Middle	6.8	22.7	22.7	8.1	8.1	32.6	32.6	81.9	81.9	5.9	5.9	5.9	2.1	2.2	2.7	2.6	2.5	
						6.8	22.7		8.1		32.6		81.8		5.9		5.9	2.2			2.4		
					Bottom	12.6	22.6	22.6	8.1	8.1	32.7	32.7	84.0	84.0	6.0	6.0	6.0	4.2	4.2		2.2	2.2	
						12.6	22.6		8.1		32.7		84.0		6.0		6.0	4.2			2.2		
SR5	Sunny	Moderate	03:10	9.5	Surface	1.0	22.7	22.7	8.1	8.1	32.5	32.5	78.7	78.8	5.6	5.6	5.7	1.3	1.3		4.0	4.0	3.5
						1.0	22.7		8.1		32.5		78.8		5.6		5.7	1.3			4.0		
					Middle	4.8	22.7	22.7	8.1	8.1	32.6	32.6	80.3	80.3	5.7	5.7	5.7	1.8	1.8	1.9	3.5	3.6	
						4.8	22.7		8.1		32.6		80.3		5.7		5.7	1.8			3.6		
					Bottom	8.5	22.6	22.6	8.1	8.1	32.7	32.7	82.8	82.8	5.9	5.9	5.9	2.6	2.6		2.9	2.9	
						8.5	22.6		8.1		32.7		82.8		5.9		5.9	2.6			2.8		
SR6	Sunny	Moderate	02:56	14.6	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.2	95.2	6.8	6.8	6.8	1.7	1.7		2.4	2.5	3.0
						1.0	22.6		8.2		32.9		95.2		6.8		6.8	1.7			2.6		
					Middle	7.3	22.5	22.5	8.2	8.2	32.9	32.9	93.4	93.4	6.7	6.7	6.7	2.3	2.3	2.7	2.8	2.9	
						7.3	22.5		8.2		32.9		93.4		6.7		6.7	2.3			3.0		
					Bottom	13.6	22.5	22.5	8.2	8.2	32.9	32.9	92.8	92.8	6.6	6.6	6.6	4.1	4.1		3.7	3.7	
						13.6	22.5		8.2		32.9		92.8		6.6		6.6	4.1			3.7		
SR7	Sunny	Rough	03:12	21.8	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	6.8	1.8	1.8		2.3	2.4	2.5
						1.0	22.6		8.2		32.9		94.8		6.8		6.8	1.8			2.4		
					Middle	10.9	22.5	22.5	8.2	8.2	32.9	32.9	94.0	94.0	6.7	6.7	6.7	2.3	2.3	2.7	2.4	2.5	
						10.9	22.5		8.2		32.9		94.0		6.7		6.7	2.3			2.5		
					Bottom	20.8	22.6	22.6	8.2	8.2	32.9	32.9	93.2	93.3	6.7	6.7	6.7	4.0	4.0		2.6	2.6	
						20.8	22.6		8.2		32.9		93.3		6.7		6.7	4.0			2.6		

DA: Depth-averaged

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 26 November 21 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								
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value
SR8	Cloudy	Moderate	02:30	10.3	Surface	1.0	22.7	22.7	8.0	8.0	32.7	32.7	86.2	86.2	6.2	6.2	6.2	1.2	1.2	1.6	2.0	2.0	2.6								
						1.0	22.7	22.7	8.0	8.0	32.7	32.7	86.2	86.2	6.2	6.2	6.2	1.2	1.2	1.6	2.0	2.0									
						5.2	22.7	22.7	8.0	8.0	32.7	32.7	86.0	86.0	6.1	6.1	6.1	1.6	1.6	1.6	2.8	2.8									
					Middle	5.2	22.7	22.7	8.0	8.0	32.7	32.7	86.0	86.0	6.1	6.1	6.1	1.6	1.6	1.6	2.7	2.7		2.8							
						9.3	22.7	22.7	8.0	8.0	32.7	32.7	85.8	85.8	6.1	6.1	6.1	2.1	2.1	2.1	3.0	3.0									
						9.3	22.7	22.7	8.0	8.0	32.7	32.7	85.8	85.8	6.1	6.1	6.1	2.0	2.0	2.0	3.0	3.0									
					SR9	Cloudy	Moderate	02:41	9.8	Surface	1.0	22.7	22.7	8.1	8.1	32.7	32.7	86.2	86.2	6.2	6.2	6.2		0.8	0.8	1.5	3.7	3.7	2.8		
											1.0	22.7	22.7	8.1	8.1	32.7	32.7	86.2	86.2	6.2	6.2	6.2		0.8	0.8	1.5	3.5	3.5			
											4.9	22.7	22.7	8.1	8.1	32.7	32.7	86.1	86.1	6.2	6.2	6.2		0.9	0.9	1.0	2.5	2.5			
Middle	4.9	22.7	22.7	8.1						8.1	32.7	32.7	86.1	86.1	6.2	6.2	6.2	1.0	1.0	1.0	2.5	2.5	2.5								
	8.8	22.7	22.7	8.1						8.1	32.7	32.7	86.3	86.4	6.2	6.2	6.2	2.8	2.8	2.8	2.2	2.2									
	8.8	22.7	22.7	8.1						8.1	32.7	32.7	86.4	86.4	6.2	6.2	6.2	2.8	2.8	2.8	2.4	2.4									
SR10	Sunny	Rough	04:03	6.3						Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	94.2	94.2	6.8	6.8	6.8	1.8	1.8	2.3	3.1	3.1	2.5			
											1.0	22.5	22.5	8.2	8.2	32.9	32.9	94.2	94.2	6.8	6.8	6.8	1.8	1.8	1.8	2.8	2.8				
											3.2	22.5	22.5	8.2	8.2	32.9	32.9	94.0	94.0	6.8	6.8	6.8	2.2	2.2	2.3	2.6	2.6				
					Middle	3.2	22.5	22.5	8.2	8.2	32.9	32.9	94.0	94.0	6.8	6.8	6.8	2.3	2.3	2.3	2.4	2.4	2.5								
						5.3	22.6	22.6	8.2	8.2	33.0	33.0	94.4	94.4	6.8	6.8	6.8	2.7	2.7	2.7	2.3	2.3									
						5.3	22.6	22.6	8.2	8.2	33.0	33.0	94.3	94.4	6.7	6.7	6.7	2.8	2.8	2.8	2.0	2.0									

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

Water Quality Monitoring Results on 26 November 21 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	Sunny	Moderate	16:39	10.7	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	86.7	86.7	6.2	6.2	6.2	0.9	0.9	1.7	2.2	2.3	3.6
						1.0	22.8	22.8	8.2	8.2	32.7	32.7	86.7	86.7	6.2	6.2		0.9			2.3		
					Middle	5.4	22.7	22.7	8.2	8.2	32.7	32.7	86.9	86.9	6.2	6.2	1.6	1.6	1.7	3.5	3.7		
						5.4	22.7	22.7	8.2	8.2	32.7	32.7	86.9	86.9	6.2	6.2	1.6			3.7			
					Bottom	9.7	22.7	22.7	8.2	8.2	32.7	32.7	86.4	86.4	6.1	6.1	6.1	2.5	2.5	1.7	5.1	5.0	
						9.7	22.7	22.7	8.2	8.2	32.7	32.7	86.4	86.4	6.1	6.1	2.5	4.8					
C2	Sunny	Rough	15:01	11.2	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.3	95.3	6.8	6.8	6.8	2.1	2.1	3.0	4.6	4.7	4.4
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.2	95.2	6.8	6.8		2.1			4.7		
					Middle	5.6	22.5	22.5	8.2	8.2	32.9	32.9	93.7	93.7	6.7	6.7	6.7	2.3	2.3	3.0	4.5	4.5	
						5.6	22.5	22.5	8.2	8.2	32.9	32.9	93.7	93.7	6.7	6.7	2.3	4.5					
					Bottom	10.2	22.5	22.5	8.2	8.2	32.9	32.9	93.1	93.1	6.7	6.7	6.7	4.6	4.6	3.0	4.1	4.1	
						10.2	22.5	22.5	8.2	8.2	32.9	32.9	93.1	93.1	6.7	6.7	4.6	4.0					
C3	Sunny	Rough	15:06	23.1	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.1	95.1	6.8	6.8	6.8	1.6	1.6	2.0	4.3	4.4	4.5
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.1	95.1	6.8	6.8		1.6			4.4		
					Middle	11.6	22.5	22.5	8.2	8.2	32.9	32.9	93.4	93.4	6.7	6.7	6.7	2.0	2.0	2.0	4.5	4.5	
						11.6	22.5	22.5	8.2	8.2	32.9	32.9	93.4	93.4	6.7	6.7	2.0	4.4					
					Bottom	22.1	22.5	22.5	8.2	8.2	32.9	32.9	92.7	92.7	6.6	6.6	6.6	2.3	2.3	2.0	4.8	4.8	
						22.1	22.5	22.5	8.2	8.2	32.9	32.9	92.7	92.7	6.6	6.6	2.3	4.7					
SR1	Sunny	Moderate	16:13	8.3	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.7	94.7	6.8	6.8	6.8	1.9	1.9	2.3	4.0	4.0	3.3
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	94.7	94.7	6.8	6.8		1.8			3.9		
					Middle	4.2	22.4	22.4	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	6.8	2.2	2.3	2.3	3.0	3.2	
						4.2	22.4	22.4	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	2.4	3.3					
					Bottom	7.3	22.4	22.4	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	6.8	2.8	2.8	2.3	2.8	2.7	
						7.3	22.4	22.4	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	2.8	2.6					
SR2	Sunny	Moderate	16:04	6.1	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.8	95.8	6.9	6.9	6.9	4.1	4.1	5.1	4.0	3.9	3.4
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.8	95.8	6.9	6.9		4.1			3.8		
					Middle	3.1	22.6	22.6	8.2	8.2	32.9	32.9	95.6	95.6	6.8	6.8	6.8	5.4	5.4	5.1	3.7	3.6	
						3.1	22.6	22.6	8.2	8.2	32.9	32.9	95.6	95.6	6.8	6.8	5.4	3.4					
					Bottom	5.1	22.6	22.6	8.2	8.2	32.9	32.9	94.7	94.7	6.8	6.8	6.8	5.7	5.8	5.1	3.1	2.9	
						5.1	22.6	22.6	8.2	8.2	32.9	32.9	94.8	94.8	6.8	6.8	5.8	2.6					
SR3	Sunny	Moderate	15:55	8.0	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.7	95.7	6.8	6.8	6.8	1.8	1.8	3.3	3.6	3.7	3.0
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.7	95.7	6.8	6.8		1.7			3.7		
					Middle	4.0	22.6	22.6	8.2	8.2	32.9	32.9	95.3	95.3	6.8	6.8	6.8	1.9	1.9	3.3	2.9	2.9	
						4.0	22.6	22.6	8.2	8.2	32.9	32.9	95.3	95.3	6.8	6.8	1.9	2.9					
					Bottom	7.0	22.6	22.6	8.2	8.2	32.9	32.9	94.1	94.1	6.7	6.7	6.7	6.1	6.1	3.3	2.6	2.5	
						7.0	22.6	22.6	8.2	8.2	32.9	32.9	94.1	94.1	6.7	6.7	6.1	2.4					
SR4	Sunny	Moderate	15:37	13.6	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	86.5	86.5	6.2	6.2	6.2	1.7	1.7	4.2	2.8	2.8	3.3
						1.0	22.8	22.8	8.2	8.2	32.7	32.7	86.5	86.5	6.2	6.2		1.6			2.8		
					Middle	6.8	22.7	22.7	8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	6.2	3.1	3.2	4.2	3.3	3.4	
						6.8	22.7	22.7	8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	3.2	3.4					
					Bottom	12.6	22.6	22.6	8.1	8.1	32.7	32.7	86.8	86.8	6.2	6.2	6.2	7.7	7.7	4.2	3.7	3.7	
						12.6	22.6	22.6	8.1	8.1	32.7	32.7	86.8	86.8	6.2	6.2	7.7	3.6					
SR5	Sunny	Moderate	15:27	9.5	Surface	1.0	22.5	22.5	8.2	8.2	32.9	32.9	94.7	94.7	6.8	6.8	6.8	0.8	0.8	1.0	2.3	2.3	2.6
						1.0	22.5	22.5	8.2	8.2	32.9	32.9	94.7	94.7	6.8	6.8		0.8			2.2		
					Middle	4.8	22.4	22.5	8.2	8.2	32.9	32.9	94.6	94.6	6.8	6.8	6.8	1.1	1.1	1.0	2.8	2.7	
						4.8	22.5	22.5	8.2	8.2	32.9	32.9	94.6	94.6	6.8	6.8	1.0	2.6					
					Bottom	8.5	22.4	22.4	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	6.8	1.1	1.1	1.0	2.9	3.0	
						8.5	22.4	22.4	8.2	8.2	32.9	32.9	94.9	94.9	6.8	6.8	1.1	3.0					
SR6	Sunny	Moderate	15:43	14.6	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.6	95.6	6.8	6.8	6.8	2.5	2.5	2.7	2.4	2.4	2.7
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.5	95.5	6.8	6.8		2.4			2.4		
					Middle	7.3	22.6	22.6	8.2	8.2	32.9	32.9	93.4	93.4	6.7	6.7	6.7	2.5	2.6	2.7	2.7	2.7	
						7.3	22.6	22.6	8.2	8.2	32.9	32.9	93.4	93.4	6.7	6.7	2.6	2.7					
					Bottom	13.6	22.6	22.6	8.2	8.2	32.9	32.9	92.8	92.8	6.6	6.6	6.6	3.0	3.0	2.7	3.2	3.1	
						13.6	22.6	22.6	8.2	8.2	32.9	32.9	92.7	92.7	6.6	6.6	2.9	2.9					
SR7	Sunny	Rough	15:23	21.8	Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.4	95.4	6.8	6.8	6.8	2.2	2.2	2.7	2.9	3.0	2.5
						1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.4	95.4	6.8	6.8		2.2			3.0		
					Middle	10.9	22.5	22.5	8.2	8.2	32.9	32.9	93.5	93.5	6.7	6.7	6.7	2.7	2.7	2.7	2.6	2.6	
						10.9	22.5	22.5	8.2	8.2	32.9	32.9	93.5	93.5	6.7	6.7	2.6	2.6					
					Bottom	20.8	22.5	22.5	8.2	8.2	32.9	32.9	92.7	92.7	6.6	6.6	6.6	3.2	3.2	2.7	2.0	1.8	
						20.8	22.5	22.5	8.2	8.2	32.9	32.9	92.7	92.7	6.6	6.6	3.2	1.6					

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

**Improvement Dredging for Lamma Power Station Navigatin Channel
Water Quality Monitoring**

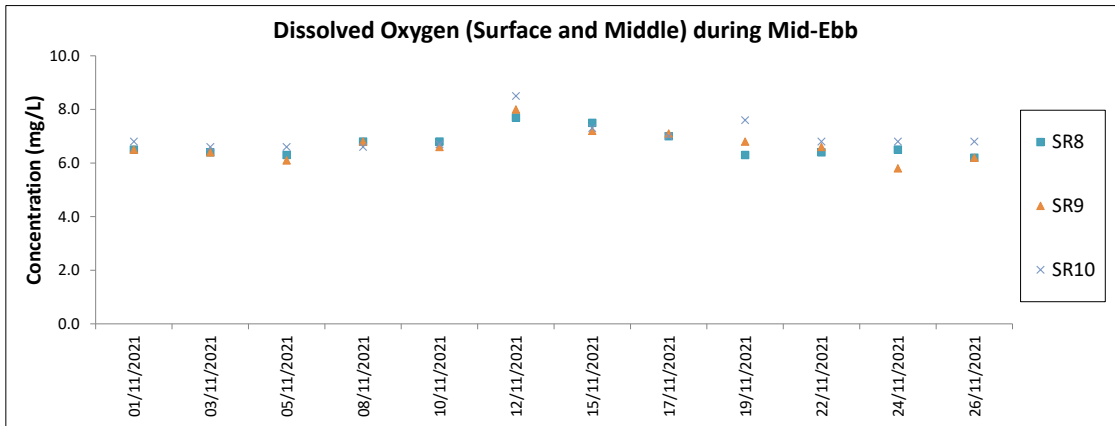
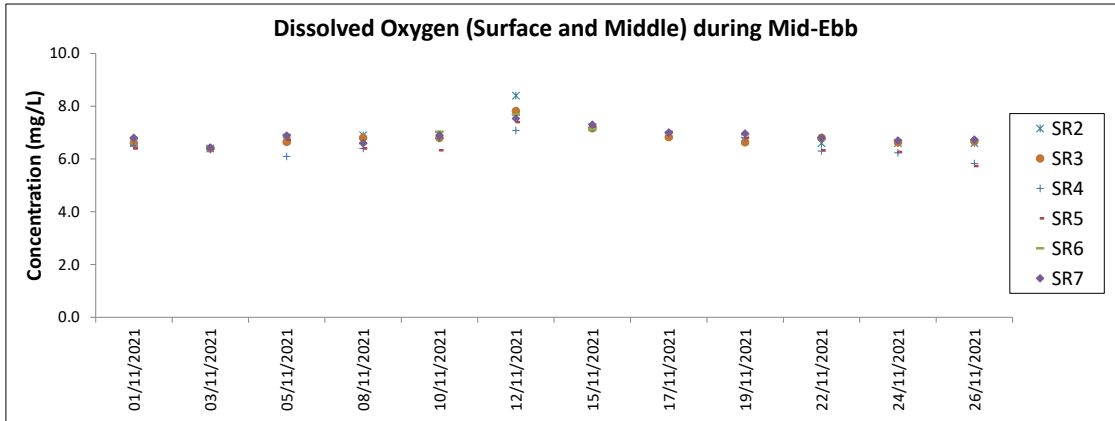
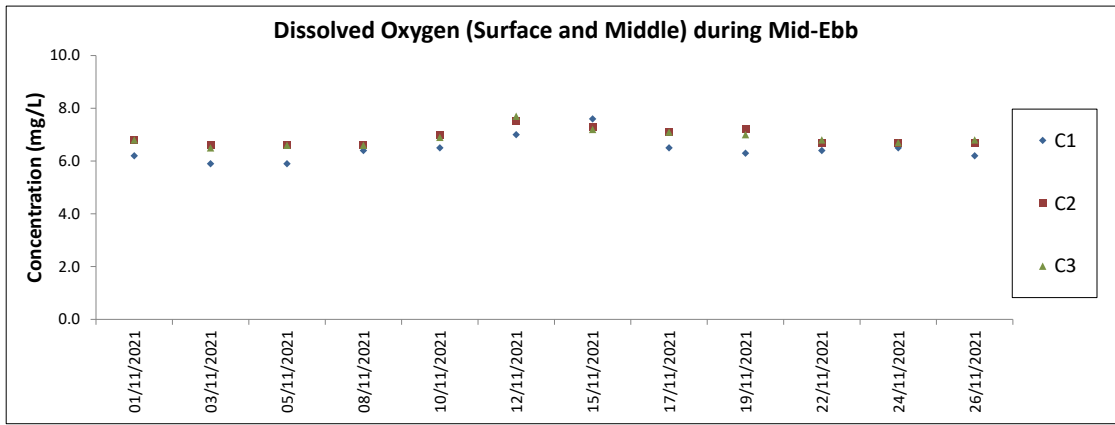
Water Quality Monitoring Results on 26 November 21 during Mid-Flood Tide

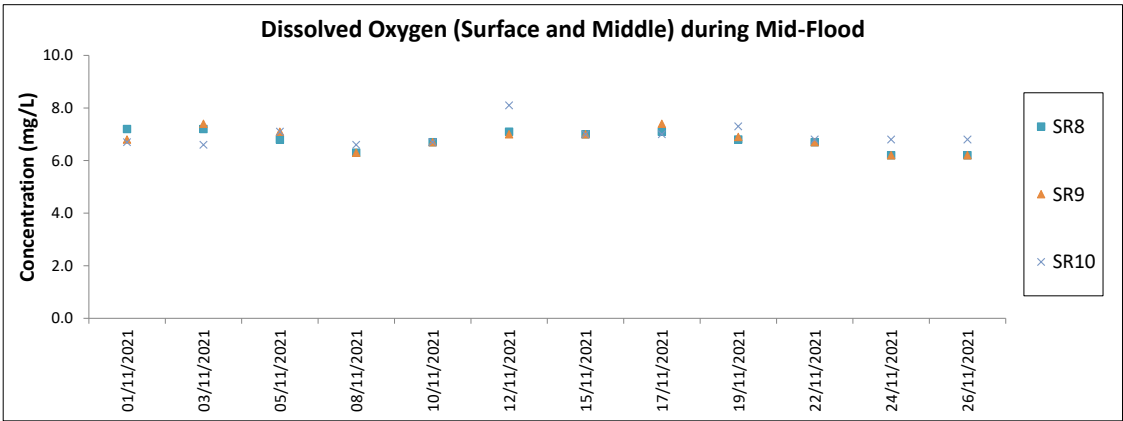
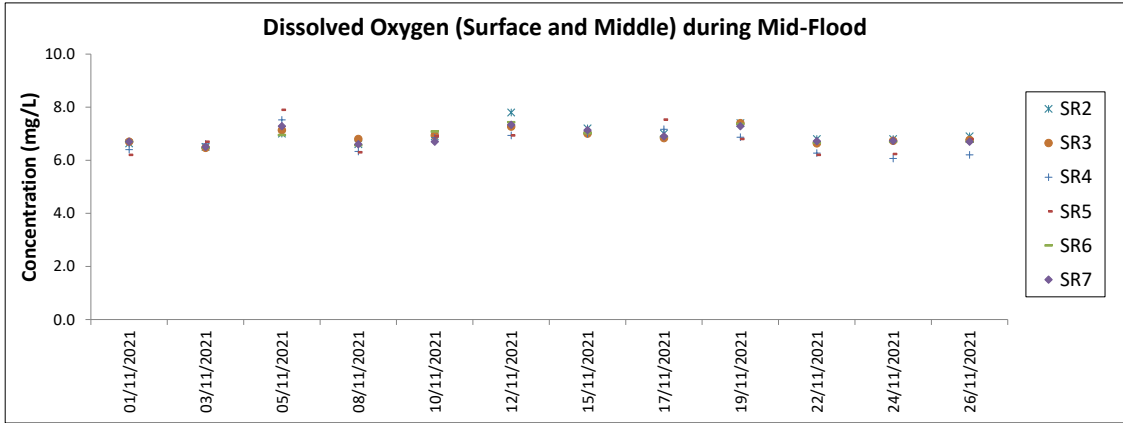
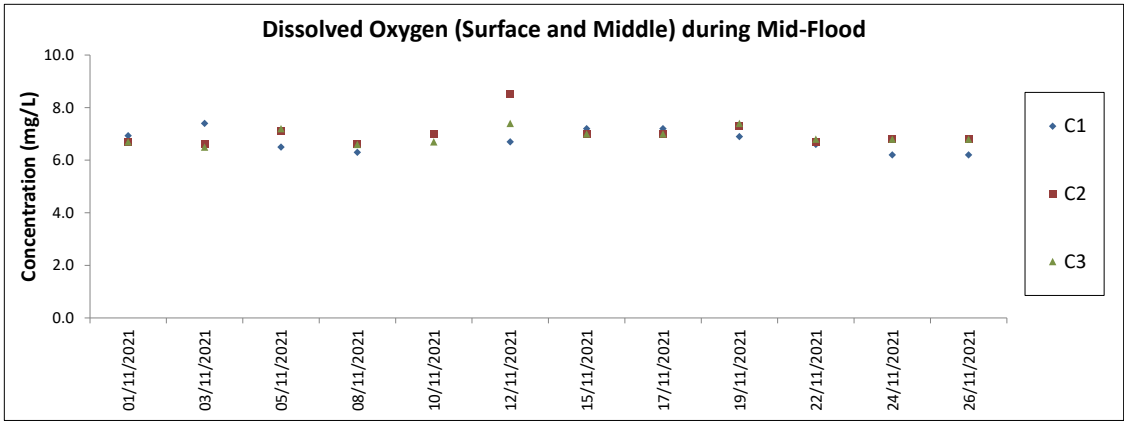
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)			Suspended Solids (mg/L)										
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA	Value	Average	DA	Value	Average	DA							
SR8	Sunny	Moderate	16:11	10.3	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	6.2	0.9	0.9	1.8	2.7	2.8	2.4							
						1.0	22.8		8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	6.2	0.9	0.9		2.0	2.0		2.6						
						5.2	22.7	22.7	8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	6.2	2.0	2.0	1.8	2.4	2.5								
					Middle	5.2	22.7	22.7	8.2	8.2	32.7	32.7	86.8	86.8	6.2	6.2	6.2	2.0	2.0	1.8	2.4	2.5								
						9.3	22.7	22.7	8.2	8.2	32.7	32.7	86.4	86.4	6.2	6.2	6.2	2.4	2.4		2.1	2.0								
						9.3	22.7	22.7	8.2	8.2	32.7	32.7	86.4	86.4	6.2	6.2	6.2	2.4	2.4		1.9	2.0								
					SR9	Sunny	Moderate	15:57	9.8	Surface	1.0	22.8	22.8	8.2	8.2	32.7	32.7	86.7	86.7	6.2	6.2	6.2		0.8	0.8	1.7	2.4	2.3	3.6	
											1.0	22.8		8.2	8.2	32.7	32.7	86.6	86.6	6.2	6.2	6.2		0.8	0.8		1.0	1.0		3.3
											4.9	22.8	22.8	8.2	8.2	32.7	32.7	86.6	86.6	6.2	6.2	6.2		1.0	1.0	1.7	3.3	3.3		
Middle	4.9	22.8	22.8	8.2						8.2	32.7	32.7	86.6	86.6	6.2	6.2	6.2	1.0	1.0		3.3	3.3								
	8.8	22.7	22.7	8.2						8.2	32.7	32.7	86.4	86.4	6.2	6.2	6.2	3.2	3.2		5.3	5.2								
	8.8	22.7	22.7	8.2						8.2	32.7	32.7	86.4	86.4	6.2	6.2	6.2	3.1	3.2		5.0	5.2								
SR10	Sunny	Rough	14:34	6.3						Surface	1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.6	95.6	6.8	6.8	6.8	2.0	2.1	2.8	4.4	4.6	4.0		
											1.0	22.6	22.6	8.2	8.2	32.9	32.9	95.6	95.6	6.8	6.8	6.8	2.1	2.1		4.8	4.6			
											3.2	22.6	22.6	8.2	8.2	32.9	32.9	95.4	95.4	6.8	6.8	6.8	2.5	2.6		3.6	3.8			
					Middle	3.2	22.6	22.6	8.2	8.2	32.9	32.9	95.3	95.3	6.8	6.8	6.8	2.6	2.6		3.9	3.8								
						5.3	22.5	22.5	8.2	8.2	32.9	32.9	93.6	93.6	6.7	6.7	6.7	3.7	3.7		3.5	3.5								
						5.3	22.5	22.5	8.2	8.2	32.9	32.9	93.6	93.6	6.7	6.7	6.7	3.7	3.7		3.5	3.5								

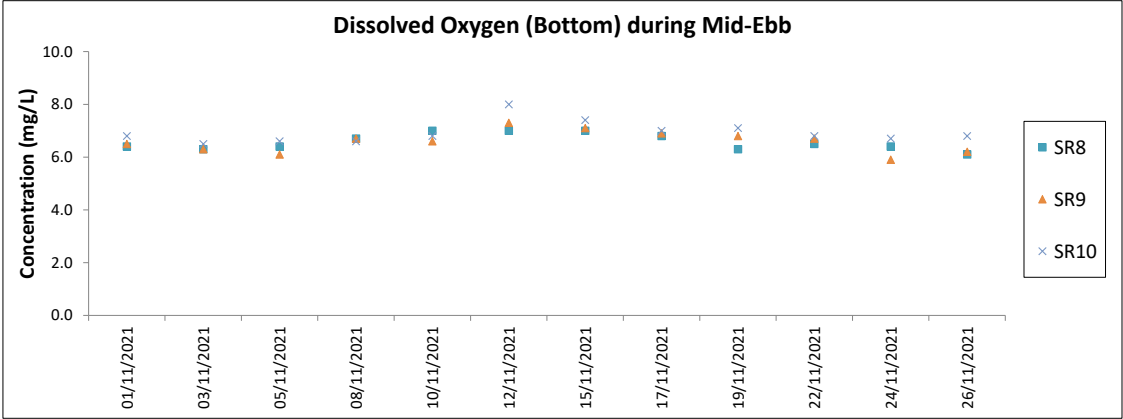
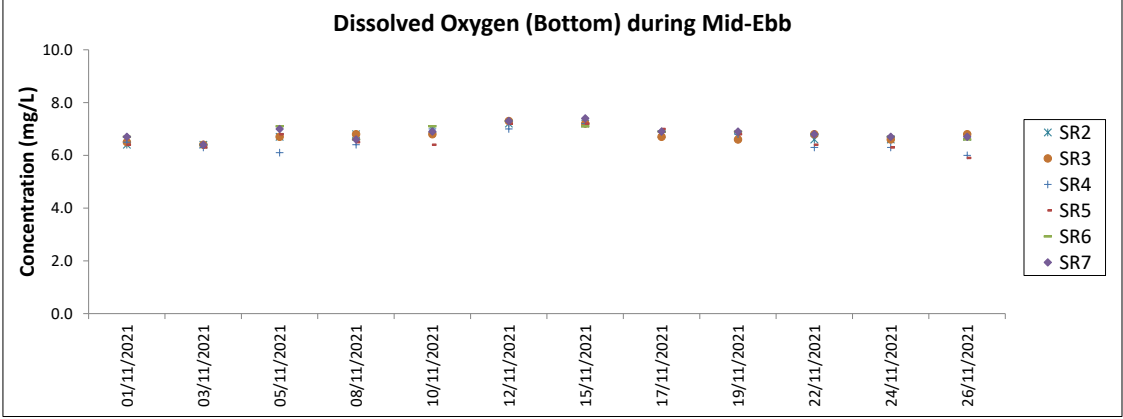
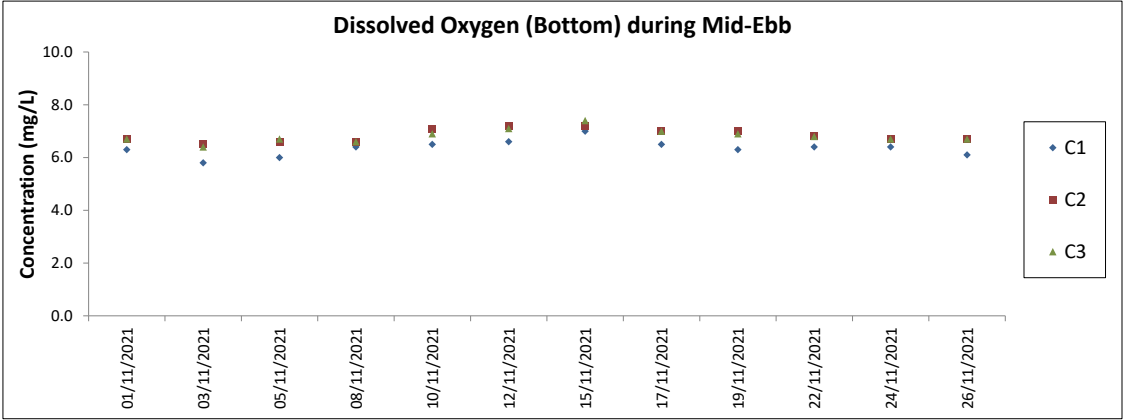
DA: Depth-averaged

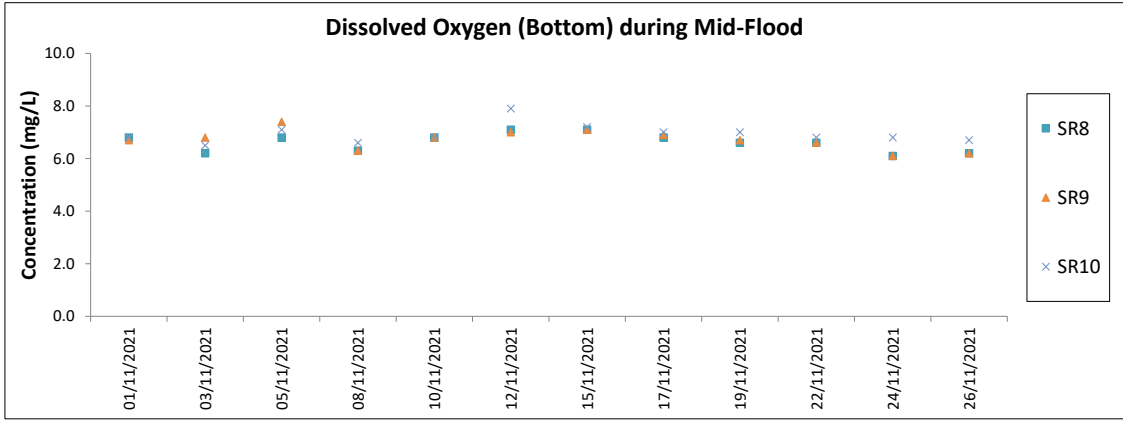
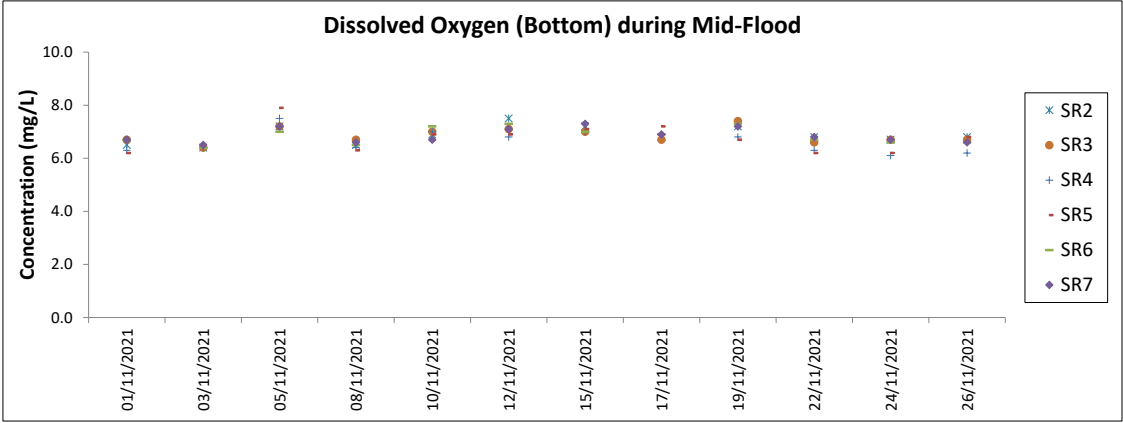
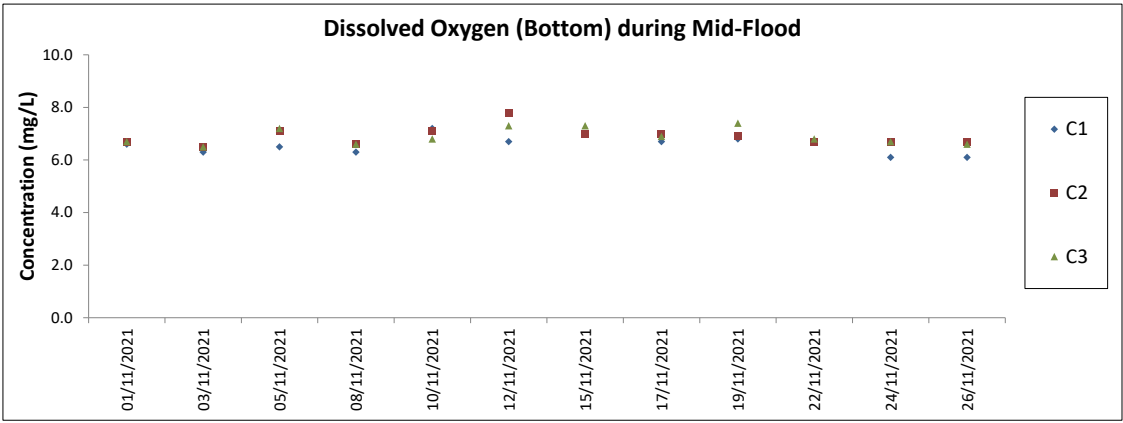
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

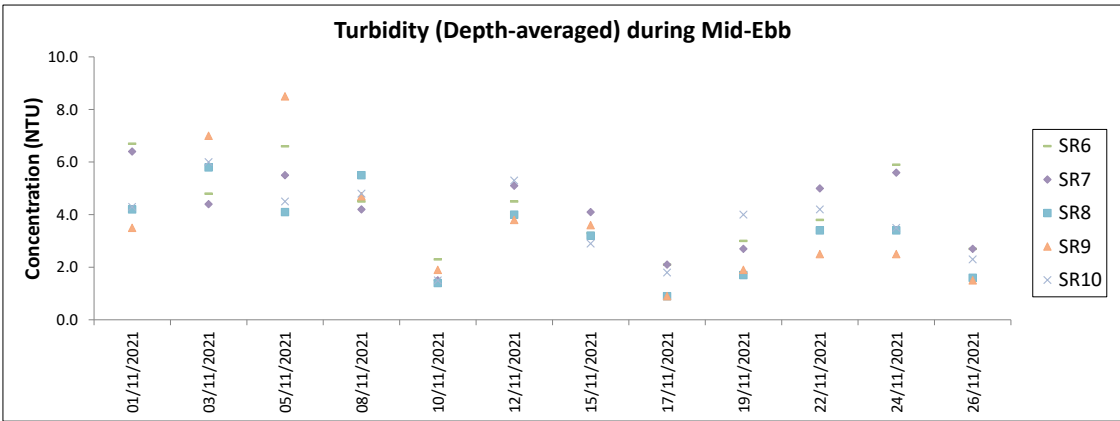
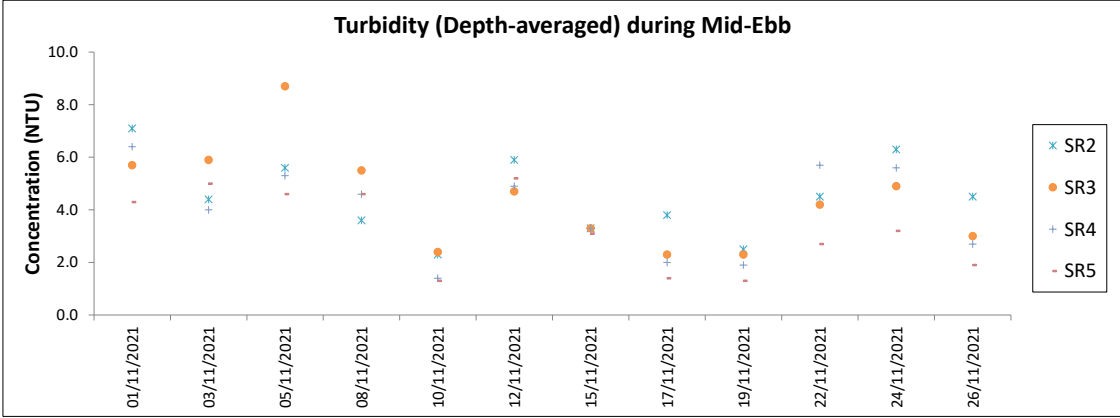
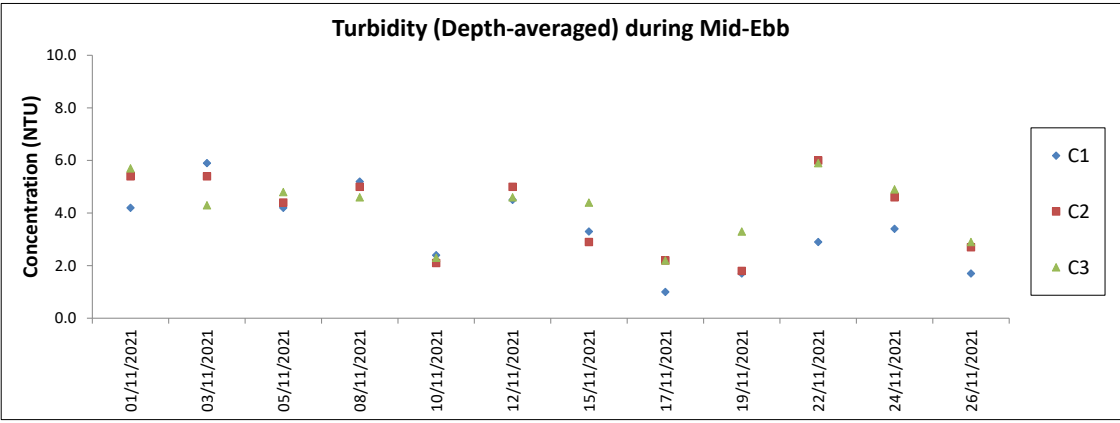
D. Graphical Presentations of Post-dredging Water Quality Monitoring Results

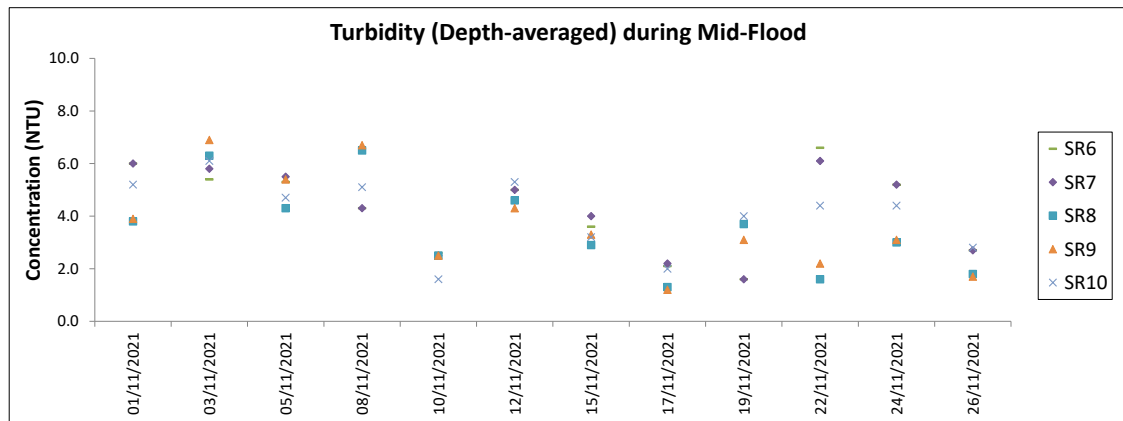
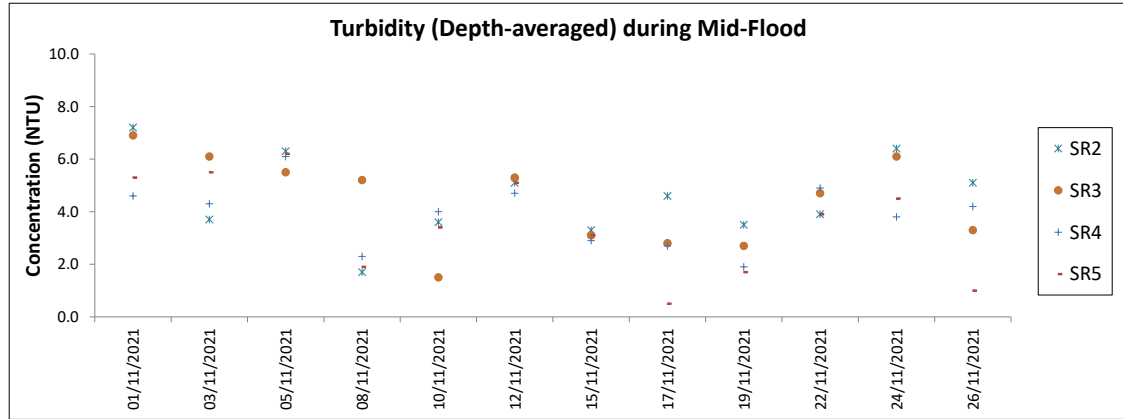
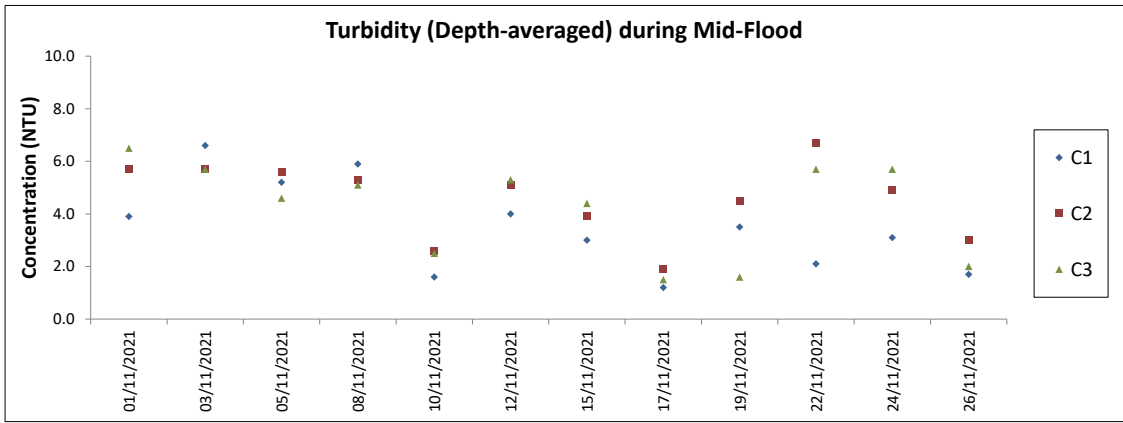


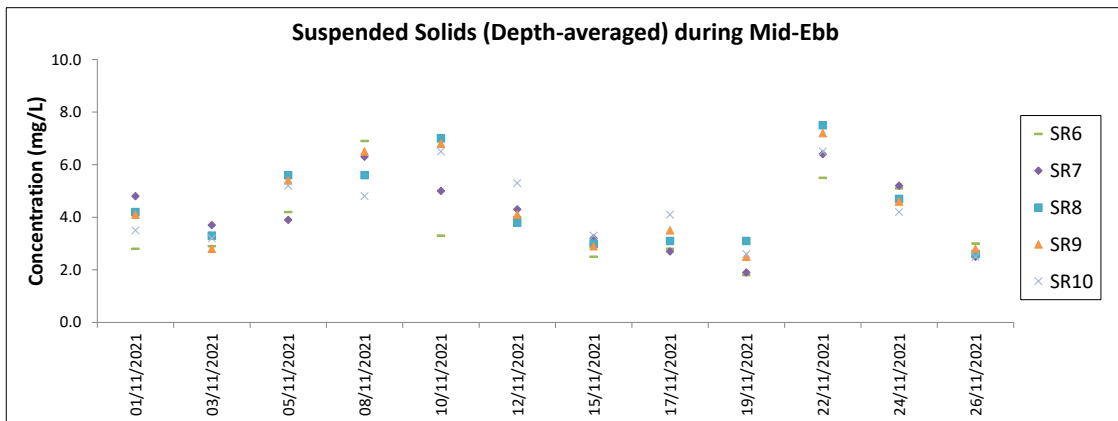
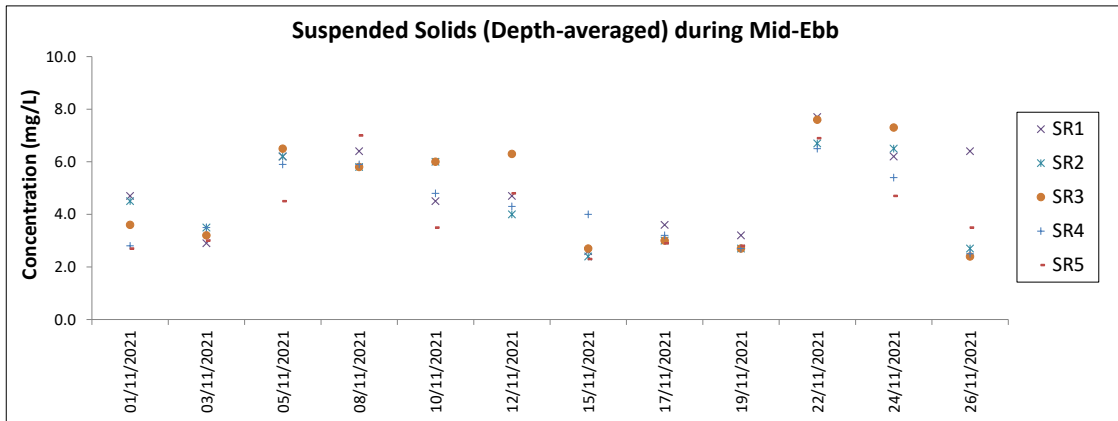
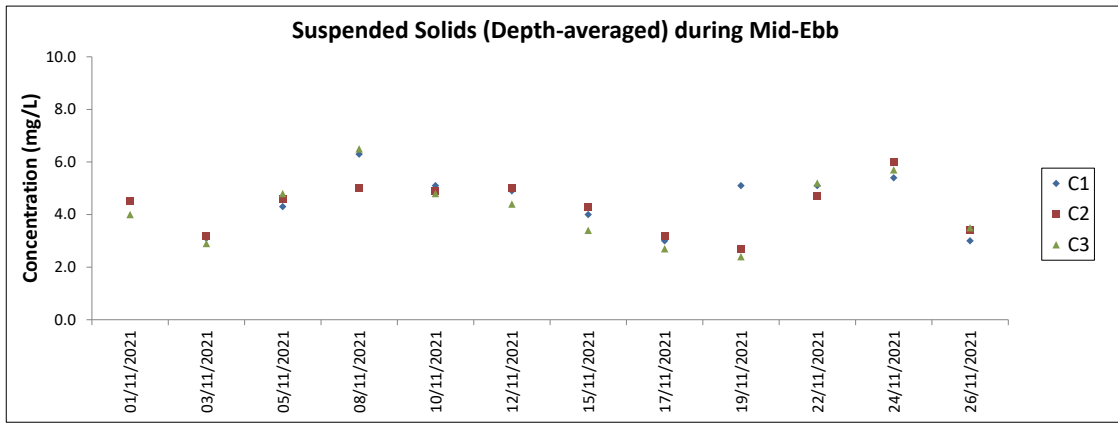


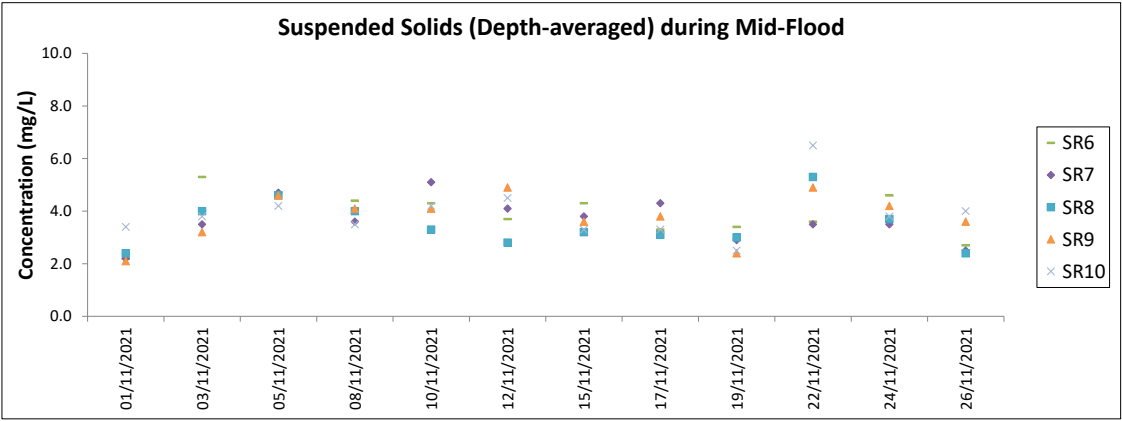
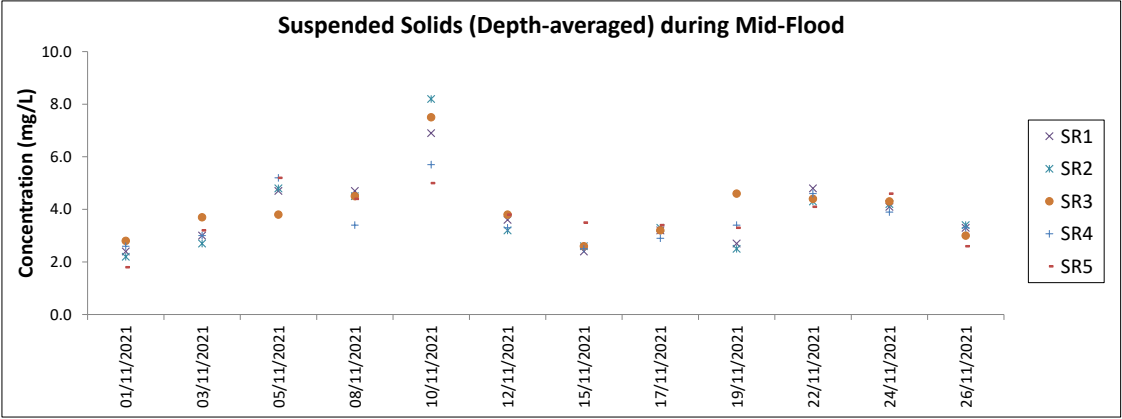
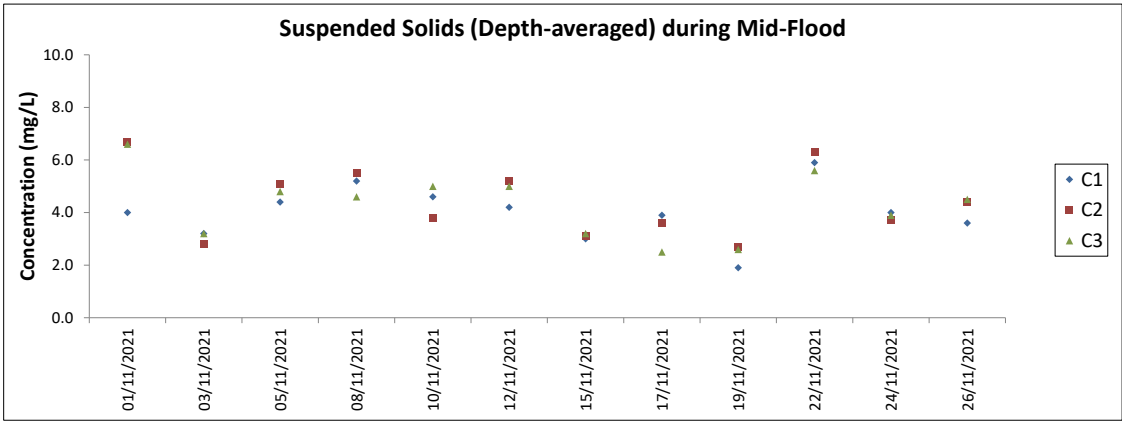




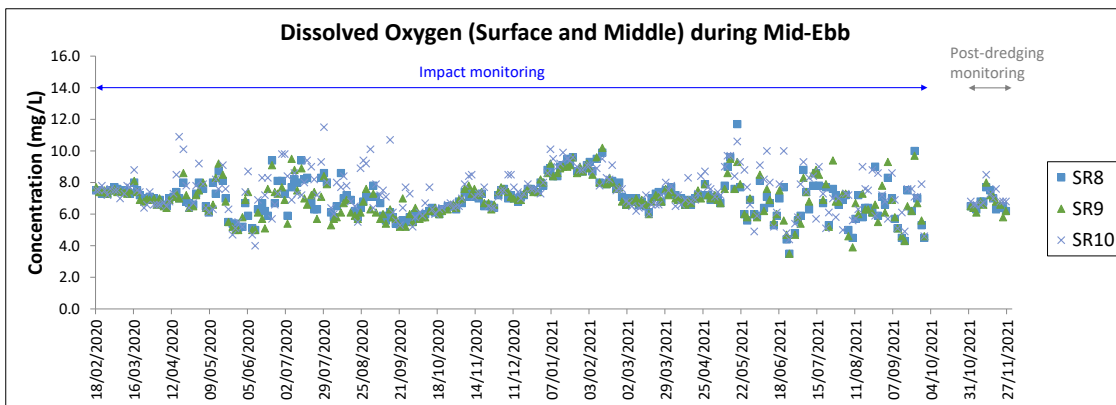
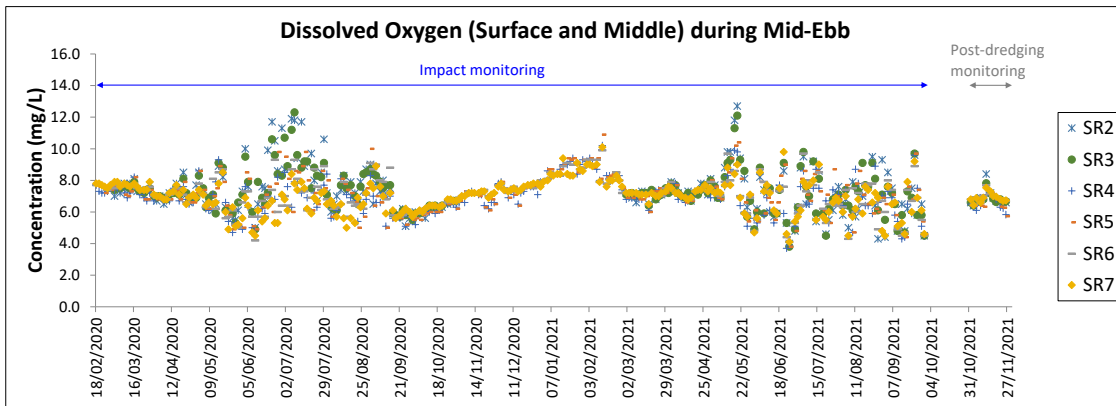
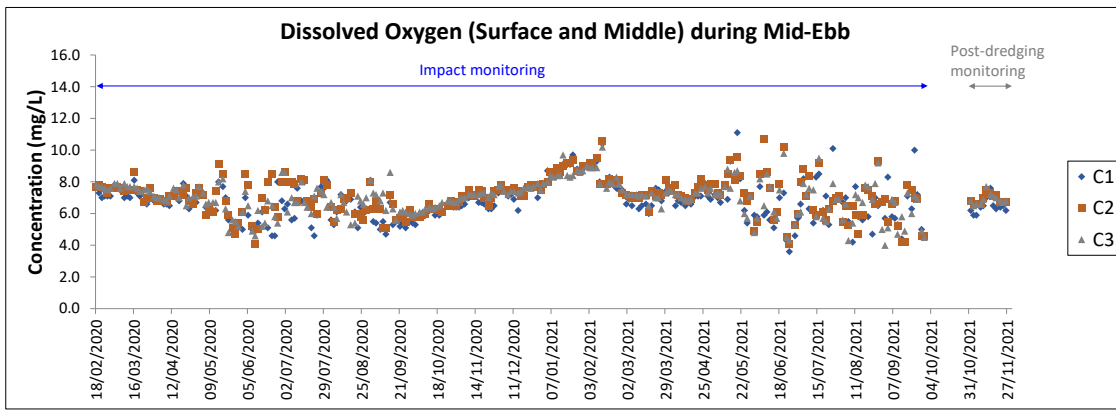


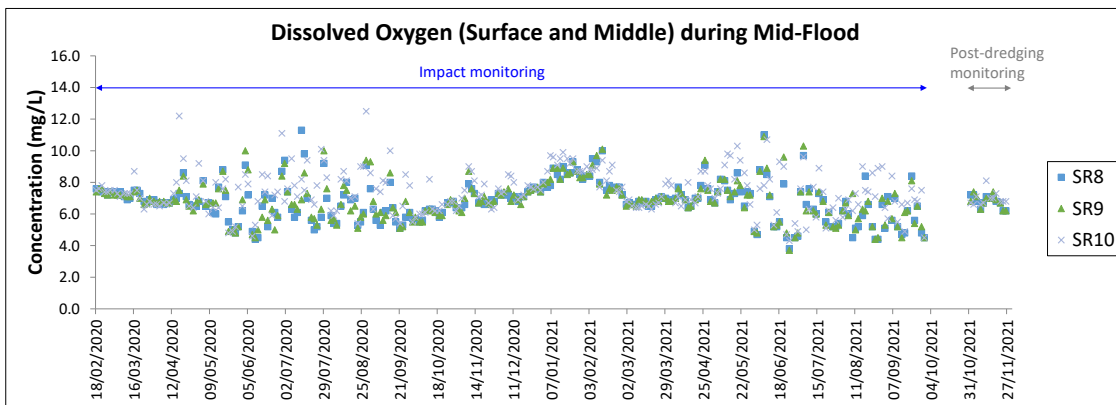
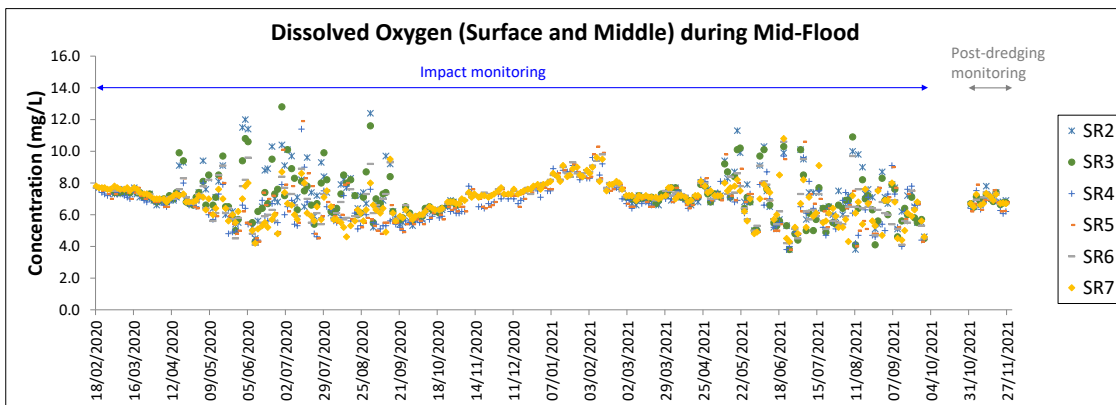
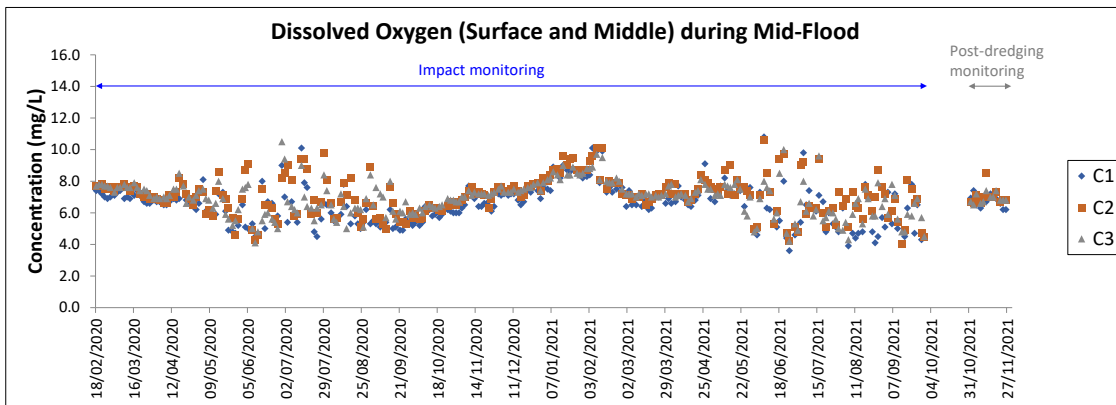


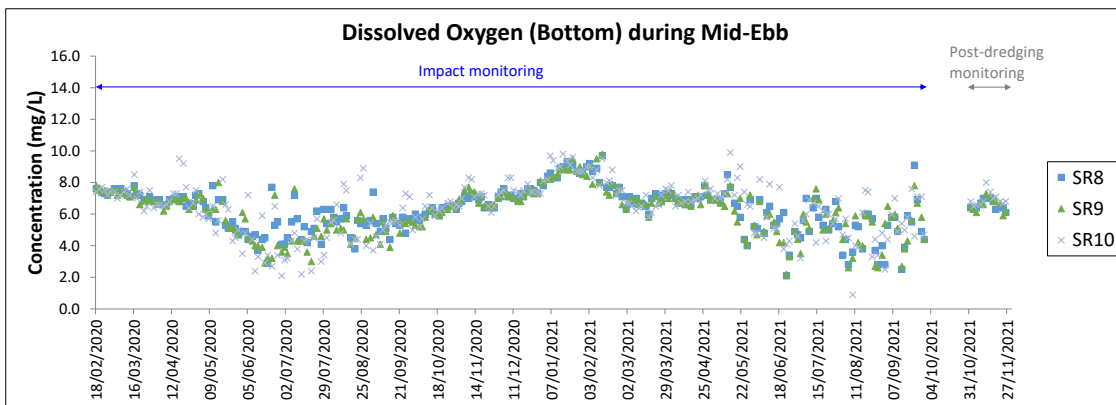
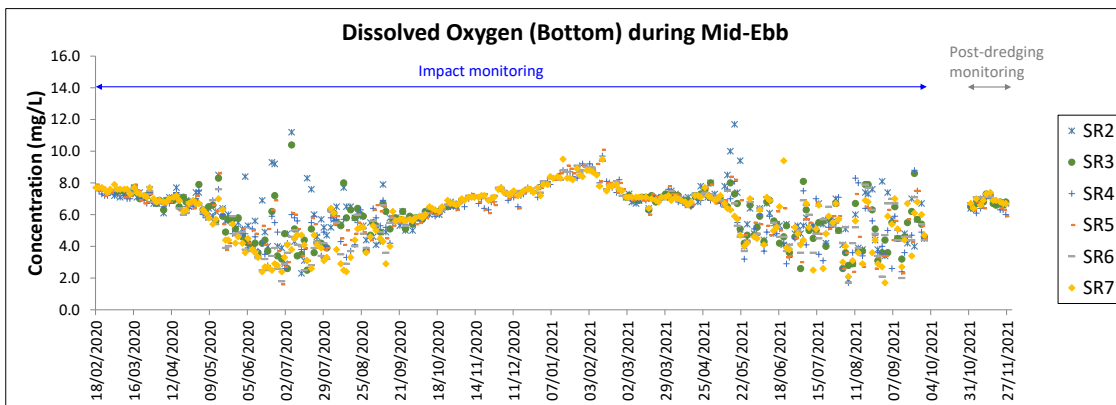
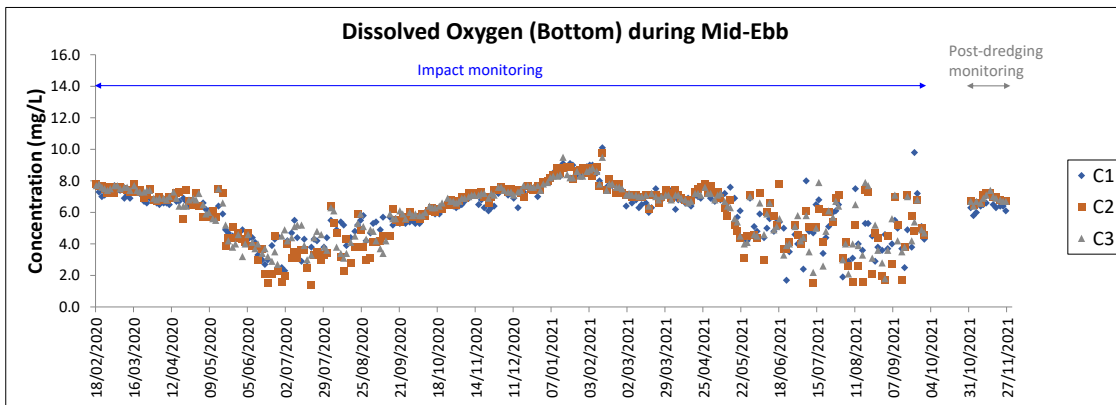


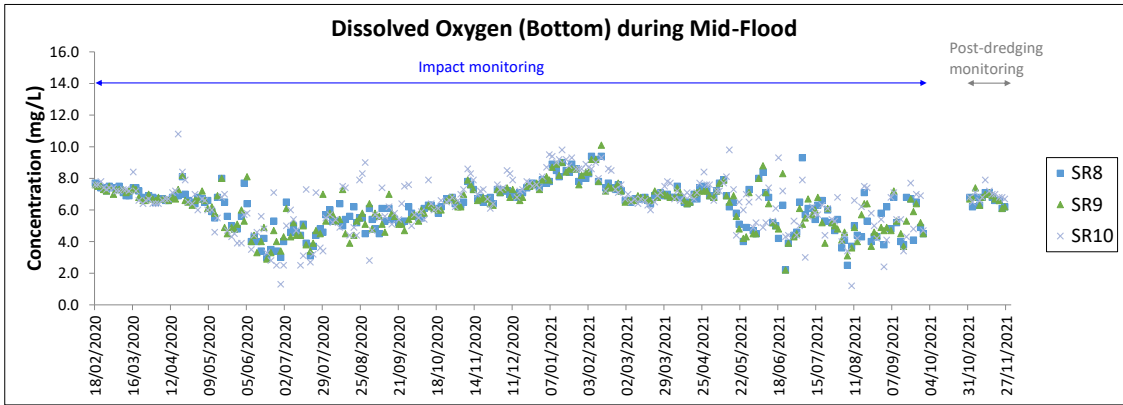
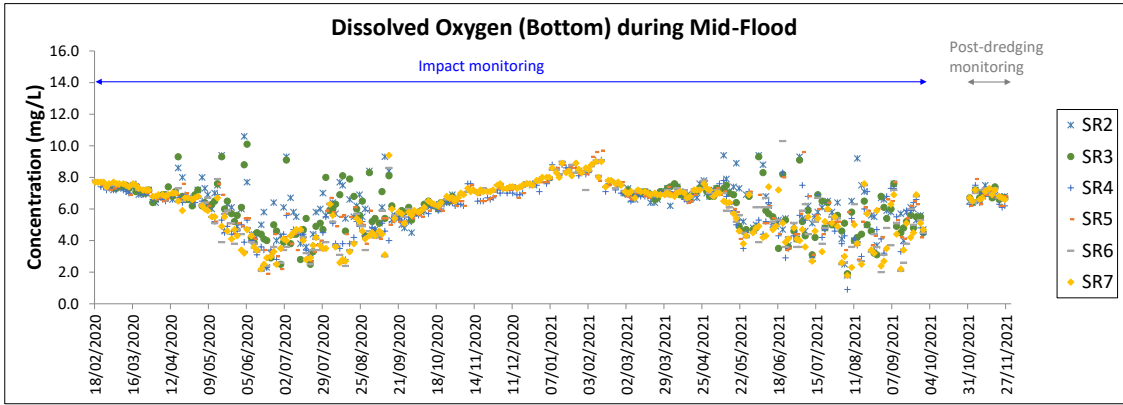
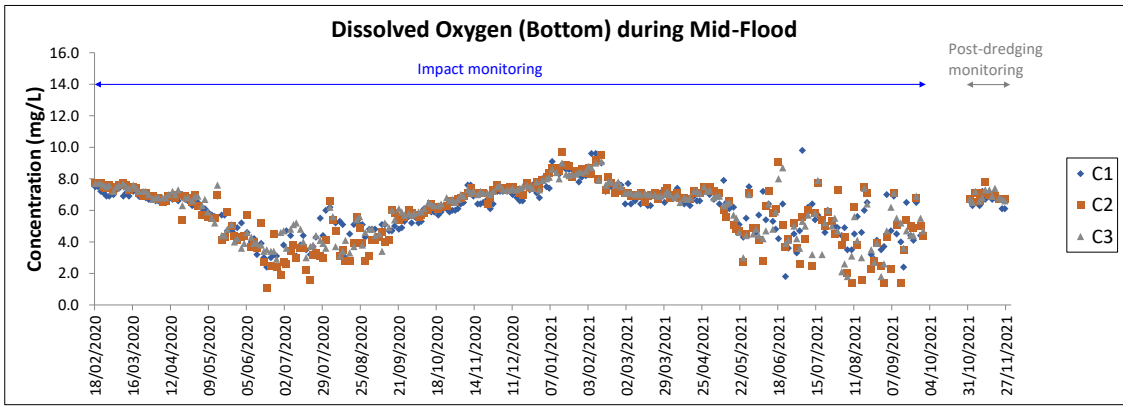


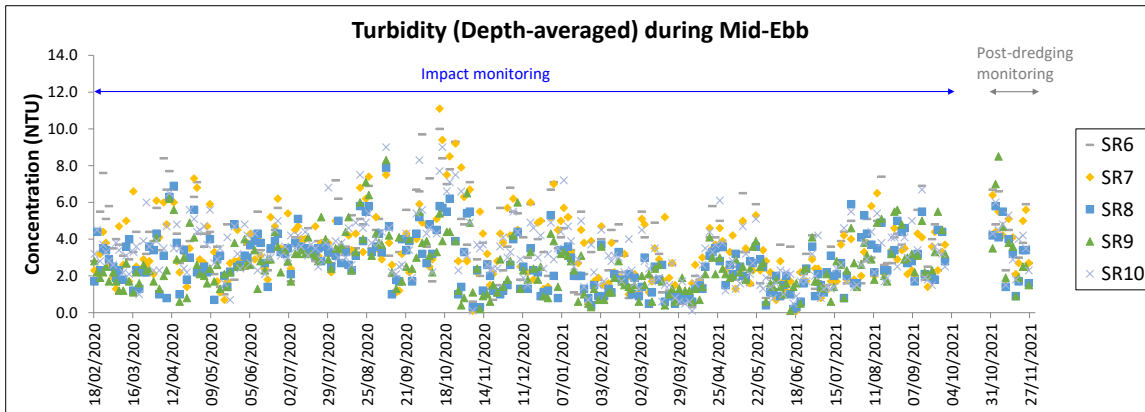
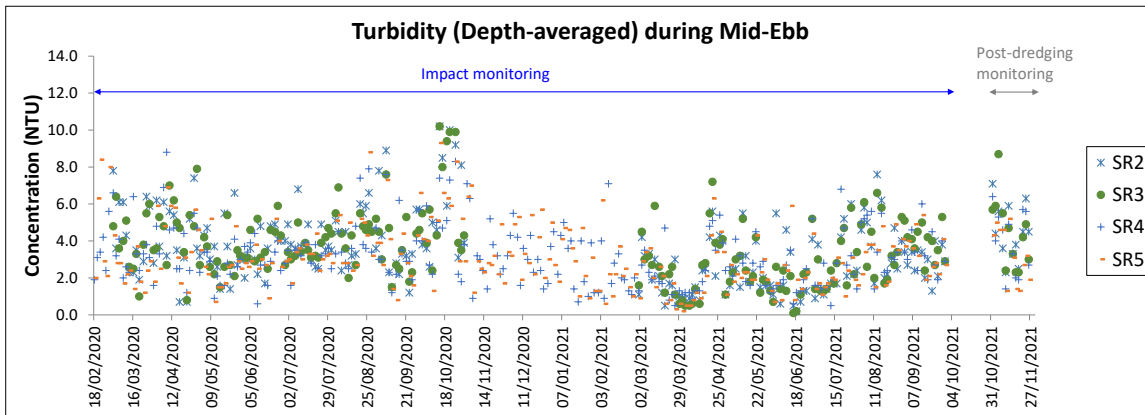
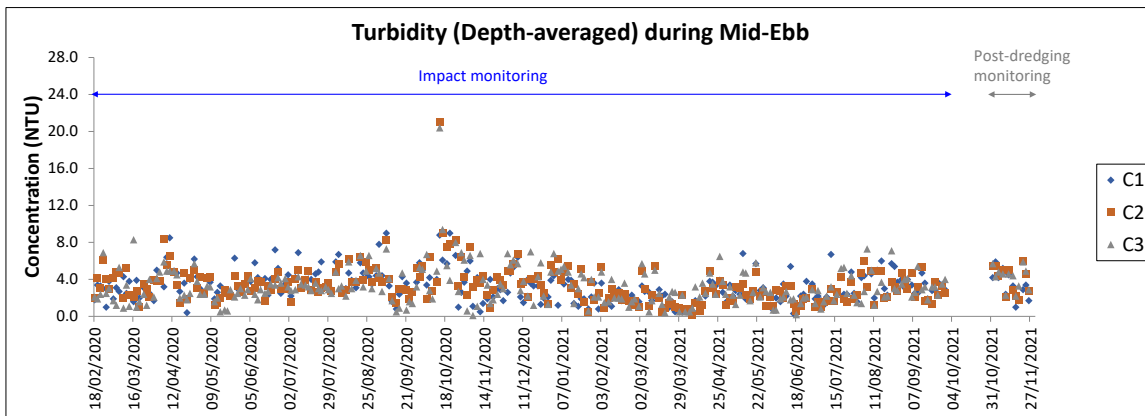
E. EM&A Data over the Monitoring Period

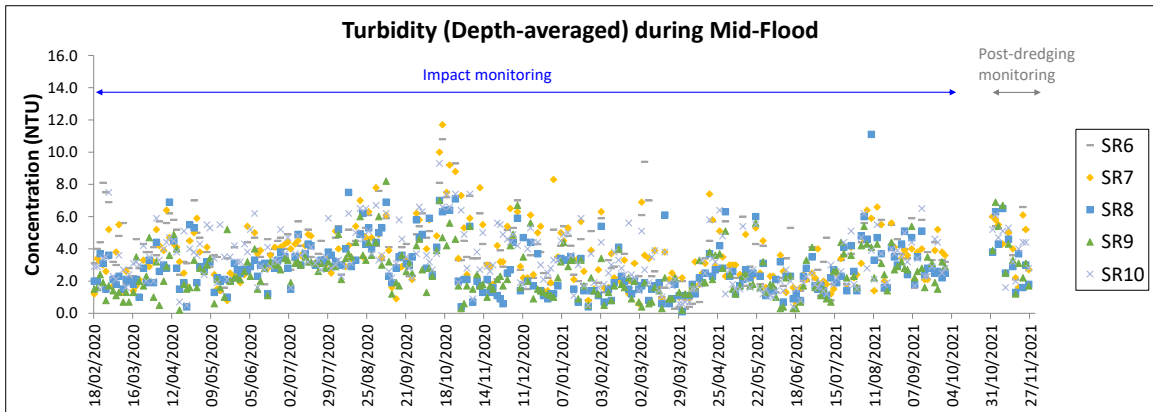
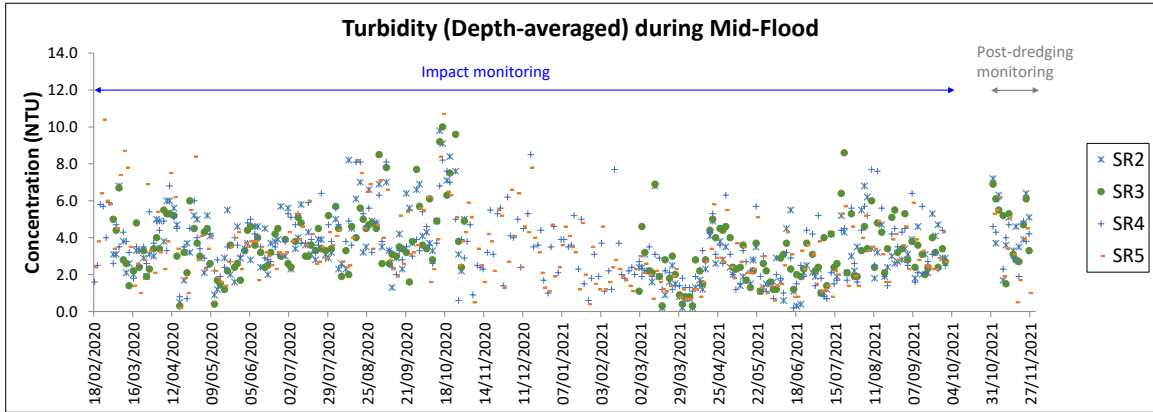
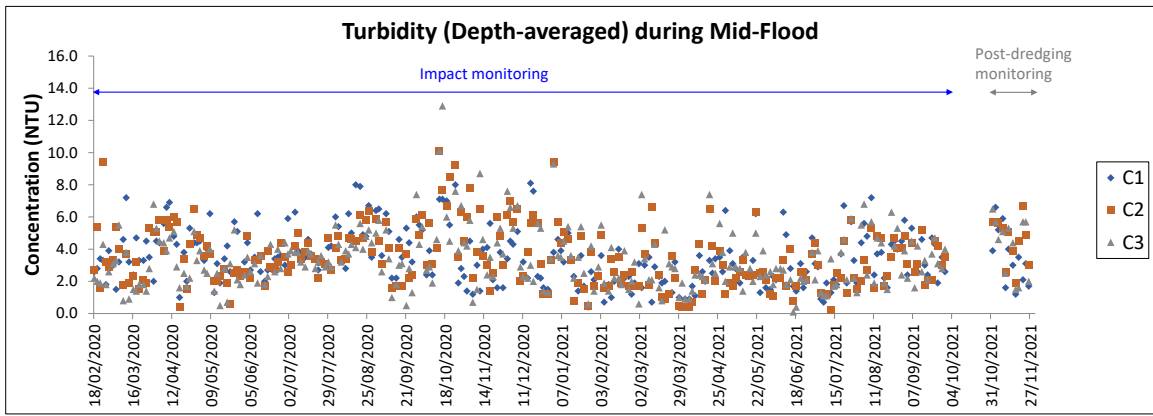


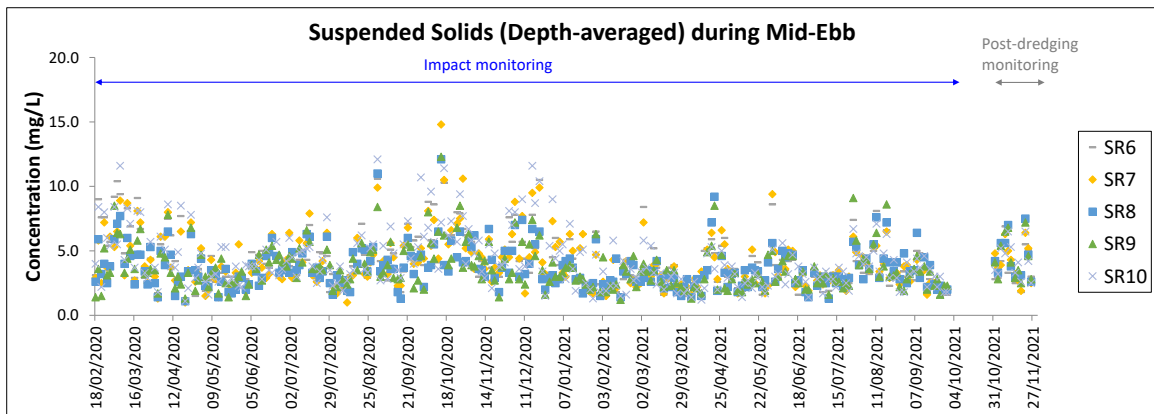
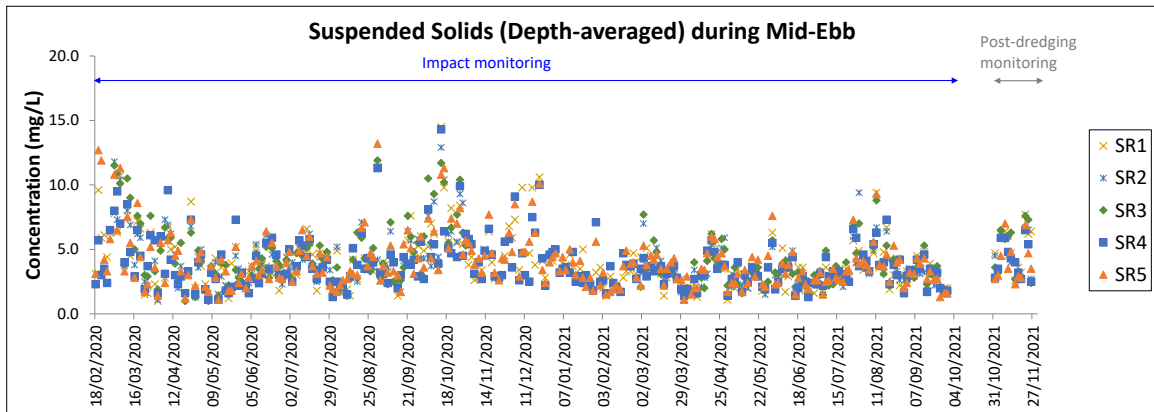
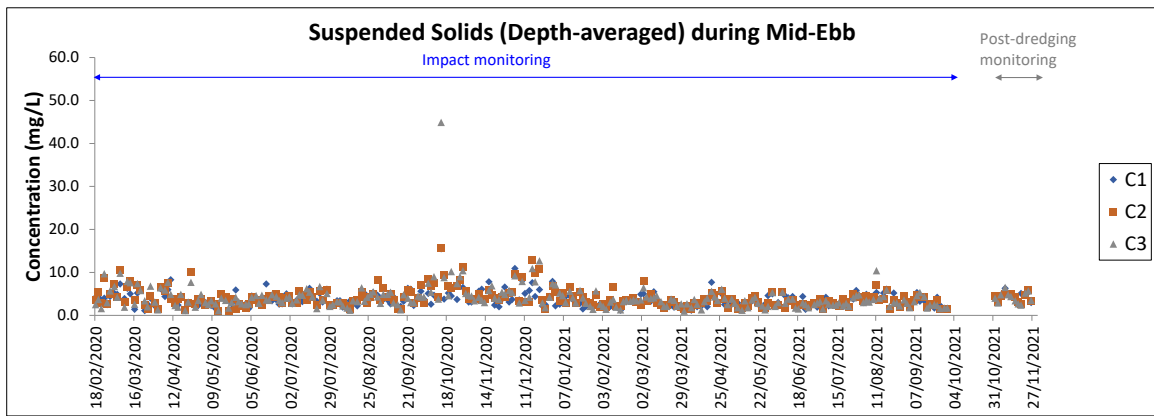


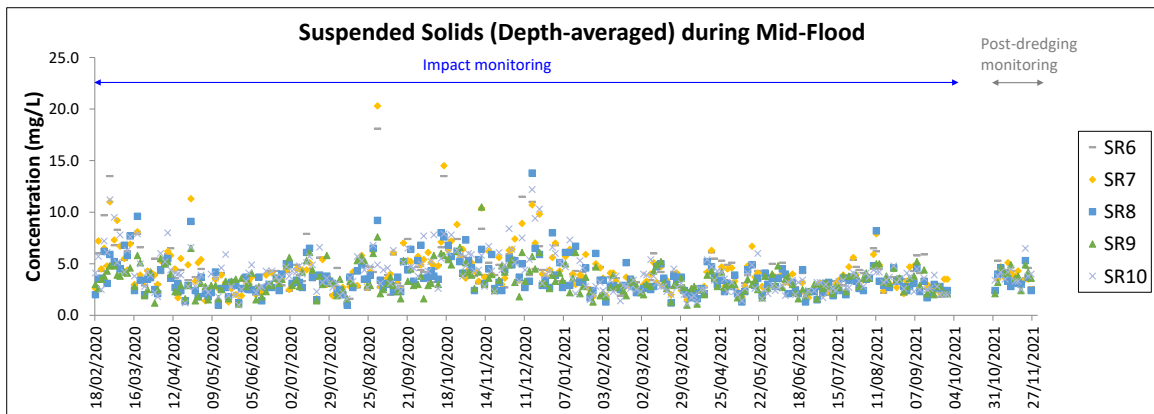
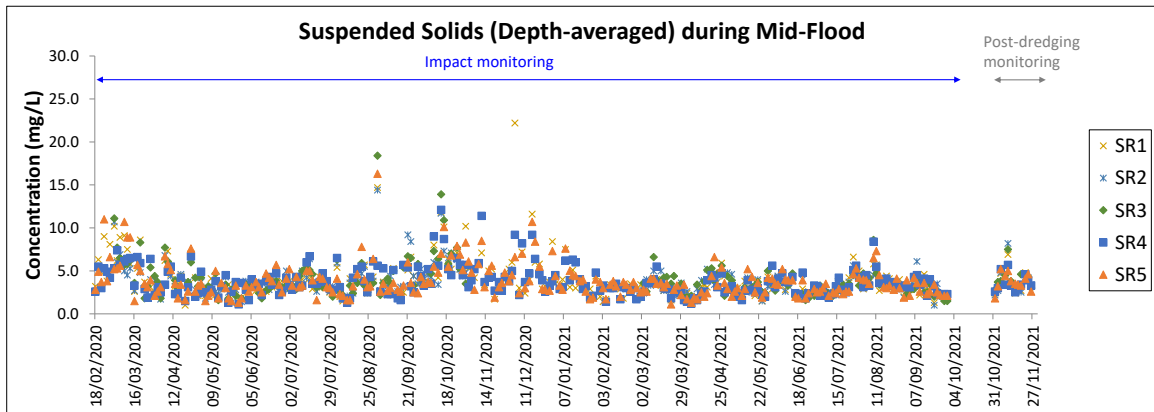
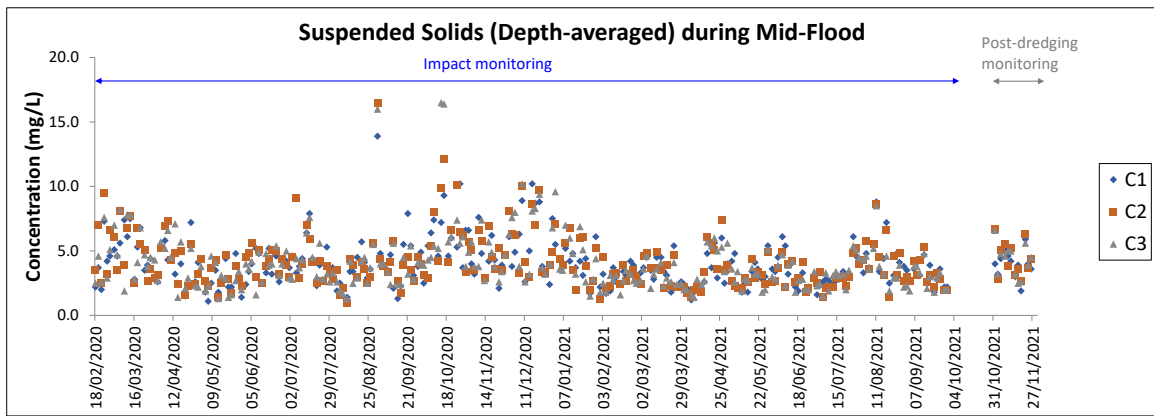


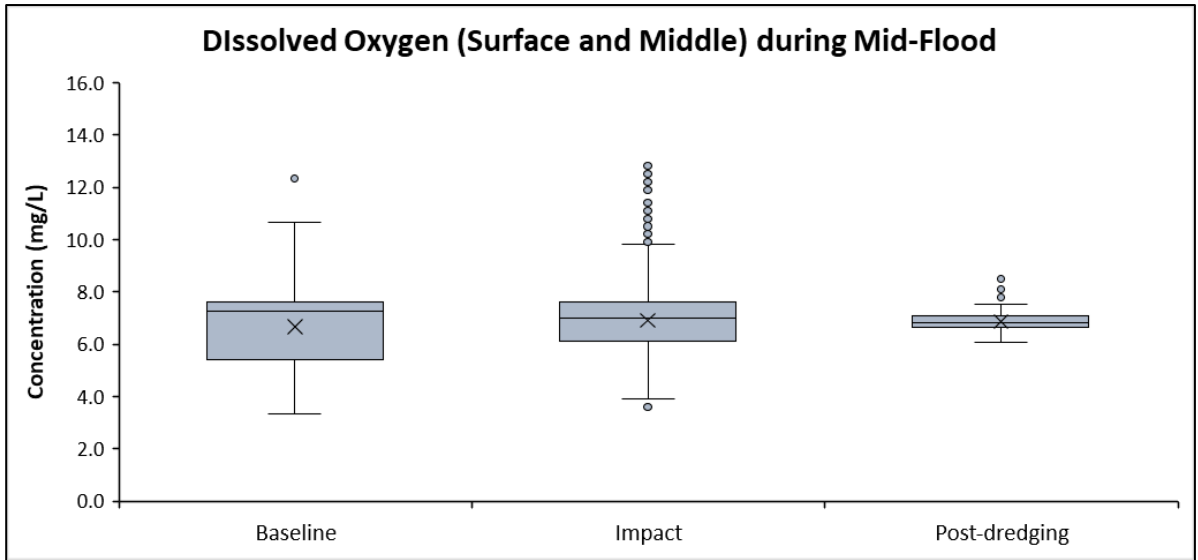
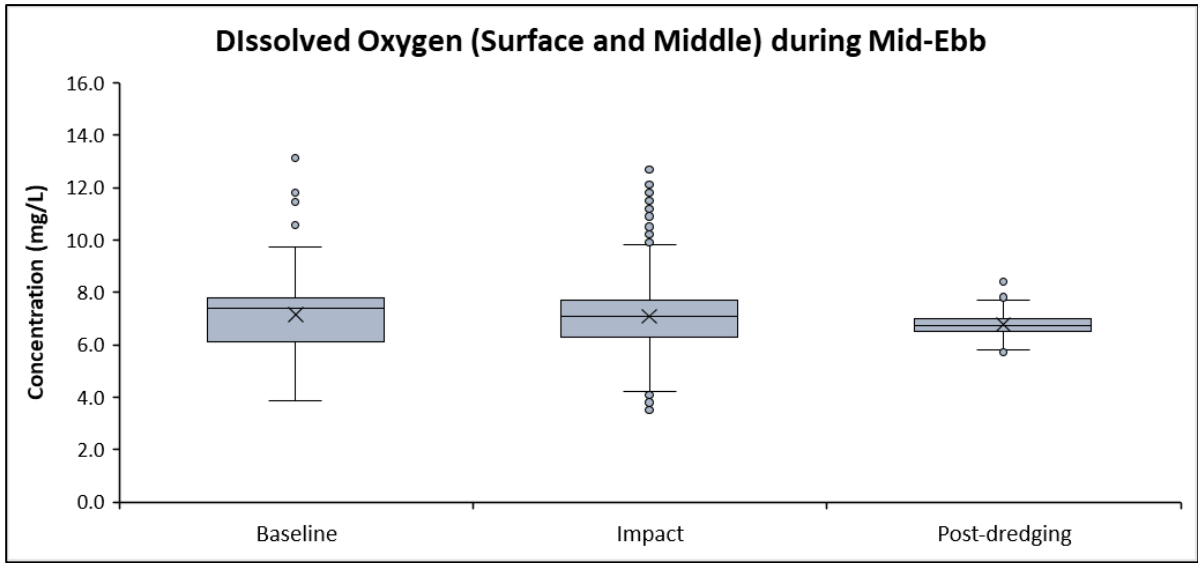


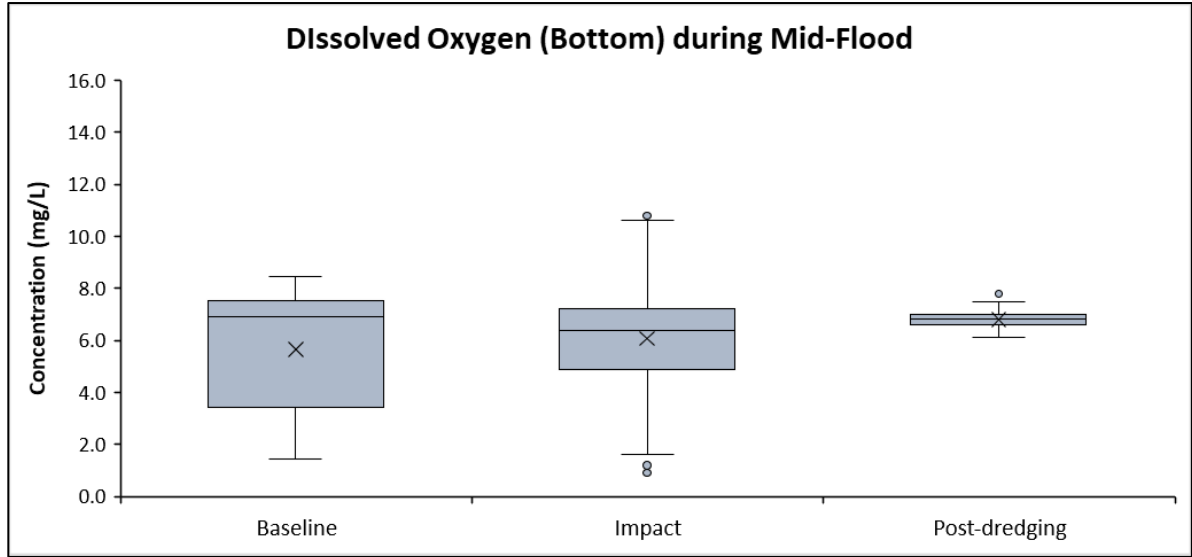
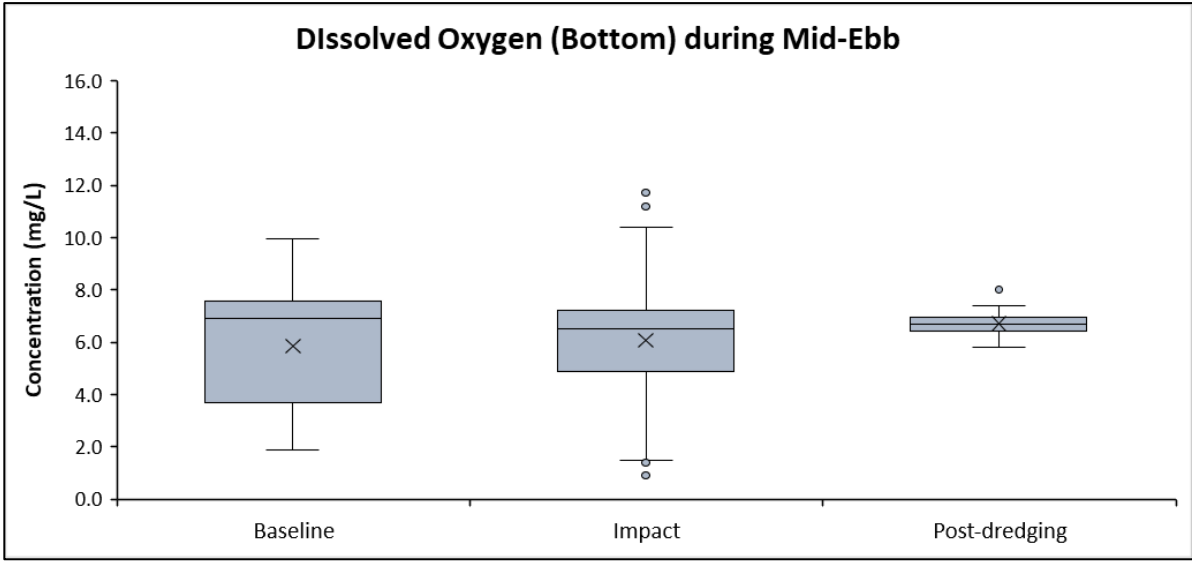


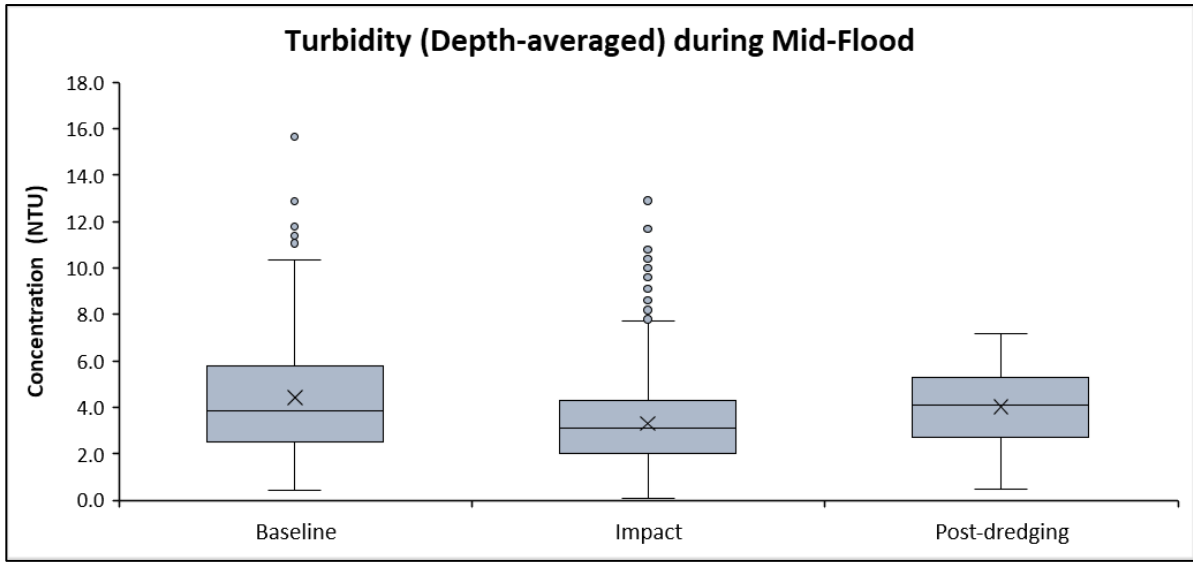
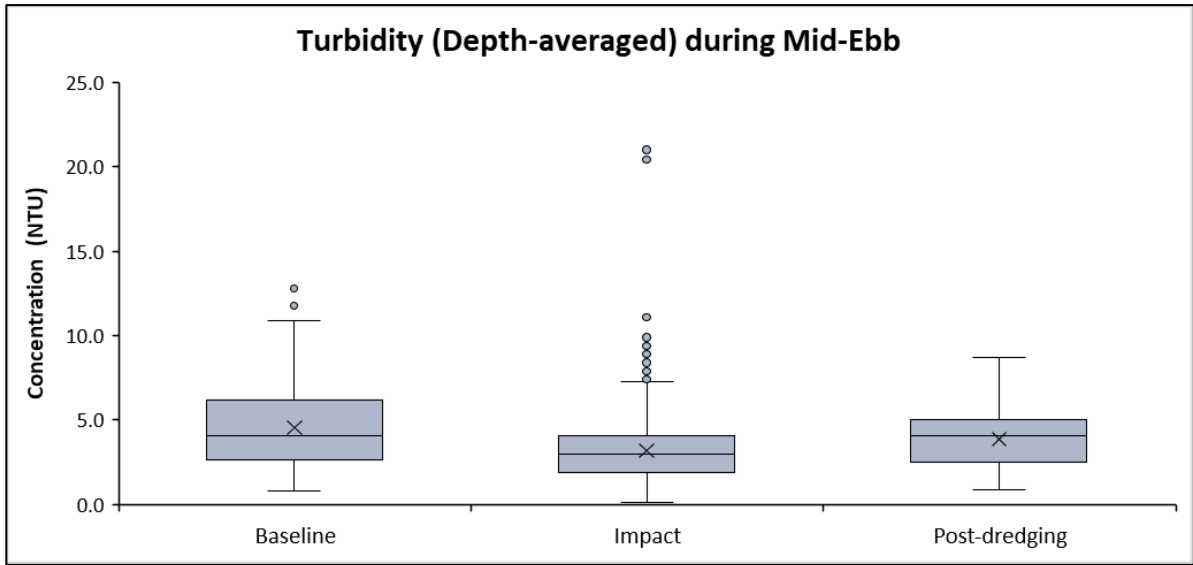


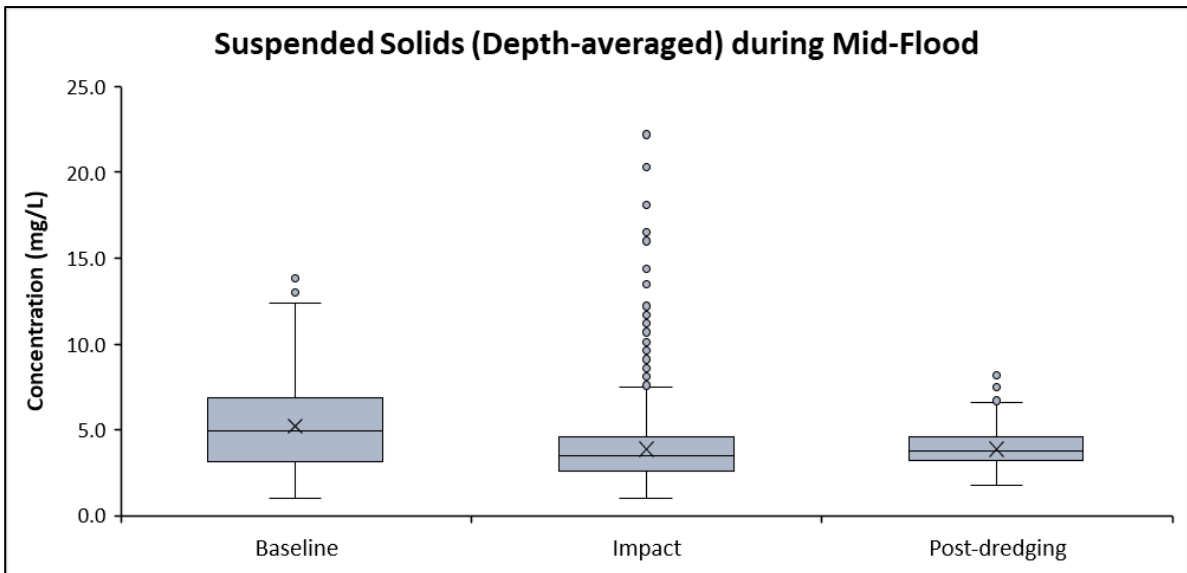
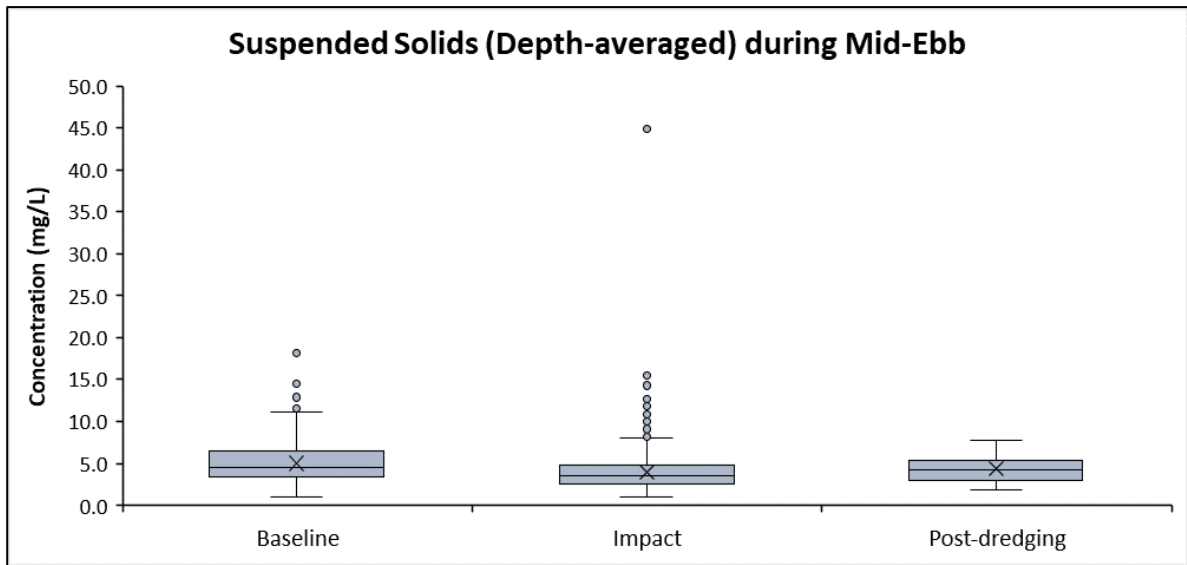




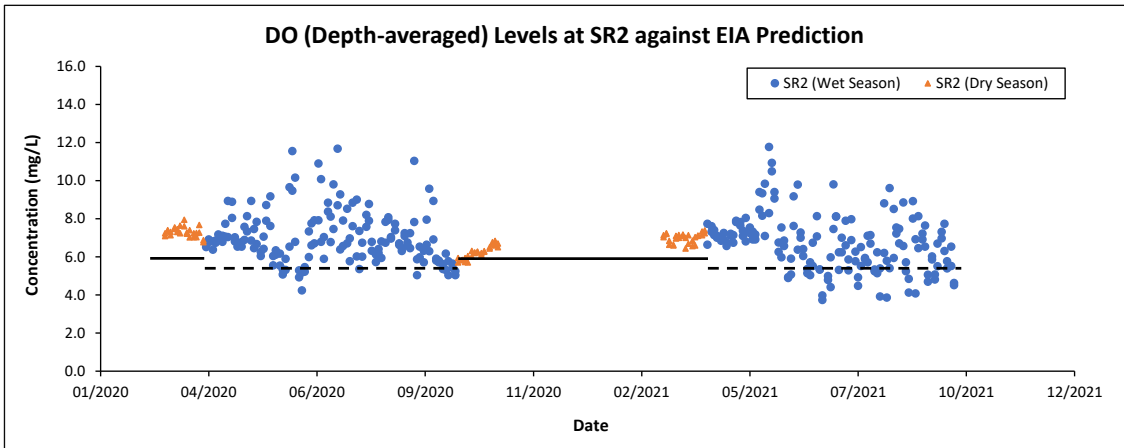




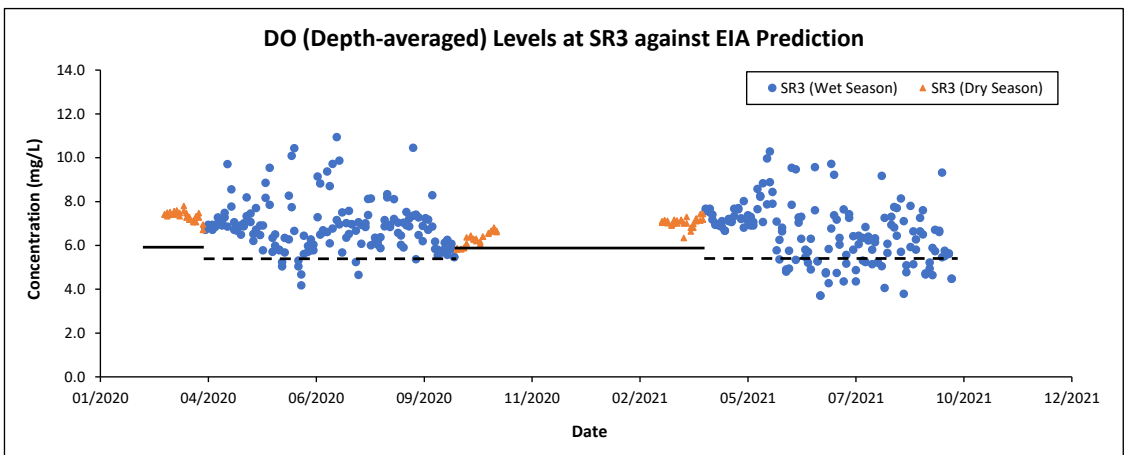




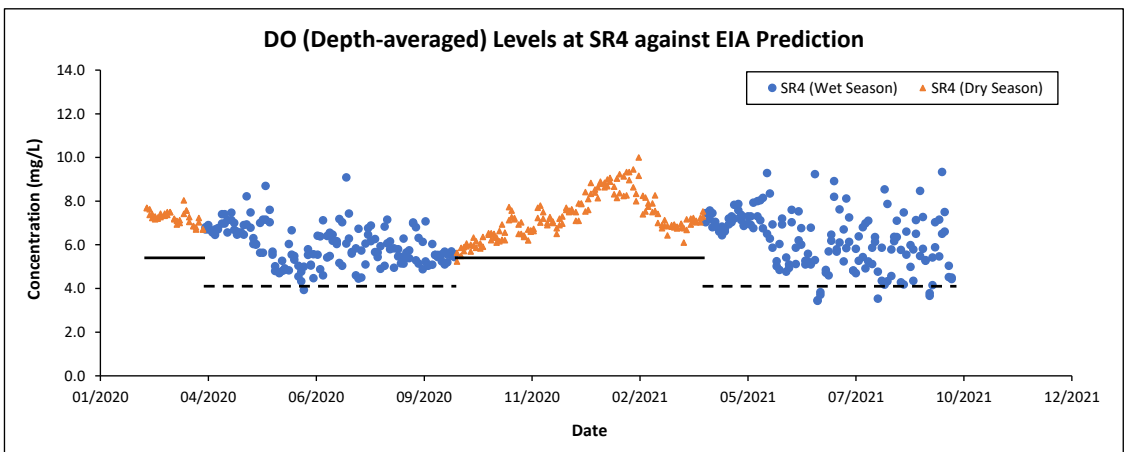
F. EM&A Data with the EIA Predictions



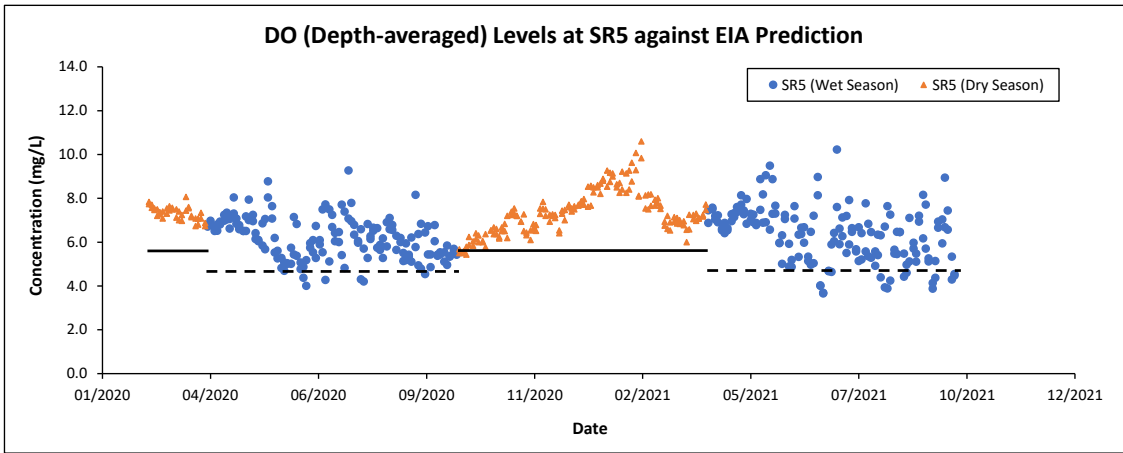
Solid line: Predicted DO (depth-averaged) at SR2 during dry season - 5.9 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR2 during wet season - 5.4 mg/L
 Monitored during bathing season only (March to October inclusive)



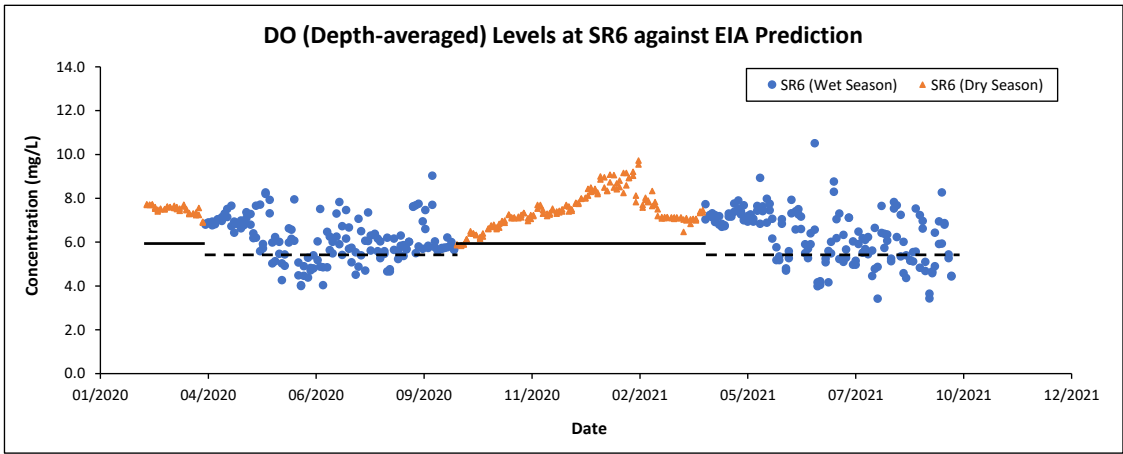
Solid line: Predicted DO (depth-averaged) at SR3 during dry season - 5.9 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR3 during wet season - 5.4 mg/L
 Monitored during bathing season only (March to October inclusive)



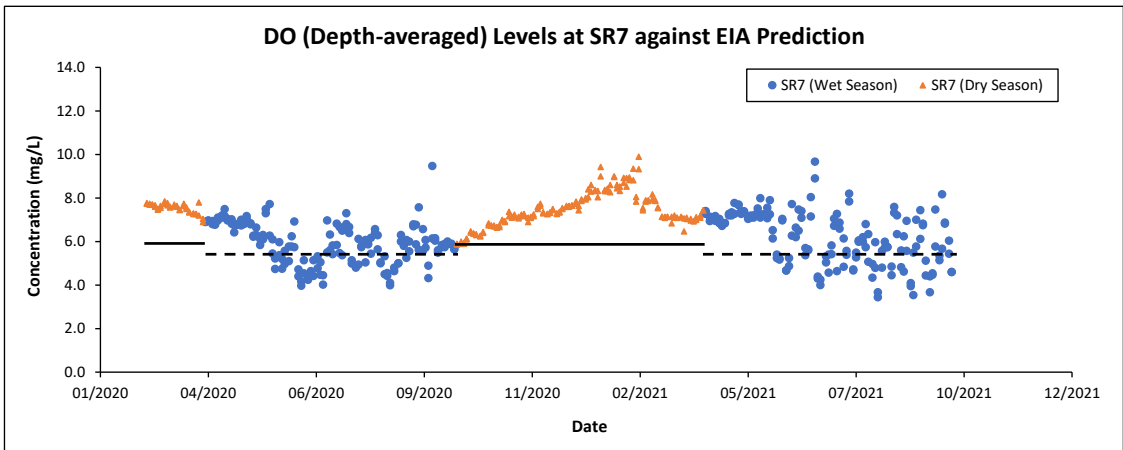
Solid line: Predicted DO (depth-averaged) at SR4 during dry season - 5.4 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR4 during wet season - 4.1 mg/L



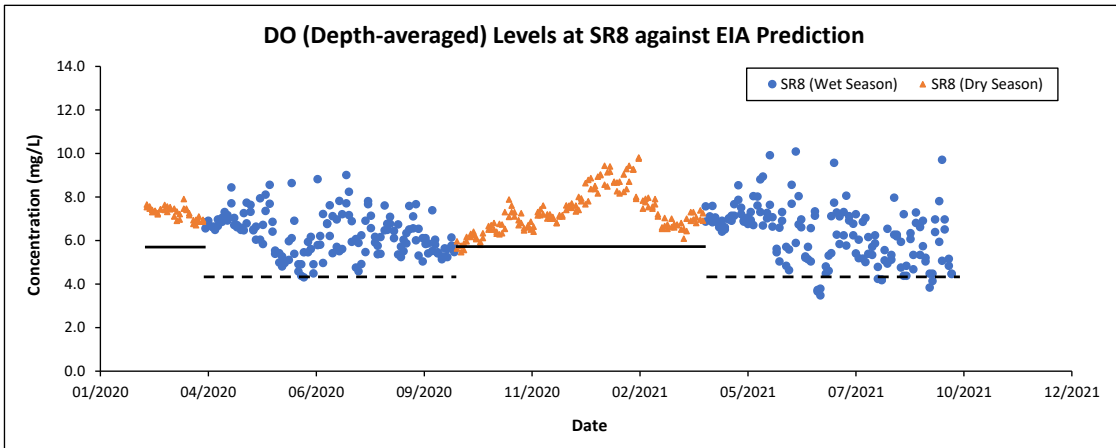
Solid line: Predicted DO (depth-averaged) at SR5 during dry season - 5.6 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR5 during wet season - 4.7 mg/L



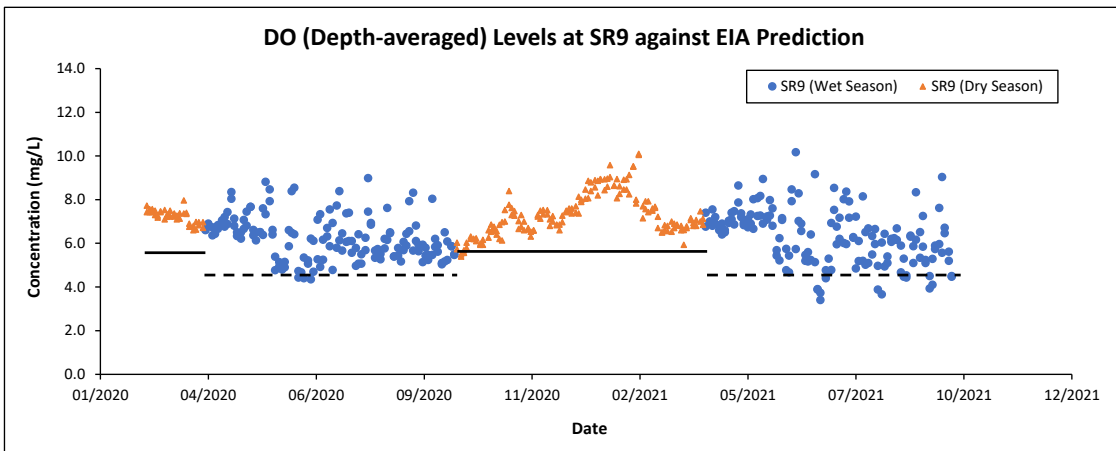
Solid line: Predicted DO (depth-averaged) at SR6 during dry season - 5.9 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR6 during wet season - 5.4 mg/L



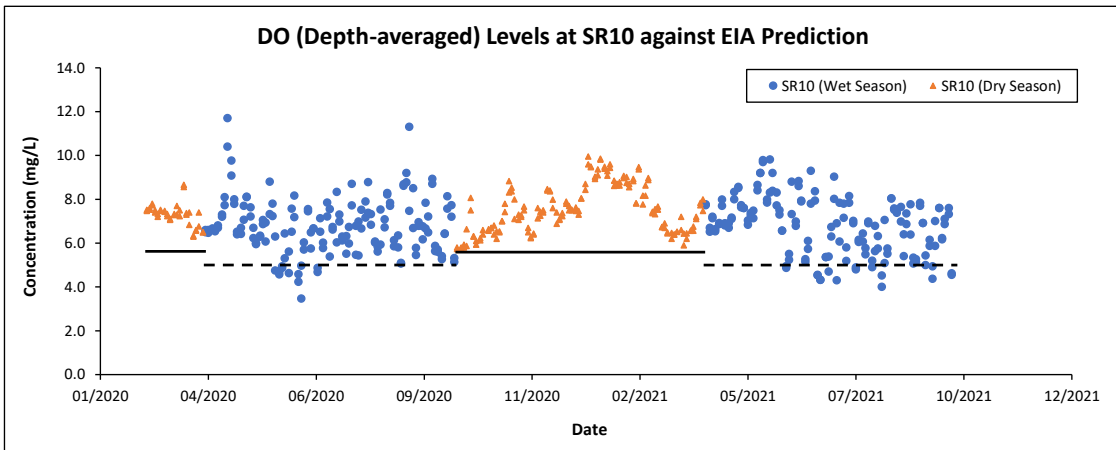
Solid line: Predicted DO (depth-averaged) at SR7 during dry season - 5.9 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR7 during wet season - 5.4 mg/L



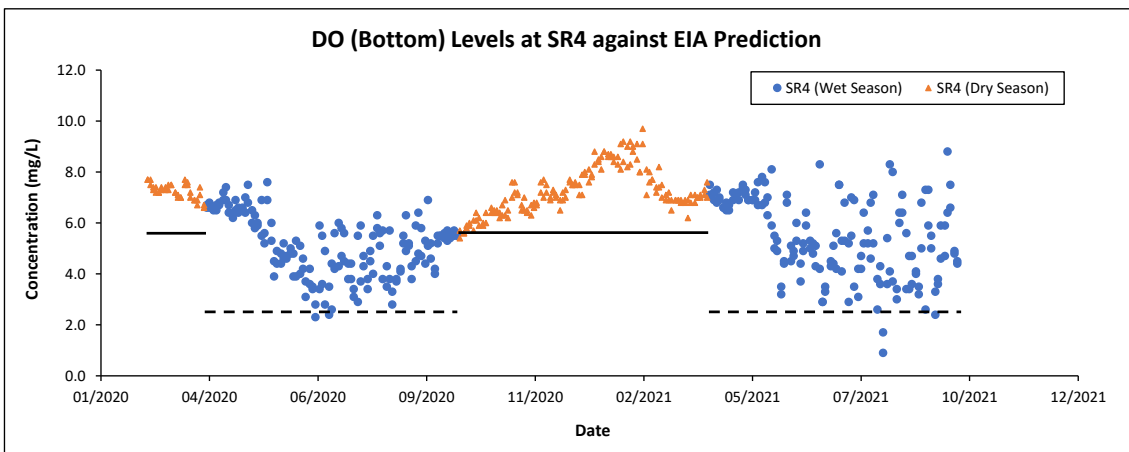
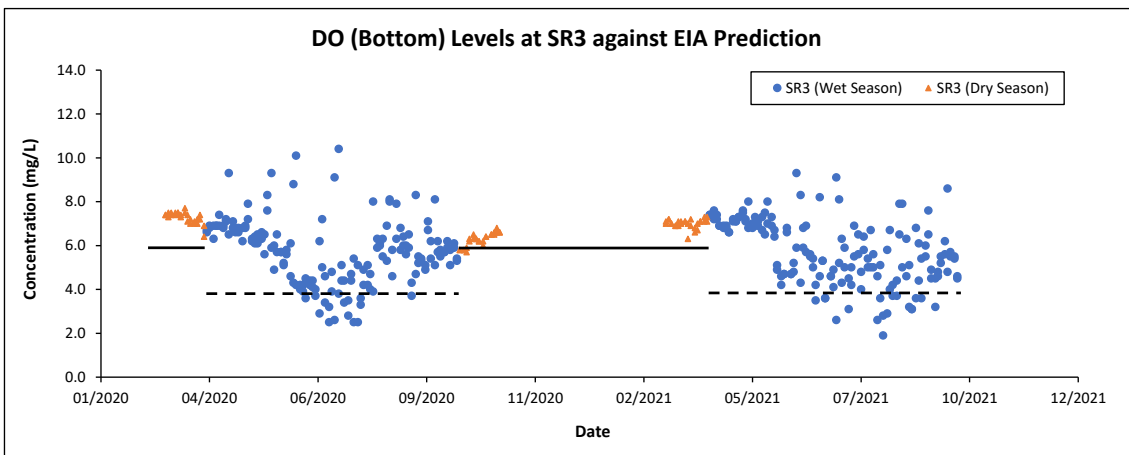
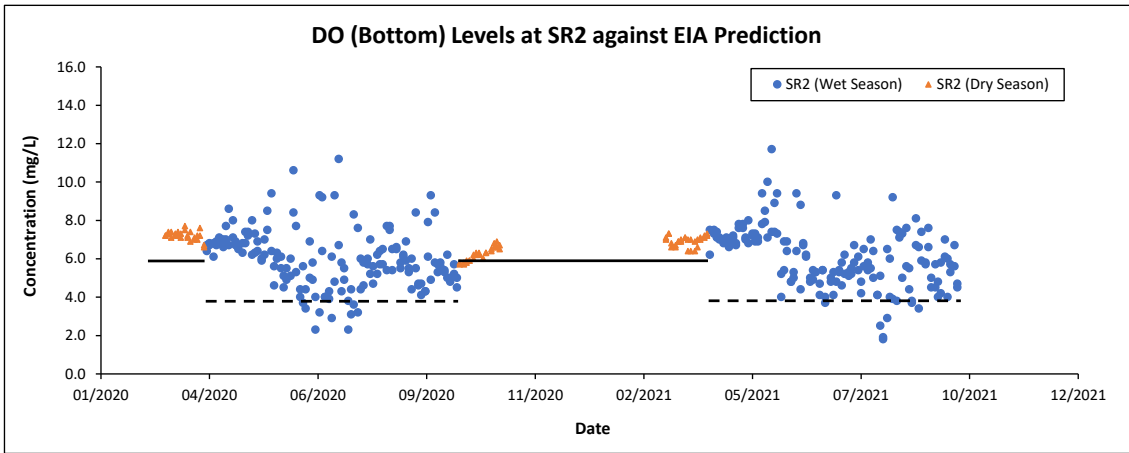
Solid line: Predicted DO (depth-averaged) at SR8 during dry season - 5.7 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR8 during wet season - 4.3 mg/L

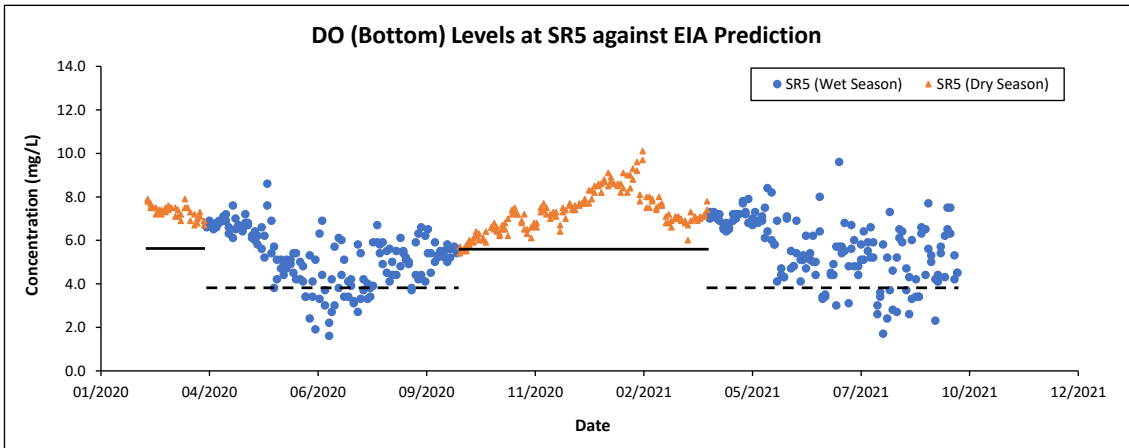


Solid line: Predicted DO (depth-averaged) at SR9 during dry season - 5.6 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR9 during wet season - 4.6 mg/L

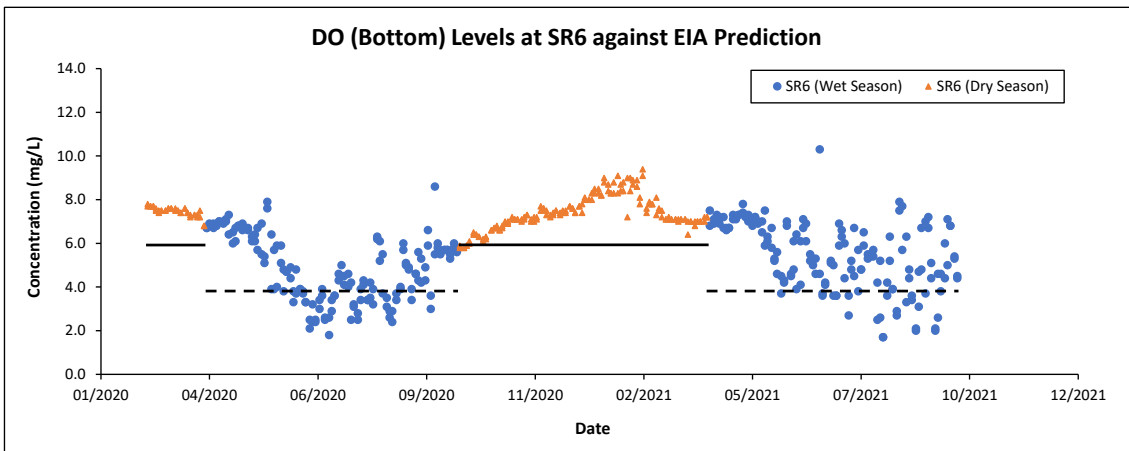


Solid line: Predicted DO (depth-averaged) at SR10 during dry season - 5.6 mg/L
 Dashed line: Predicted DO (depth-averaged) at SR10 during wet season - 5.0 mg/L

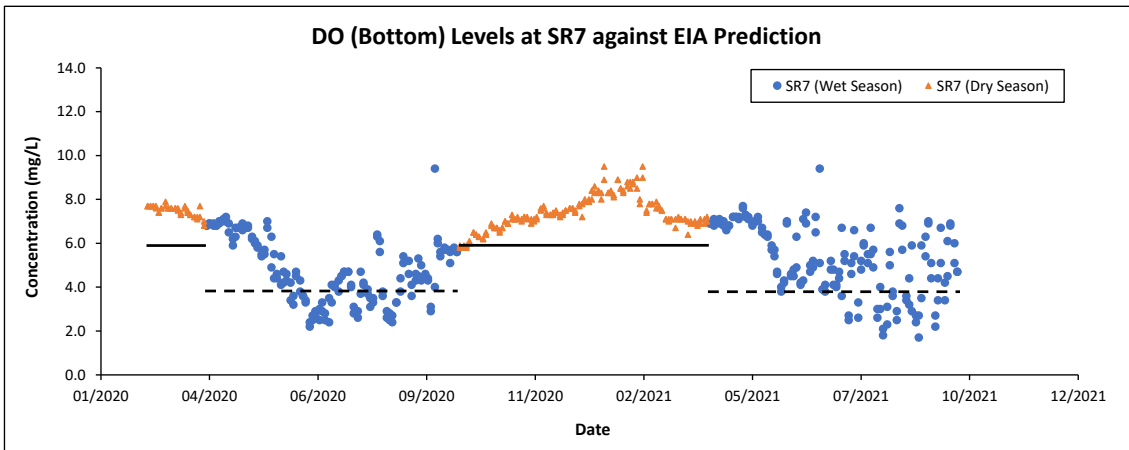




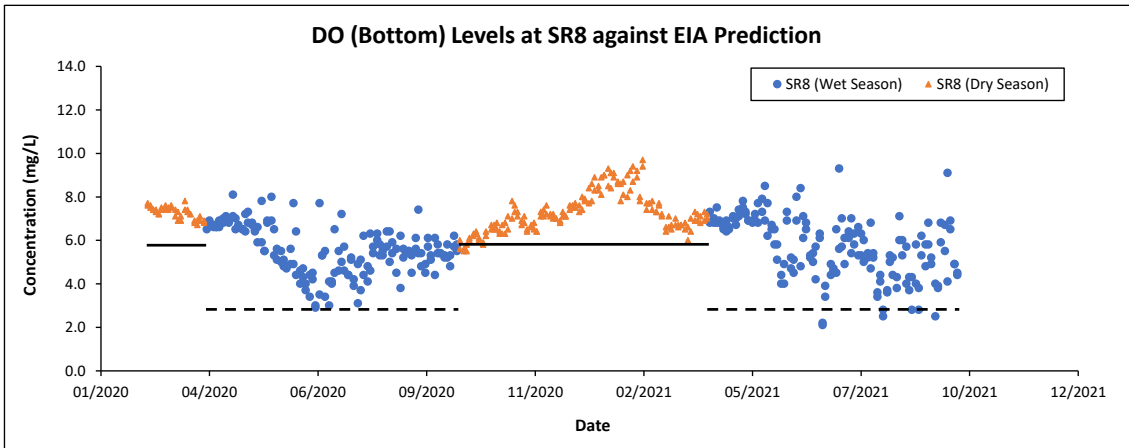
Solid line: Predicted DO (bottom) at SR5 during dry season - 5.6 mg/L
 Dashed line: Predicted DO(bottom) at SR5 during wet season - 3.8 mg/L



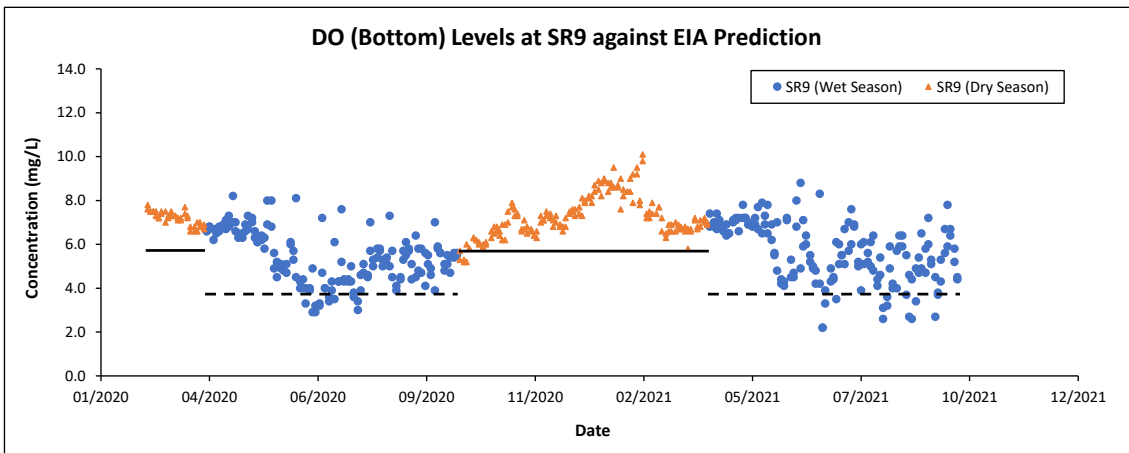
Solid line: Predicted DO (bottom) at SR6 during dry season - 5.9 mg/L
 Dashed line: Predicted DO(bottom) at SR6 during wet season - 3.8 mg/L



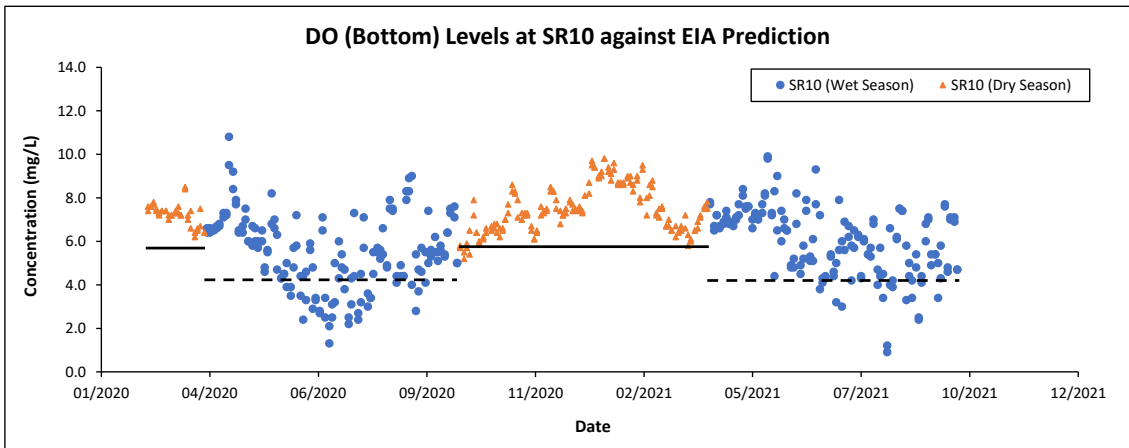
Solid line: Predicted DO (bottom) at SR7 during dry season - 5.9 mg/L
 Dashed line: Predicted DO(bottom) at SR7 during wet season - 3.8 mg/L



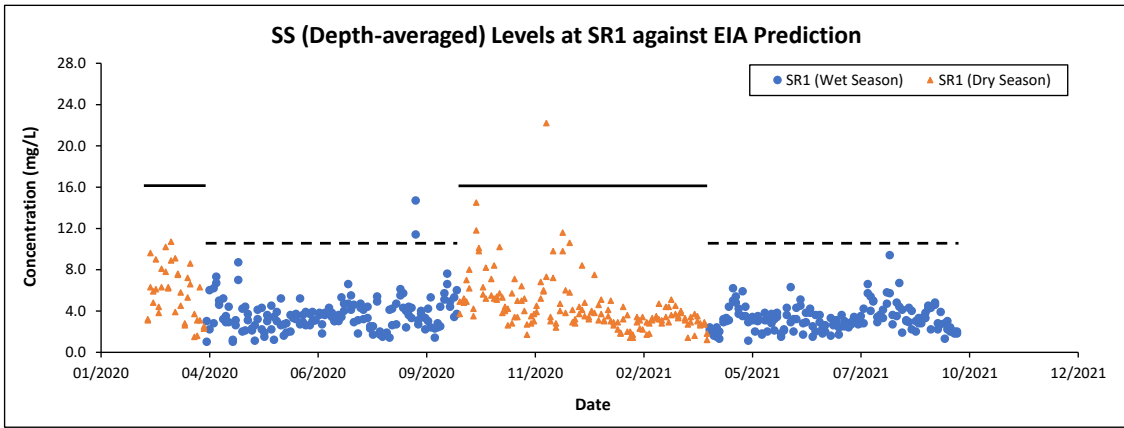
Solid line: Predicted DO (bottom) at SR8 during dry season - 5.8 mg/L
 Dashed line: Predicted DO(bottom) at SR8 during wet season - 2.8 mg/L



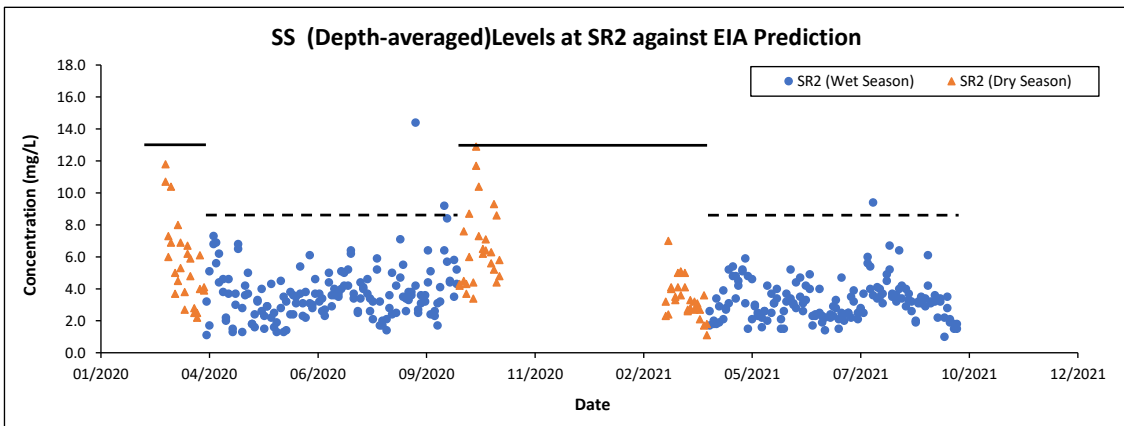
Solid line: Predicted DO (bottom) at SR9 during dry season - 5.7 mg/L
 Dashed line: Predicted DO(bottom) at SR9 during wet season - 3.7 mg/L



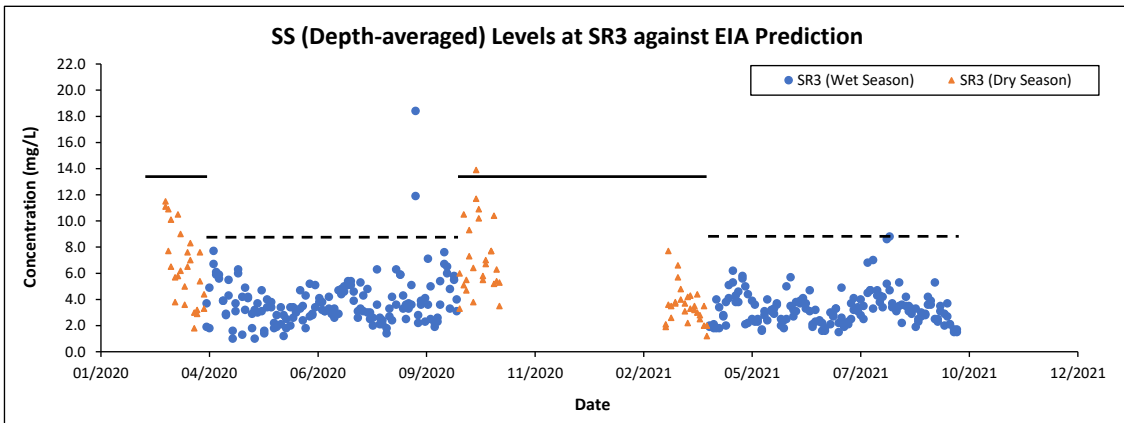
Solid line: Predicted DO (bottom) at SR10 during dry season - 5.8 mg/L
 Dashed line: Predicted DO(bottom) at SR10 during wet season - 4.2 mg/L



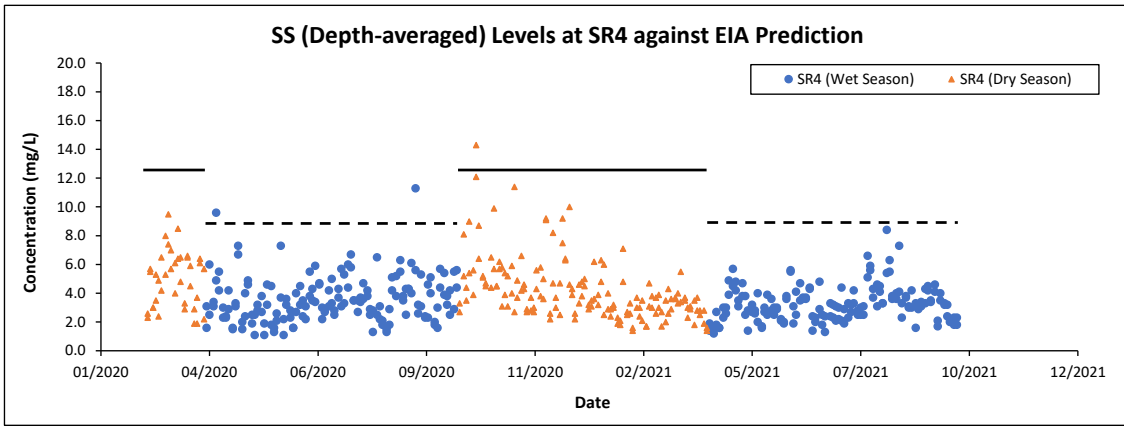
Solid line: Predicted SS (depth-averaged) at SR1 during dry season - 16.1 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR1 during wet season - 10.5 mg/L
 Monitored for SS only



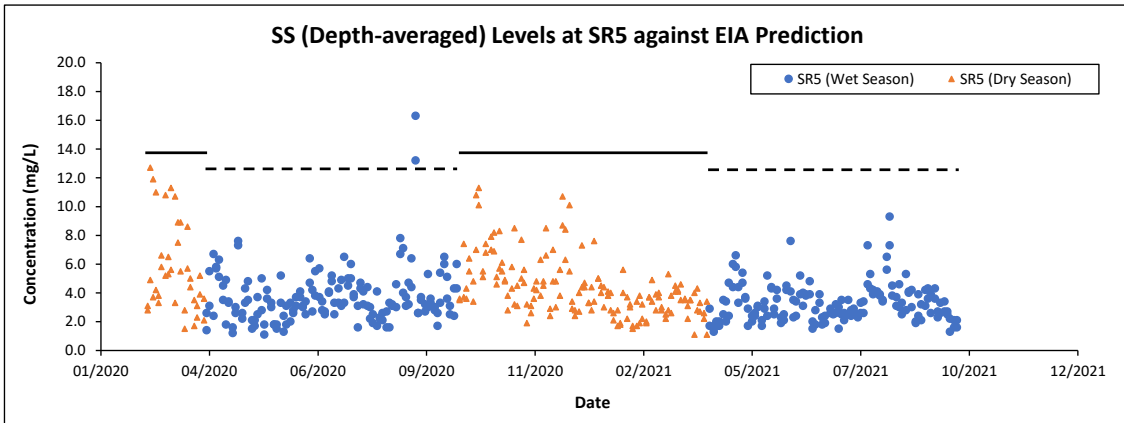
Solid line: Predicted SS (depth-averaged) at SR2 during dry season - 13.0 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR2 during wet season - 8.6 mg/L
 Monitored during bathing season only (March to October inclusive)



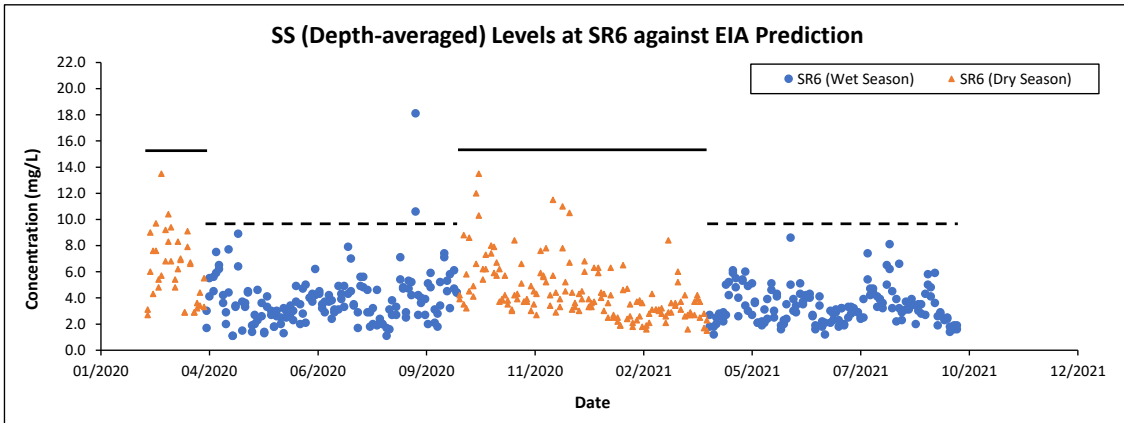
Solid line: Predicted SS (depth-averaged) at SR3 during dry season - 13.4 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR3 during wet season - 8.8 mg/L
 Monitored during bathing season only (March to October inclusive)



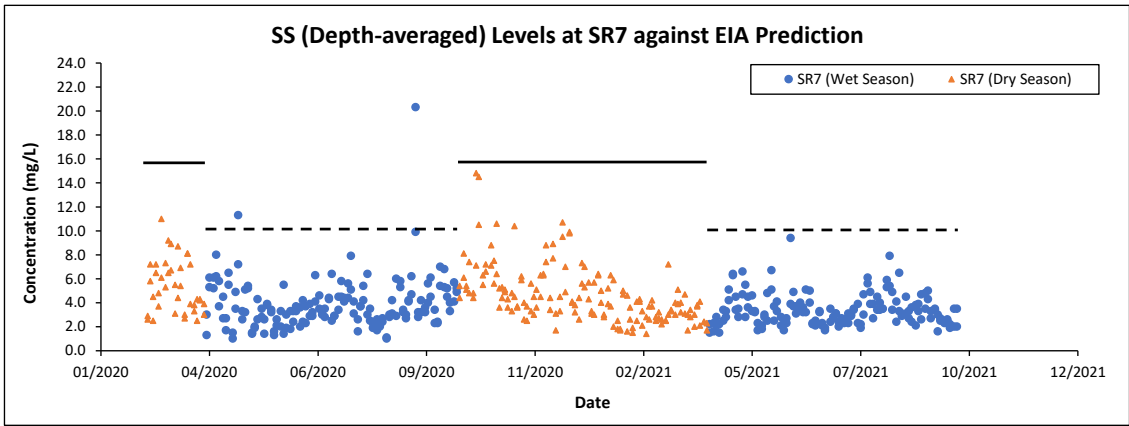
Solid line: Predicted SS (depth-averaged) at SR4 during dry season - 12.6 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR4 during wet season - 8.9 mg/L



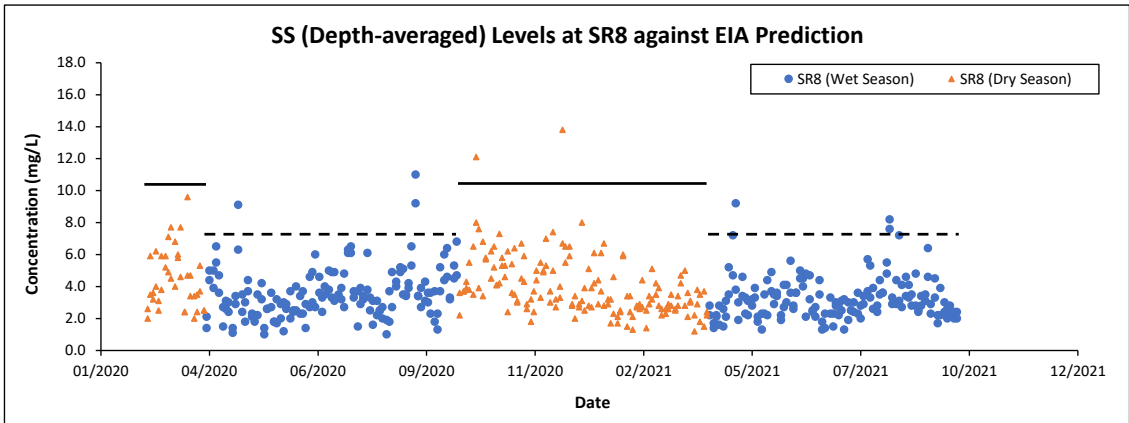
Solid line: Predicted SS (depth-averaged) at SR5 during dry season - 13.8 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR5 during wet season - 12.6 mg/L



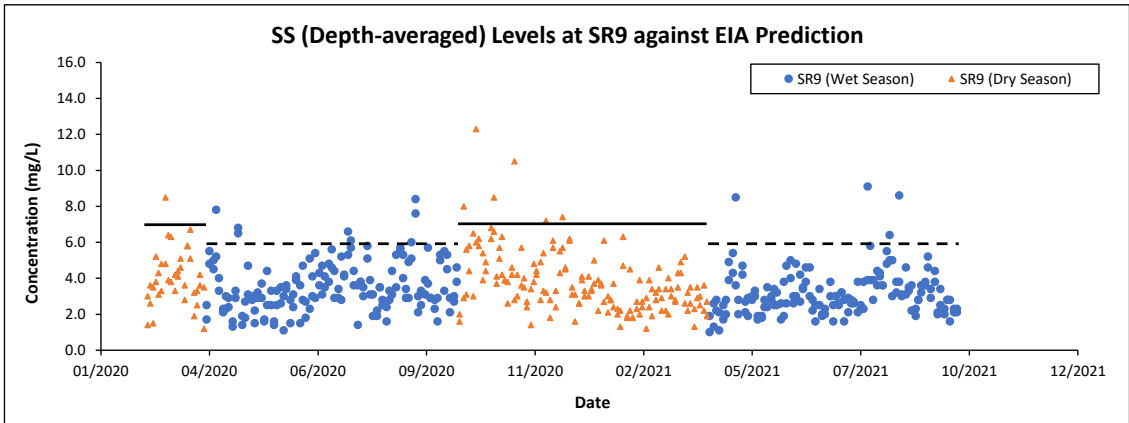
Solid line: Predicted SS (depth-averaged) at SR6 during dry season - 15.3 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR6 during wet season - 9.7 mg/L



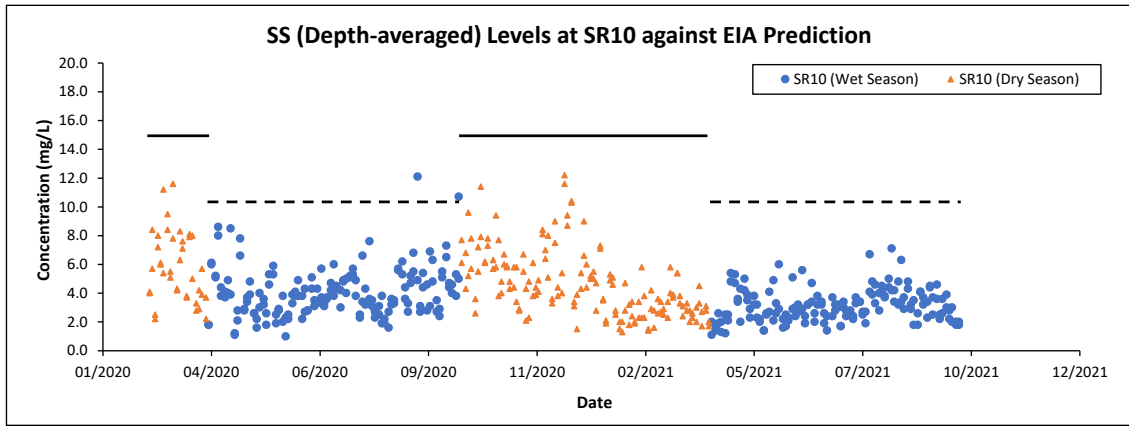
Solid line: Predicted SS (depth-averaged) at SR7 during dry season - 15.7 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR7 during wet season - 10.1 mg/L



Solid line: Predicted SS (depth-averaged) at SR8 during dry season - 10.4 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR8 during wet season - 7.3 mg/L



Solid line: Predicted SS (depth-averaged) at SR9 during dry season - 7.0 mg/L
 Dashed line: Predicted SS (depth-averaged) at SR9 during wet season - 5.9 mg/L



Solid line: Predicted SS (depth-averaged) at SR10 during dry season - 15.0 mg/L
Dashed line: Predicted SS (depth-averaged) at SR10 during wet season - 10.3 mg/L

Annex D Alert/Event and Action Plans

C1: Event and Action Plan for Water Quality at SR Stations

Event	Action			
	ET Leader	IEC	Engineer	Contractor
Action level being exceeded by one sampling day	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.

Event	Action			
	ET Leader	IEC	Engineer	Contractor
Limit Level being exceeded by one sampling day	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.

C2. 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.

C3. 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

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.

Summary of Findings

General

- No environmental deficiency identified.

Water Quality & Marine Ecology

- Silt plume was observed during the course of dredging by TSHD in February and March 2020. 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 8m ³ (except near the submarine pipeline where smaller grabs may be used).	C
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	C
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 hoppers/ TSHD for monitoring the mud dumping activities.	C

Remarks:

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