IMPACT MONITORING REPORT

Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit

Seventeenth Weekly Impact Monitoring Report - 17th March to 23rd March 2008

28th March 2008

Environmental Resources Management
21/F Lincoln House
Taikoo Place 979 King's Road
Island East Hong Kong
Telephone 2271 3000
Facsimile 2723 5660

www.erm.com

Delivering sustainable solutions in a more competitive world

CLP Power

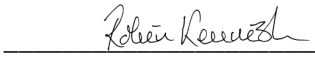
Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit: *Seventeenth Weekly Impact Monitoring Report – 17th March 2008 – 23rd March 2008*

March 2008

Reference 0072833

For and on behalf of
ERM-Hong Kong, Limited

Approved by: Dr Robin Kennish

Signed: 

Position: Director

Date: 28 March 2008

CONTENTS

EXECUTIVE SUMMARY		*I*
1	*INTRODUCTION*	*1*
1.1	*PURPOSE OF THE REPORT*	*1*
1.2	*STRUCTURE OF THE REPORT*	*1*
2	*PROJECT INFORMATION*	*3*
2.1	*BACKGROUND*	*3*
2.2	*SITE DESCRIPTION*	*4*
2.3	*MARINE CONSTRUCTION WORKS UNDERTAKEN DURING REPORTING WEEK*	*4*
2.4	*PROJECT ORGANISATION*	*4*
2.5	*STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS*	*4*
3	*ENVIRONMENTAL MONITORING REQUIREMENT*	*5*
3.1	*MONITORING LOCATIONS*	*5*
3.2	*MONITORING PARAMETERS AND FREQUENCY*	*6*
3.3	*MONITORING EQUIPMENT AND METHODOLOGY*	*7*
4	*IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES*	*11*
4.1	*RECOMMENDED MITIGATION MEASURES*	*11*
4.2	*IMPLEMENTATION STATUS OF MITIGATION MEASURES*	*11*
5	*MONITORING RESULTS*	*13*
5.1	*IMPACT MONITORING RESULTS*	*13*
5.2	*DOLPHIN MONITORING*	*13*
5.3	*TIDAL FLOW DIRECTION MONITORING*	*13*
6	*ENVIRONMENTAL NON-CONFORMANCES*	*14*
6.1	*SUMMARY OF ENVIRONMENTAL EXCEEDANCE*	*14*
6.2	*SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE*	*16*
6.3	*SUMMARY OF ENVIRONMENTAL COMPLAINT*	*16*
6.4	*SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION*	*16*
7	*FUTURE KEY ISSUES*	*17*
7.1	*KEY ISSUES FOR THE COMING MONTH*	*17*
7.2	*MONITORING SCHEDULE FOR THE COMING MONTHS*	*17*
8	*REVIEW OF THE EM&A AND IMPACT ASSESSEMENT PREDICTIONS*	*18*
9	*CONCLUSIONS*	*19*

LIST OF TABLES

Table 2.1	*Summary of Environmental Licensing, Notification, Permit and Reporting Status*
Table 3.1	*Co-ordinates of Water Quality Monitoring Stations (HK Grid)*
Table 3.2	*Action and Limit Levels for Water Quality for the Tuen Mun Landing Site*
Table 3.2	*Action and Limit Levels for Water Quality for the Airport Landing Site*
Table 3.3	*Event and Action Plan for Water Quality*
Table 6.1	*Exceedances of Action and Limit Levels of Depth-averaged Turbidity (NTU) and Suspended Solids (mg/L) during Mid-ebb Tide on 20 March 2008*
Table 6.2	*Exceedances of Action and Limit Levels of Depth-averaged Turbidity (NTU) during Mid-ebb Tide on 23 March 2008*

LIST OF ANNEXES

Annex A	Works Programme of the period between 17 March to 23 March 2008
Annex B	Project Organisation Chart (with Contact Details)
Annex C	Tentative Monitoring Schedule
Annex D	QA/QC Results of Laboratory Testing for Suspended Solids
Annex E	Impact Water Quality Monitoring Results
Annex F	Dolphin Observation Recording Forms

The construction works for the Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit (Application No. *DIR-143/2006*) commenced on 10 November 2007. This is the 17th weekly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 17 to 23 March 2008 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during the Reporting Period

Carryover from last week, cable laying works between the Airport and Tuen Mun landing sites were continued from 17 to 20 March 2008. Then, cable landing works were conducted at the Airport landing site on 21 March 2008. Following this, cable lay barge preparation works were undertaken on 22 and 23 March 2008.

Water Quality

Six monitoring events were scheduled between 17 March and 23 March 2008 at the Airport and Tuen Mun landing sites. All monitoring events at all designated monitoring stations were performed on schedule, ie on 18 March, 20 March and 23 March 2008 at Tuen Mun, and on 17 March, 19 March and 21 March 2008 at the Airport.

All measured dissolved oxygen levels complied with the Action and Limit (AL) Levels, and all measured Turbidity and Suspended Solids (SS) levels were below AL Levels with exception of 20 and 23 March 2008.

Environmental Non-conformance

Seven exceedances of Action and Limit Levels were recorded on two monitoring days, ie 20 and 23 March 2008 in the reporting week. The exceedances were examined against the construction works. It was concluded that they were isolated cases and unlikely related to the Project.

No non-compliance event was recorded during the reporting week.

No complaint and summons/prosecution was received during the reporting week.

Future Key Issues

During the following week (ie 24 to 30 March 2008), cable landing works will be undertaken at the Tuen Mun landing site and cable lay barge preparation works will be carried out. In addition, backfilling and installation of concrete slabs will be conducted inside the restriction zone near the Tuen Mun landing site.

1 INTRODUCTION

ERM-Hong Kong, Limited (ERM) was appointed by CLP Power (CLP) as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for the Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit (thereinafter called the ('Project')).

1.1 PURPOSE OF THE REPORT

This is the 17th weekly EM&A report, which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 17 to 23 March 2008.

1.2 STRUCTURE OF THE REPORT

The structure of the report is as follows:

Section 1 : ***Introduction***
Details the background, purpose and structure of the report.

Section 2 : ***Project Information***
Summarises background and scope of the project, site description, project organisation and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licenses during the reporting period.

Section 3 : ***Environmental Monitoring Requirement***
Summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels, Event / Action Plans, environmental mitigation measures as recommended in the EIA report and relevant environmental requirements.

Section 4 : ***Implementation Status on Environmental Mitigation Measures***
Summarises the implementation of environmental protection measures during the reporting period.

Section 5 : ***Monitoring Results***
Summarises the monitoring results obtained in the reporting period.

Section 6 : ***Environmental Non-conformance***
Summarises any monitoring exceedance, environmental complaints and environmental summons within the reporting period.

Section 7 : ***Future Key Issues***
Summarises the monitoring schedule for the next week.

Section 8 : ***Review of EM&A Data and Impact Assessment Predictions***
Compares and contrasts the EM&A data in the reporting period with the impact assessment predictions and annotates with explanations of discrepancies.

Section 9 : ***Conclusions***
Presents the key findings of the impact monitoring results.

2 PROJECT INFORMATION

2.1 BACKGROUND

CLP will install a 132 kV submarine cable circuit to connect Castle Peak Power Station and Hong Kong International Airport in order to meet the electricity load growth at the Airport.

The proposed cable route will start from Tuen Mun and extend southward crossing the Urmston Road to the Airport. The cable landing sites will be located to the west of Butterfly Beach, Tuen Mun and at the northern part of the platform of the Airport (see *Figure 2.1*).

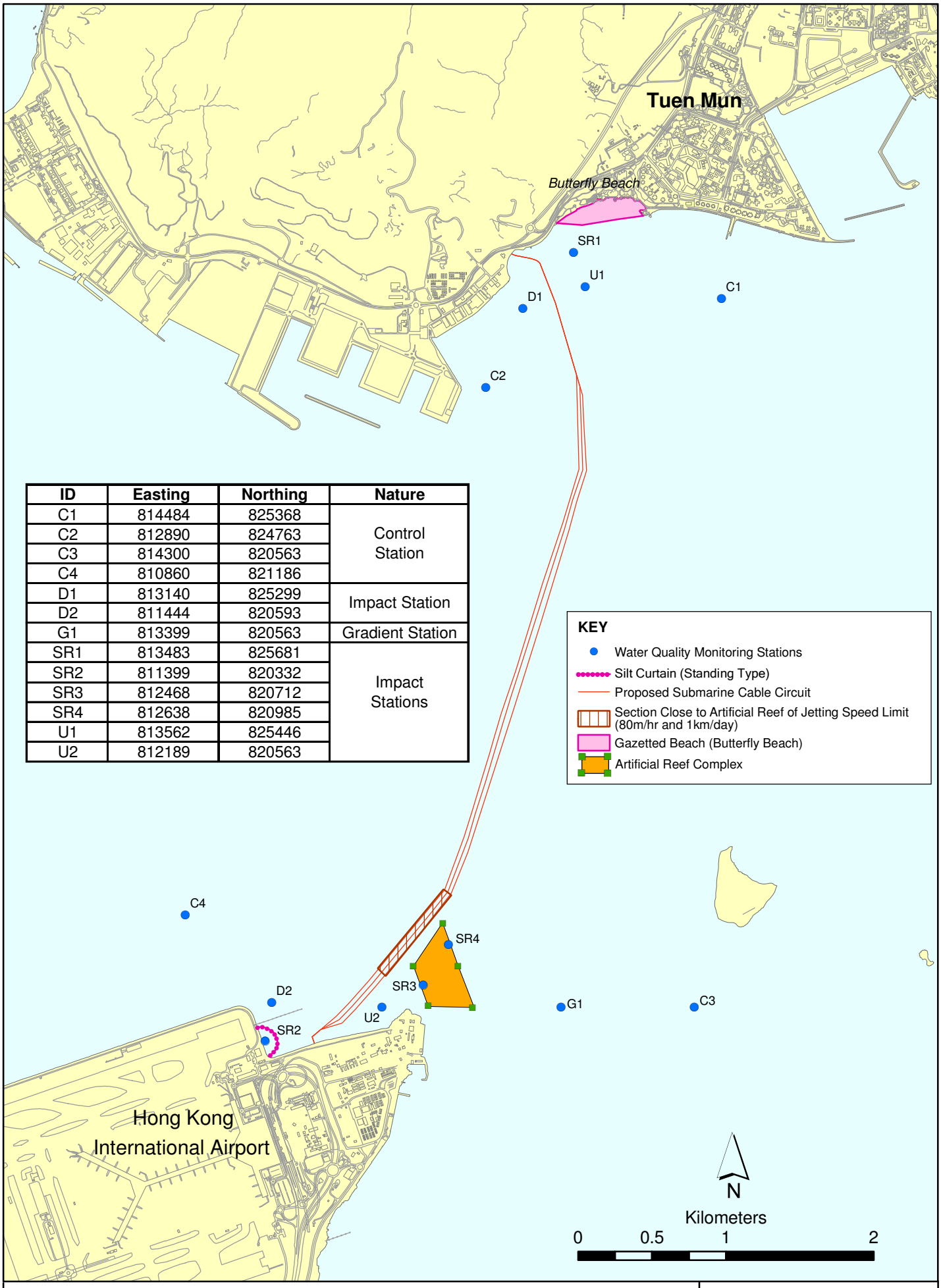
In September 2006, a Project Profile (PP) for the proposed 132kV Cable Route for Airport "A" to Castle Peak CCTS (thereinafter called the 'Project') was prepared and submitted to the Environmental Protection Department (EPD) under the *Environmental Impact Assessment Ordinance (EIAO)* for application for Permission to apply directly for Environmental Permit (EP) (Application No. *DIR-143/2006*).

An Environmental Permit (*EP-267/2007*) for the works was granted on 29 March 2007. Under the requirements of *Condition 2.12* of the EP, an EM&A programme as set out in the *Environmental Monitoring and Audit Manual (EM&A Manual)* is required to be implemented. In accordance with the *EM&A Manual*, impact monitoring of water quality is required for the Project.

Baseline Monitoring was conducted at Tuen Mun landing site between 18 October and 28 October 2007. Through communications with EPD, a silt curtain at the water intake of the Airport should already be in place during the baseline monitoring. EPD hence advised the baseline monitoring (thereinafter called *Baseline Environmental Monitoring Part B*) for the Airport East section of works should be postponed until a silt curtain is ready. The baseline monitoring for Tuen Mun section of the Project and sediment quality testing were hence undertaken first (thereinafter called *Baseline Environmental Monitoring Part A*) and the results were presented in *Part A* of the report which was submitted to EPD.

The silt curtains were installed at the Airport seawater intake on 20 December 2007 and *Baseline Environmental Monitoring Part B* was then carried out between 22 December 2007 and 2 January 2008.

Impact Monitoring has been carried out at Tuen Mun landing site since 10 November 2007 and at Airport landing site since 16 January 2008. This report, therefore, presents results of the data from monitoring stations around the Tuen Mun and Airport landing sites (*Figure 2.1)*. Results of the impact monitoring data will therefore be compared against the results of the *Baseline Environmental Monitoring Part A* and *Part B*.



ID	Easting	Northing	Nature
C1	814484	825368	Control Station
C2	812890	824763	
C3	814300	820563	
C4	810860	821186	
D1	813140	825299	Impact Station
D2	811444	820593	
G1	813399	820563	Gradient Station
SR1	813483	825681	Impact Stations
SR2	811399	820332	
SR3	812468	820712	
SR4	812638	820985	
U1	813562	825446	
U2	812189	820563	

FIGURE 2.1

Location of Water Quality Monitoring Stations

File: 0072833_new_fig1.2.mxd
Date: 09/1/2008

Environmental Resources Management

ERM

2.2 SITE DESCRIPTION

The proposed 132kV cable is located in-between Tuen Mun and the Hong Kong International Airport. The alignment of the cable is illustrated in *Figure 2.1*.

2.3 MARINE CONSTRUCTION WORKS UNDERTAKEN DURING REPORTING WEEK

During the reporting week, cable laying works between the Airport and Tuen Mun landing sites were carried out from 17 to 20 March 2008. Then, cable landing works were conducted at the Airport landing site on 21 March 2008. Following this, cable lay barge preparation works were undertaken on 22 and 23 March 2008.

The works programme of the period between 17 and 23 March 2008 is presented in *Annex A*.

2.4 PROJECT ORGANISATION

The Project Organisation chart and contact details are shown in *Annex B.*

2.5 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS

A summary of the relevant permits, licences, notifications and/or reports on environmental protection for this Project is presented in *Table 2.1*.

Table 2.1 Summary of Environmental Licensing, Notification, Permit and Reporting Status

Permit / Licence / Notification / Report	Reference	Validity Period	Remarks
EM&A Manual	-	Throughout the construction period	submitted on 25 January 2007
Environmental Permit	EP-267/2007	Throughout the construction period	granted on 29 March 2007
Baseline Environmental Monitoring Report (Part A)	-	Throughout the construction period for Tuen Mun Section	approved by EPD on 8 November 2007
Baseline Environmental Monitoring Report (Part B)	-	Throughout the construction period for Airport Section	approved by EPD on 16 January 2008

3.1 MONITORING LOCATIONS

In accordance with the *EM&A Manual*, prior to the installation of the cable, water quality sampling was undertaken at stations situated around the cable laying works area at Tuen Mun and the Airport. The locations of the sampling stations are shown in *Figure 2.1*.

- C1 and C2 are Control Stations located over 1 km away from the Tuen Mun landing point and hence are not expected to be influenced by the construction works due to their remoteness;
- U1 and D1 are Gradient Stations situated approximately 300 m either side of the cable alignment for monitoring the effect of dredging at the Tuen Mun landing point and for identifying the source of impact; and,
- SR1 is a Sensitive Receiver used to monitor the effect of the construction works on Butterfly Beach.
- C3 and C4 are Control Stations near the Airport, which are not expected to be influenced by the construction works due to their remoteness from the construction works.
- U2 and D2 are Impact Stations located approximately 300 m either from the cable alignment for monitoring the effect of dredging at the Airport landing point.
- SR2 is Impact Station (sensitive receiver) used to monitor the effect of the construction works to the Seawater Intake at the Airport.
- SR3 and SR4 are Impact Stations (sensitive receivers) used to verify the predictions concerning sediment plume dispersion during dredging at the areas close to the Artificial Reef (AR) and at the landing sites.
- G1 is Gradient Station which is situated in between C3 and the AR. It is used to determine the source of pollutants by comparing the monitoring results with those recorded at C3, SR3 and SR4. Since G1 is located between C3 and the construction work alignment, it serves the gradient function with C3 during flood tide, but has no relationship and function with C4 during ebb tide.

The co-ordinates of these monitoring stations are listed in *Table 3.1.*

Table 3.1 Co-ordinates of Water Quality Monitoring Stations (HK Grid)

Station	Nature	Easting	Northing
C1	Control Station	814483	825367
C2	Control Station	812890	824763
C3	Control Station	814300	820563
C4	Control Station	810860	821186
U1	Impact Station	813561	825446
U2	Impact Station	812189	820563
D1	Impact Station	813140	825298
D2	Impact Station	811444	820593
SR1	Impact Station	813483	825681
SR2	Impact Station	811399	820332
SR3	Impact Station	812468	820712
SR4	Impact Station	812638	820985
G1	Gradient Station	813399	820563

3.2 MONITORING PARAMETERS AND FREQUENCY

The impact water quality monitoring was conducted in accordance with the requirements stated in *EM&A Manual*. These are presented below.

3.2.1 Monitoring Parameters

Parameters measured *in situ* were:

- dissolved oxygen (DO) (% saturation and mg L^{-1});
- temperature (°C);
- turbidity (NTU); and
- salinity (‰).

The only parameter measured in the laboratory was:

- suspended solids (SS) (mgL^{-1}).

In addition to the water quality parameters, other relevant data were measured and recorded in field logs, including the location of the sampling stations, water depth, time, weather conditions, sea conditions, tidal state, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.

3.2.2 Monitoring Frequency

Impact water quality monitoring was carried out three times a week. The interval between two sets of monitoring was not less than 36 hours. The monitoring was undertaken at 13 locations (eight impact monitoring stations D1, D2, U1, U2, SR1, SR2, SR3 and SR4, one gradient station G1, and four control monitoring stations C1, C2, C3 and C4), as shown on *Figure 2.1.*

Samples were taken during mid-flood and mid-ebb tidal state on each sampling occasion.

3.3 MONITORING EQUIPMENT AND METHODOLOGY

3.3.1 Monitoring Equipment

Dissolved Oxygen, Temperature, Salinity, Turbidity Measuring Equipment

The instrument was a portable, weatherproof multi-parameter measuring instrument (YSI 6820) complete with cables, multi-probe sensor, comprehensive operation manuals, and was operable from a DC power source. It was capable of measuring:

- dissolved oxygen levels in the range of 0 – 50 mg L^{-1}; and 0-500% saturation;
- temperature of -5 to 50 °C;
- turbidity levels between 0-1000 NTU (response of the sensor was checked with certified standard turbidity solutions before the start of measurement); and,
- salinity in the range of 0-40 ppt (checked with 30 ppt Salinity solutions before the start of the measurement).

Water Depth Gauge

The water depth gauge affixed to the bottom of the water quality monitoring vessel was used.

Current Velocity and Direction

Current velocity and direction was estimated by conducting float tracking.

Positioning Device

A Global Positioning System (GPS) was used (C-Navigator World DGPS, GPS 72A) during monitoring to ensure the accurate recording of the position of the monitoring vessel before taking measurements. The use of DGPS was used for positioning device, which was well calibrated at appropriate checkpoint.

Water Sampling Equipment

Water samples for suspended solids measurement were collected by the use of a multi-bottle water sampling system (General Oceanics Inc., Rosette Sampler ROS02), consisting of PVC bottles of more than two litres, which could be effectively sealed with cups at both ends. The water sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.

3.3.2 Monitoring Methodology

Timing & Frequency

The water quality sampling was undertaken within a 3 hour window of 1.5 hours before and 1.5 hours after mid-flood and mid-ebb tides. Tidal range for flood and ebb tides was not less than 0.5m for capturing representative tides.

Reference was made to the predicted tides at Lok On Pai, which is the tidal station nearest to the Project site, published on the website of Hong Kong Observatory(1). Based on the predicted water levels at Lok On Pai, the impact water quality monitoring was conducted following the schedule presented in *Annex C*.

Duplicate samples were collected from each of the monitoring events for *in situ* measurements and laboratory analysis.

Depths

Each station was sampled and measurements were taken at three depths, 1 m below the sea surface, mid depth and 1m above the sea bed.

Protocols

The multi-parameter measuring instrument (YSI 6820) was checked and calibrated by an HOKLAS accredited laboratory before use. Onsite calibration was also carried out to check the responses of sensors and electrodes using certified standard solutions before each use. Sufficient stocks of spare parts were maintained for replacements when necessary, and backup monitoring equipment was made available.

Water samples for SS measurements were collected in high density polythene bottles, packed in ice (cooled to 4° C without being frozen), and delivered to an HOKLAS accredited laboratory as soon as possible after collection.

Laboratory Analysis

All laboratory work was carried out by an HOKLAS accredited laboratory. Water samples of about 1,000 mL were collected at the monitoring and control stations for carrying out the laboratory determinations. The determination work started within the next working day after collection of the water samples. The analyses followed the standard methods as described in *APHA Standard Methods for the Examination of Water and Wastewater*, 19th Edition, unless otherwise specified (APHA 2540D for SS).

The QA/QC details were in accordance with requirements of HOKLAS or another internationally accredited scheme (for details refer to *Annex D*).

(1) Hong Kong Observatory (2007) http://www.hko.gov.hk/tide/eLOPtide.htm [Accessed on 13 October 2007]

3.3.3 Action and Limit Levels

Two sets of the Action and Limit levels, which were established based on the results of *Baseline Environmental Monitoring Part A* and *Part B*, are presented in *Tables 3.2* and *3.3* respectively.

Table 3.2 Action and Limit Levels for Water Quality for the Tuen Mun Landing Site

Parameter	Unit	Tide	Depth	Action Level	Limit Level
Suspended Solids (SS)	mg L^{-1}	Mid-Ebb	Depth-averaged	12.8	13.3
		Mid-Flood	Depth-averaged	23.6	28.3
Dissolved Oxygen (DO)	mg L^{-1}	Mid-Ebb	Surface and Middle	5.2	4.0
			Bottom	5.3	2.0
		Mid-Flood	Surface and Middle	5.5	4.0
			Bottom	5.5	2.0
Turbidity	NTU	Mid-Ebb	Depth-averaged	7.0	8.3
		Mid-Flood	Depth-averaged	14.8	18.9

Table 3.2 Action and Limit Levels for Water Quality for the Airport Landing Site

Parameter	Unit	Tide	Depth	Action Level	Limit Level
Suspended Solids (SS)	mg L^{-1}	Mid-Ebb	Depth-averaged	21.6	29.8
		Mid-Flood	Depth-averaged	30.8	34.3
Dissolved Oxygen (DO)	mg L^{-1}	Mid-Ebb	Surface and Middle	6.6	4.0
			Bottom	6.9	2.0
		Mid-Flood	Surface and Middle	6.8	4.0
			Bottom	6.8	2.0
Turbidity	NTU	Mid-Ebb	Depth-averaged	17.4	25.9
		Mid-Flood	Depth-averaged	22.9	27.9

Notes:
(1) The results recorded at the gradient station during the mid-flood period will be used to decide whether any exceedance being recorded during mid-flood are arising from the marine works of this Project.
(2) Turbidity and SS levels will make reference to 120% and 130% of value recorded at the upstream control station during the same tidal conditions to assess the compliance of Action and Limit Levels respectively.

3.3.4 Event and Action Plan

The Event and Action Plan for water quality monitoring which was stipulated in the *EM&A Manual* is presented in *Table 3.3*.

Table 3.3 Event and Action Plan for Water Quality

Event	Action
Action Level Exceedance	**Step 1** - repeat sampling event; **Step 2** – identify source(s) of impact and confirm whether exceedance was due to the construction works; **Step 3** – inform EPD and LCSD and confirm notification of the non-compliance in writing; **Step 4** - discuss with cable installation contractor the most appropriate method of reducing suspended solids during cable installation (e.g. reduce cable laying speed/volume of water used during installation, increase effectiveness of silt curtain). **Step 5** - repeat measurements after implementation of mitigation for confirmation of compliance. **Step 6** - if non compliance continues - increase measures in Step 3 and repeat measurements in Step 3. If non compliance occurs a third time, suspend cable laying operations.
Limit Level Exceedance	Undertake **Steps 1-5** immediately, if further non compliance continues at the Limit Level, suspend cable laying operations until an effective solution is identified.

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

4.1 RECOMMENDED MITIGATION MEASURES

Mitigation measures for water quality control have been recommended in the Project Profile and the Environmental Permit. The Contractor is responsible for the design and implementation of the following measures.

During cable laying the following will be undertaken:

- Although the sediment loss during both grab dredging and suction dredging is expected to be quite small, the Contractor will be employing a silt curtain around the dredgers to reduce the dispersion of sediments from the landing points.
- Closed grab dredgers will be used to avoid dispersion of suspended solids into the sea.
- The maximum dredging rate at Tuen Mun shore approach will be limited to 1,500 m^3 day^{-1} for working 10 hours per day, i.e., 150 m^3 hr^{-1}.
- The maximum dredging rates of grab dredgers and suction method, whichever to be deployed by the contractor, at the Airport shore approach will be limited to 650 m^3 day^{-1} and 1,600 m^3 day^{-1} for working 16 hours per day, i.e., 41 m^3 hr^{-1} and 100 m^3 hr^{-1}.
- All barges used for the transport of dredged materials will be fitted with tight bottom seals in order to prevent leakage of material during loading and transport.
- All barges will be filled to a level, to ensure that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action.
- The forward speed of the jetting machine will be limited to a maximum of 80 m hr^{-1} and 24 hours operation.

4.2 IMPLEMENTATION STATUS OF MITIGATION MEASURES

In additional to the regulatory requirements as mentioned in *Section 4.1* above, the Contractor has implemented a precautionary measure for the works undertaken at the inshore area. As a precautionary measure, a silt curtain has been installed at the Airport seawater intake and five silt curtains have been installed at the five AR blocks along the direction facing the cable alignment during construction of the Project. In addition, the cable laying

works undertaken in the vicinity of the ARs will be restricted to periods when the tidal current is moving away from the artificial reef towards the works area.

5 MONITORING RESULTS

5.1 IMPACT MONITORING RESULTS

The monitoring data and graphical presentations of the results are included in *Annex E*. These are summarised below.

A total of six monitoring events were scheduled between 17 March and 23 March 2008 at the Tuen Mun and Airport landing sites. All monitoring events at all designated monitoring stations were performed on schedule, ie on 18 March, 20 March and 23 March 2008 at Tuen Mun, and on 17 March, 19 March and 21 March at the Airport.

No major activities influencing the water quality were identified between 17 and 23 March 2008.

All measured dissolved oxygen levels compiled with the Action and Limit (AL) Levels, while Turbidity and Suspended Solids (SS) levels were all below AL Levels during the reporting week (*Annex E*), with exception of 20 and 23 March 2008.

5.2 DOLPHIN MONITORING

In accordance with the EM&A Manual, dolphin monitoring has been conducted during the cable laying (jetting) operations on 17, 18, 19, and 20 March 2008. During the reporting period, no dolphin sightings were recorded. The dolphin observation recording forms are included in *Annex F*.

5.3 TIDAL FLOW DIRECTION MONITORING

During the reporting week, no cable laying operations were conducted near the AR restricted zone as shown in *Figure 2.1*. Hence, no current flow data were reported.

6.1 SUMMARY OF ENVIRONMENTAL EXCEEDANCE

6.1.1 Exceedance on 20 March 2008

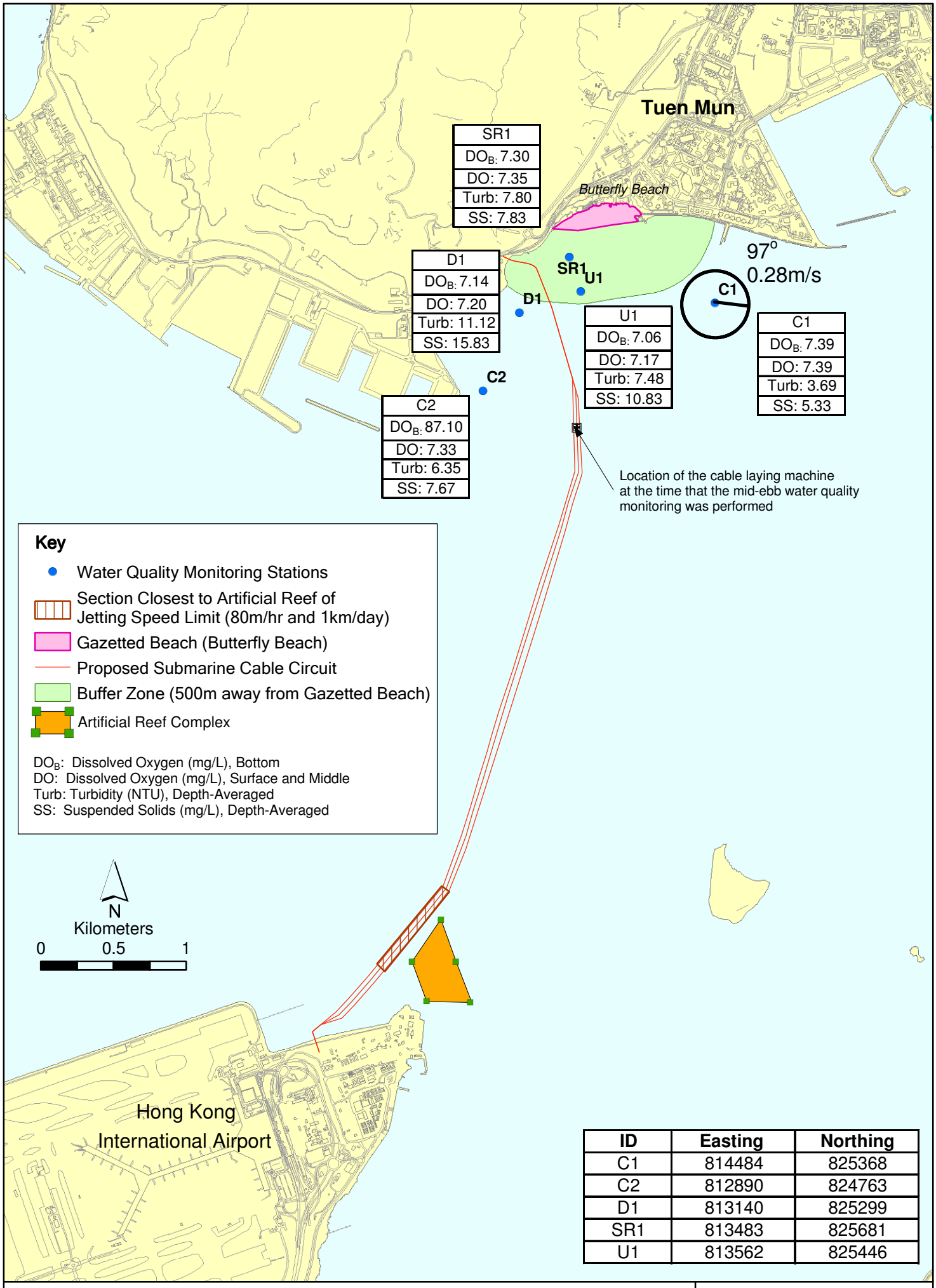
Exceedances of the Action and Limits Levels of depth-averaged Turbidity and Suspended Solids (SS) were recorded at Stations D1, U1 and SR1 during mid-ebb tide on 20 March 2008 (*Table 6.1*).

Table 6.1 Exceedances of Action and Limit Levels of Depth-averaged Turbidity (NTU) and Suspended Solids (mg/L) during Mid-ebb Tide on 20 March 2008

Exceedance Log No.	0072833_20 Mar 08_Turb_E_Station D1 0072833_20 Mar 08_SS_E_Station D1 0072833_20 Mar 08_Turb_E_Station U1 0072833_20 Mar 08_Turb_E_Station SR1	
Sampling date	20 March 2008	
Monitoring station	D1, U1, SR1	
Action Levels (mg/L)	Mid-ebb	Turbidity = 7.0 SS = 12.8
	Mid-flood	Turbidity = 14.8 SS = 23.6
Limit Levels (mg/L)	Mid-ebb	Turbidity = 8.3 SS = 13.3
	Mid-flood	Turbidity = 18.9 SS = 28.3
Measured Levels (mg/L) at D1	Mid-ebb	Turbidity = 11.12 (exceeds Limit Level) SS = 15.83 (exceeds Limit Level)
	Mid-flood	Turbidity = 5.40 SS = 7.50
Measured Levels (mg/L) at U1	Mid-ebb	Turbidity = 7.48 (exceeds Action Level) SS = 10.83
	Mid-flood	Turbidity = 5.37 SS = 8.17
Measured Levels (mg/L) at SR1	Mid-ebb	Turbidity = 7.80 (exceeds Action Level) SS = 7.83
	Mid-flood	Turbidity = 4.11 SS = 6.00

According to the work programme provided by the Contractor (*Annex A*), the Contractor confirmed jetting operations works were carried out approximately 1.3 km away from Butterfly Beach on 20 March 2008 (see *Figure 6.1*). It should be noted that jetting operations were undertaken at a relatively remote location from the Project site, ie 880 m, 934 m and 1170 m away from the monitoring stations D1, U1 and SR1, respectively.

During mid-ebb, D1 was located upstream of the Project site where was unlikely to be influenced by Project activities. The turbidity and SS levels measured at station D1 were however higher than those recorded at the downstream stations U1 and SR1. This suggests the exceedances may be due to high background levels of turbidity and SS.



ID	Easting	Northing
C1	814484	825368
C2	812890	824763
D1	813140	825299
SR1	813483	825681
U1	813562	825446

Figure 6.1

Mid Ebb Water Quality Monitoring
(20 Mar 2008)

File: 0072833_mid_ebb_20080320.mxd
Date: 11/04/2008

Environmental Resources Management
ERM

In addition, turbidity and SS levels of all Impact Stations did not show non-compliance during the subsequent mid-flood tidal conditions

Based on the above, the exceedance was unlikely to be caused by the Project. No action was therefore required.

The exceedance incident has been notified to EPD and LCSD.

6.1.2 Exceedance on 23 March 2008

Exceedances of the Action and Limits Levels of depth-averaged Turbidity were recorded at Stations D1, U1 and SR1 during mid-ebb tide on 23 March 2008 (*Table 6.2*).

Table 6.2 Exceedances of Action and Limit Levels of Depth-averaged Turbidity (NTU) during Mid-ebb Tide on 23 March 2008

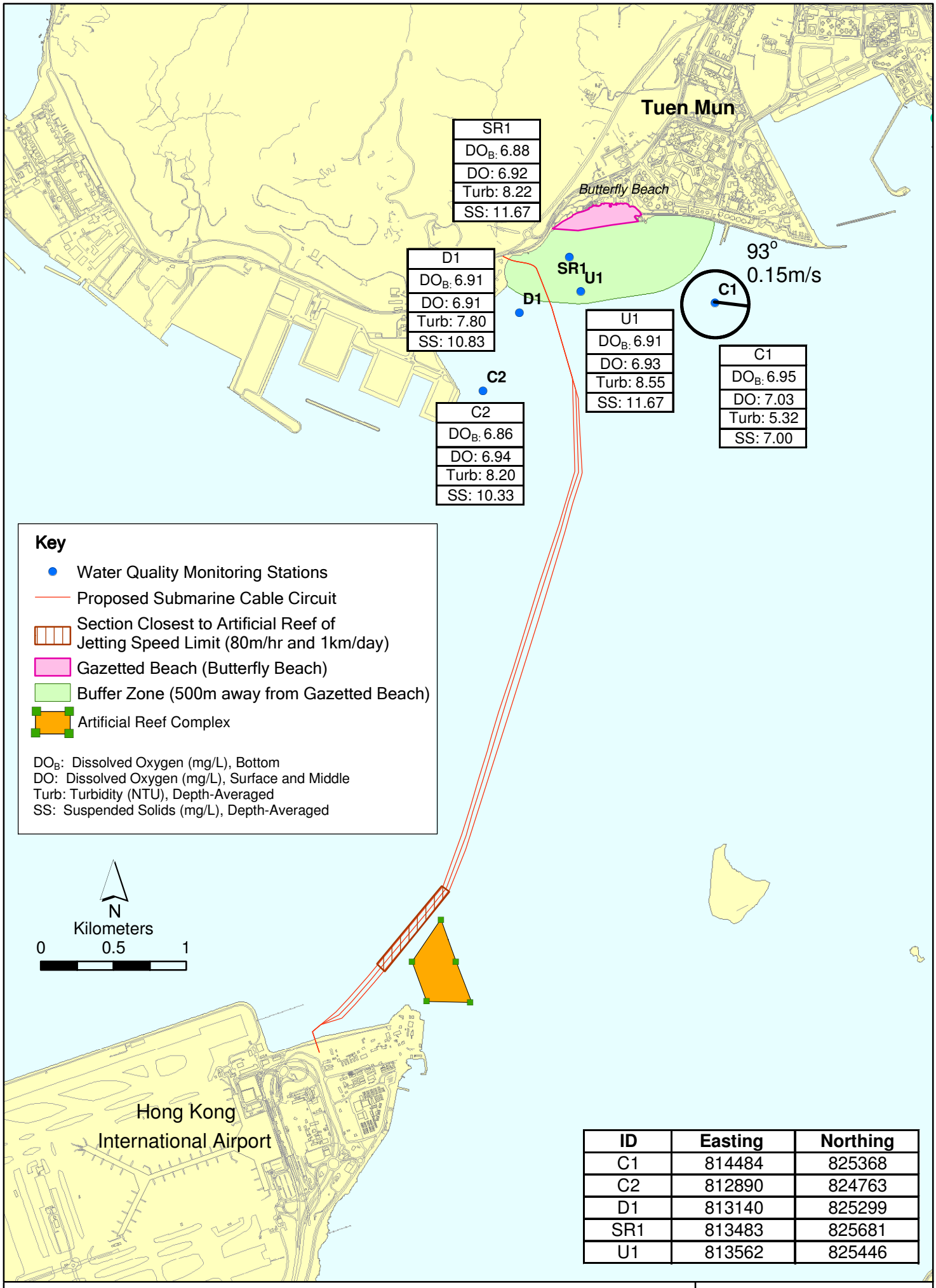
Exceedance Log No.	0072833_23 Mar 08_Turb_E_Station D1 0072833_23 Mar 08_Turb_E_Station U1 0072833_23 Mar 08_Turb_E_Station SR1	
Sampling date	23 March 2008	
Monitoring station	D1, U1, SR1	
Action Levels (mg/L)	Mid-ebb	Turbidity = 7.0
	Mid-flood	Turbidity = 14.8
Limit Levels (mg/L)	Mid-ebb	Turbidity = 8.3
	Mid-flood	Turbidity = 18.9
Measured Levels (mg/L) at D1	Mid-ebb	Turbidity = 7.80 (exceeds Action Level)
	Mid-flood	Turbidity = 7.46
Measured Levels (mg/L) at U1	Mid-ebb	Turbidity = 8.55 (exceeds Limit Level)
	Mid-flood	Turbidity = 8.87
Measured Levels (mg/L) at SR1	Mid-ebb	Turbidity = 8.22 (exceeds Action Level)
	Mid-flood	Turbidity = 6.89

The Contractor confirmed that cable lay barge preparation works were carried out near the Tuen Mun landing site on 23 March 2008. No jetting operations were undertaken.

It was observed that the turbidity levels recorded at Stations D1, U1 and SR1 were in similar magnitude to that measured at the upstream control station C2 (see *Figure 6.2*), at where it was unlikely to be affected by Project works. Hence, the exceedances may be due to a high background level of turbidity.

Moreover, turbidity levels of all Impact Stations did not show non-compliance during the subsequent mid-flood tidal conditions and persist occurrence of exceedance was not observed. The exceedances were therefore considered to be an isolated case and may be caused by natural fluctuation. No action was therefore required.

The exceedance incident has been notified to EPD and LCSD.



ID	Easting	Northing
C1	814484	825368
C2	812890	824763
D1	813140	825299
SR1	813483	825681
U1	813562	825446

Figure 6.2

Mid Ebb Water Quality Monitoring
(23 Mar 2008)

File: 0072833_mid_ebb_20080323.mxd
Date: 26/03/2008

Environmental Resources Management
ERM

6.2 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

No non-compliance event was recorded during the reporting period.

6.3 SUMMARY OF ENVIRONMENTAL COMPLAINT

No complaint was received during the reporting period.

6.4 SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION

No summons or prosecution on environmental matters was received during the reporting period.

7 FUTURE KEY ISSUES

7.1 KEY ISSUES FOR THE COMING MONTH

During the following week (ie 24 to 30 March 2008), cable landing works will be undertaken at the Tuen Mun landing site and cable lay barge preparation works will be carried out. In addition, backfilling and installation of concrete slabs will be conducted inside the restriction zone near the Tuen Mun landing site.

The expected construction programme is enclosed in *Annex A*.

7.2 MONITORING SCHEDULE FOR THE COMING MONTHS

The tentative schedule of impact water quality monitoring in March 2008 is presented in *Annex C*. The environmental monitoring will be conducted at the same monitoring locations as those for this reporting week.

Cable laying (jetting) operations and landing works were carried out between the Airport and Tuen Mun land sites during the period of 17 March to 23 March 2008. The monitoring data collected are therefore compared with the impact assessment predictions in the Project Profile.

It should be noted that exceedances of Action and Limit Levels were recorded when there were no cable laying (jetting) operations undertaken. The exceedances were investigated (see *Section 6.1*) and considered unlikely due to the Project. The impact water quality monitoring results are in line with the conclusions made in the water quality impact assessment in the Project Profile.

9 CONCLUSIONS

This Weekly Impact Monitoring Report presents the EM&A work undertaken during the period from 17 March to 23 March 2008 in accordance with the EM&A Manual and the requirements under *EP-267/2007*.

Exceedances of Action and Limit Levels were recorded on 20 March and 23 March 2008 in the reporting week. The exceedances were examined against the construction works. It was concluded that they were isolated cases and unlikely related to the Project.

No non-compliance event was recorded during the reporting week.

No complaint and summons/prosecution was received during the reporting week.

The ET will keep track of the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Annex A

Works Programme of the Period between 17 March and 6 April 2008

Marine Work of 132kV Submarine Cable Installation between Airport to Tuen Mun

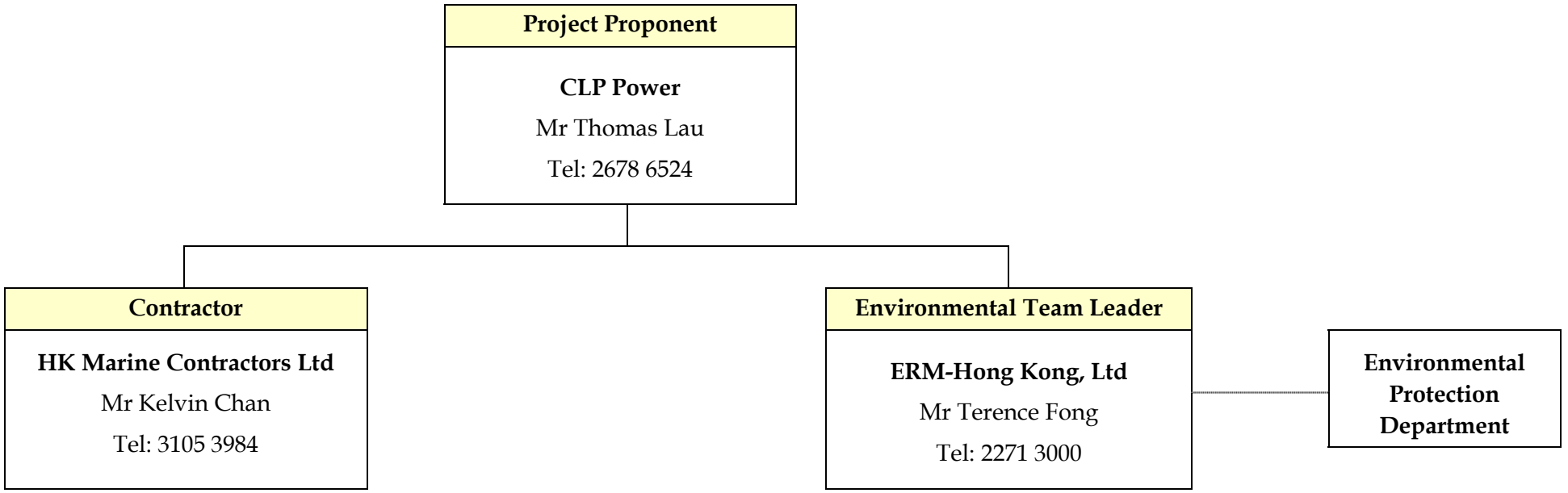
		Workdone for Last Week							Plan for This Week							Anticipate Plan for Next Week						
	Item Date	17/3	18/3	19/3	20/3	21/3	22/3	23/3	24/3	25/3	26/3	27/3	28/3	29/3	30/3	31/3	1/4	2/4	3/4	4/4	5/4	6/4
1	Mobilization of Plants																					
2	Utilities Detection																					
3	Mobilization of Marine Plant																					
4	Site Setting Out																					
5	Site Clearance																					
6	Installation of Silt Curtain																					
5	Rock Breaking (Land Portion)																					
6	Rock Breaking (Marine Portion)																					
7	Dredging (Tuen Mun)																					
8	Mobilization of Marine Plant																					
9	Dredging (Airport)																					
10	Mobilization of Cable Laying Barges																					
11	Cable Lay Barges Preparation Work																					
12	Installation of Silt Curtain (AR)																					
13	Cable Burial Machine Testing																					
14	Cable Laying																					
15	Cable Landing Work (Tuen Mun)																					
16	Cable Landing Work (Airport)																					
17	Backfill and Installation of Concrete Slabs (Tuen Mun) * inside the restriction zone.																					
18	Backfill and Installation of Concrete Slabs (Tuen Mun) * outside the restriction zone.																					

Prepared by: Hong Kong Marine Contractors Ltd.
Ref. No. MCERM-132AIRPORTTM-00503-08
Date: 30/03/2008

Annex B

Project Organisation Chart (with Contact Details)

ANNEX B - PROJECT ORGANIZATION (WITH CONTACT DETAILS)



Annex C

Tentative Monitoring Schedule

Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit
Tentative Water Quality Monitoring Schedule at Tuen Mun and Airport landing site - March 2008

Reference Tidal Station: Lok On Pai (source: HK Observatory Department)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Mar
						Mid-Flood 7:48 Mid-Ebb 20:34 *Impact Monitoring (Tuen Mun)*
2-Mar	3-Mar	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar
	Mid-Flood 10:15 Mid-Ebb 22:33 *Impact Monitoring (Airport)*	Mid-Ebb 11:26 Mid-Flood 16:06 *Impact Monitoring (Tuen Mun)*	Mid-Ebb 12:00 Mid-Flood 17:05 *Impact Monitoring (Airport)*	Mid-Ebb 12:32 Mid-Flood 17:55 *Impact Monitoring (Tuen Mun)*	Mid-Ebb 13:01 Mid-Flood 18:41 *Impact Monitoring (Airport)*	Mid-Ebb 13:31 Mid-Flood 19:26 *Impact Monitoring (Tuen Mun)*
9-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
	Mid-Flood 8:29 Mid-Ebb 14:41 *Impact Monitoring (Airport)*	Mid-Flood 8:56 Mid-Ebb 15:22 *Impact Monitoring (Tuen Mun)*	Mid-Flood 9:24 Mid-Ebb 16:09 *Impact Monitoring (Airport)*	Mid-Flood 9:54 Mid-Ebb 17:06 *Impact Monitoring (Tuen Mun)*	Mid-Flood 10:23 Mid-Ebb 18:13 *Impact Monitoring (Airport)*	
16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar
Mid-Flood 8:43 Mid-Ebb 21:19 *Impact Monitoring (Tuen Mun)*	Mid-Flood 10:04 Mid-Ebb 22:28 *Impact Monitoring (Airport)*	Mid-Ebb 11:23 Mid-Flood 16:28 *Impact Monitoring (Tuen Mun)*	Mid-Ebb 11:56 Mid-Flood 17:26 *Impact Monitoring (Airport)*	Mid-Ebb 12:27 Mid-Flood 18:13 *Impact Monitoring (Tuen Mun)*	Mid-Ebb 12:56 Mid-Flood 18:55 *Impact Monitoring (Airport)*	
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar
Mid-Ebb 13:51 Mid-Flood 20:10 *Impact Monitoring (Tuen Mun)*	Mid-Ebb 14:22 Mid-Flood 20:47 *Impact Monitoring (Airport)*	Mid-Flood 8:28 Mid-Ebb 14:54 *Impact Monitoring (Tuen Mun)*	Mid-Flood 8:49 Mid-Ebb 15:28 *Impact Monitoring (Airport)*	Mid-Flood 9:08 Mid-Ebb 16:06 *Impact Monitoring (Tuen Mun)*	Mid-Flood 9:20 Mid-Ebb 16:53 *Impact Monitoring (Airport)*	Mid-Flood 8:00 Mid-Ebb 17:54 *Impact Monitoring (Tuen Mun)*
30-Mar	31-Mar					
	Mid-Flood 8:08 Mid-Ebb 19:00 *Impact Monitoring (Airport)*					

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

Annex D

QA/QC Results of Laboratory Testing for Suspended Solids

CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9		
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0804287		
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong				
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com				
Telephone	: 2271 3000	Telephone	: +852 2610 1044				
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021				
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 18 Mar 2008		
Order number	: ----			Date of issue	: 20 Mar 2008		
C-O-C number	: ----			No. of samples	- Received	:	92
Site	: ----				- Analysed	:	92

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0804287 supersedes any previous reports with this reference. The completion date of analysis is 20 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0804287 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong, Chapter 553, Section 6.

Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 617305)								
HK0804287-001	2008/03/17/2202/C4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	13	14	11.0
	REPL. 1							
HK0804287-011	2008/03/17/2137/SR3/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	9	8	12.9
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 617306)								
HK0804287-021	2008/03/17/2153/D2/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	8	8	0.0
	REPL. 1							
HK0804287-031	2008/03/17/2126/SR4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	11	11	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 617307)								
HK0804287-043	2008/03/17/2108/SR2/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	6	7	0.0
	REPL. 1							
HK0804287-051	2008/03/17/0936/C4/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	8	9	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 617308)								
HK0804287-063	2008/03/17/0918/U2/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	8	0.0
	REPL. 2							
HK0804287-071	2008/03/17/0841/C3/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	12	11	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 617309)								
HK0804287-082	2008/03/17/0905/SR4/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	5	0.0
	REPL. 2							
HK0804287-091	2008/03/17/0901/SR2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	10	11	10.9
	REPL. 2							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		***Method Blank (MB) Results***			***Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results***						
					Spike	***Spike Recovery (%)***		***Recovery Limits (%)***		***RPDs (%)***	
Method: Analysis Description	***CAS number***	***LOR***	***Units***	***Result***	***Concentration***	***SCS***	***DCS***	***Low***	***High***	***Value***	***Control Limit***
EA/ED: Physical and Aggregate Properties (QCLot: 617305)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 617306)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 617307)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 617308)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 617309)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.5	----	85	115	----	----

CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 6		
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0804333		
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong				
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com				
Telephone	: 2271 3000	Telephone	: +852 2610 1044				
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021				
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 19 Mar 2008		
Order number	: ----			Date of issue	: 20 Mar 2008		
C-O-C number	: ----			No. of samples	- Received	:	60
Site	: ----				- Analysed	:	60

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0804333 supersedes any previous reports with this reference. The completion date of analysis is 20 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0804333 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong, Chapter 553, Section 6.

Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

				Duplicate (DUP) Results				
Laboratory Sample ID	*Client Sample ID*	*Method: Analysis Description*	*CAS number*	*LOR*	*Units*	*Original Result*	*Duplicate Result*	*RPD (%)*
EA/ED: Physical and Aggregate Properties (QC Lot: 618024)								
HK0804333-001	2008/03/18/1001/C1/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	4	4	0.0
	REPL. 1							
HK0804333-010	2008/03/18/1013/SR1/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	5	5	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 618025)								
HK0804333-021	2008/03/18/1026/D1/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	5	5	0.0
	REPL. 1							
HK0804333-031	2008/03/18/1533/C1/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	9	8	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 618026)								
HK0804333-041	2008/03/18/1544/SR1/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	5	6	0.0
	REPL. 2							
HK0804333-051	2008/03/18/1559/D1/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	4	4	0.0
	REPL. 1							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	*CAS number*	*LOR*	*Units*	*Result*	*Concentration*	*SCS*	*DCS*	*Low*	*High*	*Value*	*Control Limit*
EA/ED: Physical and Aggregate Properties (QCLot: 618024)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 618025)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 618026)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----

CERTIFICATE OF ANALYSIS

Client	:	**ERM HONG KONG**	Laboratory	:	**ALS Technichem (HK) Pty Ltd**	Page	: **1 of 10**
Contact	:	**MS JOANNA KWAN**	Contact	:	**Alice Wong**	Work Order	: **HK0804459**
Address	:	**21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG**	Address	:	**11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**		
E-mail	:	**Joanna.kwan@erm.com**	E-mail	:	**Alice.Wong@alsenviro.com**		
Telephone	:	**2271 3000**	Telephone	:	**+852 2610 1044**		
Facsimile	:	**2723 5660**	Facsimile	:	**+852 2610 2021**		
Project	:	**EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS**	Quote number	:	**----**	Date received	: **20 Mar 2008**
Order number	:	**----**				Date of issue	: **26 Mar 2008**
C-O-C number	:	**----**				No. of samples	- Received : **116**
Site	:	**----**					- Analysed : **116**

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0804459 supersedes any previous reports with this reference. The completion date of analysis is 25 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0804459 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong, Chapter 553, Section 6.

Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

				Duplicate (DUP) Results				
Laboratory Sample ID	*Client Sample ID*	*Method: Analysis Description*	*CAS number*	*LOR*	*Units*	*Original Result*	*Duplicate Result*	*RPD (%)*
EA/ED: Physical and Aggregate Properties (QC Lot: 619376)								
HK0804459-001	2008/03/19/1232/C4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	12	13	0.0
	REPL. 1							
HK0804459-011	2008/03/19/1208/SR3/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	9	9	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 619377)								
HK0804459-021	2008/03/19/1223/D2/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	7	7	0.0
	REPL. 1							
HK0804459-031	2008/03/19/1158/SR4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	18	16	9.9
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 619378)								
HK0804459-041	2008/03/19/1151/G1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	8	8	0.0
	REPL. 2							
HK0804459-045	2008/03/19/1059/SR2/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	12	12	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 619379)								
HK0804459-061	2008/03/19/1601/C4/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	6	0.0
	REPL. 1							
HK0804459-072	2008/03/19/1617/U2/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	9	8	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 619380)								
HK0804459-081	2008/03/19/1611/D2/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	6	0.0
	REPL. 2							
HK0804459-091	2008/03/19/1637/SR4/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	7	7	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 619381)								
HK0804459-101	2008/03/19/1614/SR2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	6	0.0
	REPL. 1							
HK0804459-111	2008/03/19/1739/M2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	6	0.0
	REPL. 1							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		***Method Blank (MB) Results***			***Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results***						
					Spike	***Spike Recovery (%)***		***Recovery Limits (%)***		***RPDs (%)***	
Method: Analysis Description	***CAS number***	***LOR***	***Units***	***Result***	***Concentration***	***SCS***	***DCS***	***Low***	***High***	***Value***	***Control Limit***
EA/ED: Physical and Aggregate Properties (QCLot: 619376)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 619377)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 619378)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 619379)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 619380)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 619381)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----

CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 6		
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0804576		
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong				
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com				
Telephone	: 2271 3000	Telephone	: +852 2610 1044				
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021				
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 25 Mar 2008		
Order number	: ----			Date of issue	: 28 Mar 2008		
C-O-C number	: ----			No. of samples	- Received	:	60
Site	: ----				- Analysed	:	60

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0804576 supersedes any previous reports with this reference. The completion date of analysis is 26 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0804576 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong, Chapter 553, Section 6.

Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

				Duplicate (DUP) Results				
Laboratory Sample ID	*Client Sample ID*	*Method: Analysis Description*	*CAS number*	*LOR*	*Units*	*Original Result*	*Duplicate Result*	*RPD (%)*
EA/ED: Physical and Aggregate Properties (QC Lot: 620792)								
HK0804576-001	2008/03/20/1146/C1/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	6	5	0.0
	REPL. 1							
HK0804576-011	2008/03/20/1159/SR1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	8	8	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 620793)								
HK0804576-022	2008/03/20/1216/D1/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	19	20	0.0
	REPL. 2							
HK0804576-031	2008/03/20/1711/C1/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	7	8	19.3
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 620794)								
HK0804576-041	2008/03/20/1725/SR1/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	8	8	0.0
	REPL. 2							
HK0804576-051	2008/03/20/1748/D1/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	9	9	0.0
	REPL. 1							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	*Spike Recovery (%)*		*Recovery Limits (%)*		*RPDs (%)*	
Method: Analysis Description	*CAS number*	*LOR*	*Units*	*Result*	*Concentration*	*SCS*	*DCS*	*Low*	*High*	*Value*	*Control Limit*
EA/ED: Physical and Aggregate Properties (QCLot: 620792)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620793)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620794)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.5	----	85	115	----	----

CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9		
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0804575		
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong				
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com				
Telephone	: 2271 3000	Telephone	: +852 2610 1044				
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021				
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 25 Mar 2008		
Order number	: ----			Date of issue	: 28 Mar 2008		
C-O-C number	: ----			No. of samples	- Received	:	92
Site	: ----				- Analysed	:	92

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0804575 supersedes any previous reports with this reference. The completion date of analysis is 26 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0804575 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong, Chapter 553, Section 6.

Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 619999)								
HK0804575-001	2008/03/21/1239/C4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	22	21	4.8
	REPL. 1							
HK0804575-011	2008/03/21/1215/SR3/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	10	10	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 620000)								
HK0804575-021	2008/03/21/1231/D2/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	17	17	0.0
	REPL. 1							
HK0804575-031	2008/03/21/1159/SR4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	16	15	8.1
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 620001)								
HK0804575-041	2008/03/21/1151/G1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	10	10	0.0
	REPL. 2							
HK0804575-051	2008/03/21/1847/C4/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	7	7	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 620002)								
HK0804575-061	2008/03/21/1816/U2/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	11	12	0.0
	REPL. 1							
HK0804575-071	2008/03/21/1729/C3/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	12	12	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 620003)								
HK0804575-081	2008/03/21/1758/SR4/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	22	21	0.0
	REPL. 2							
HK0804575-091	2008/03/21/1748/SR2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	13	14	0.0
	REPL. 2							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	*CAS number*	*LOR*	*Units*	*Result*	*Concentration*	*SCS*	*DCS*	*Low*	*High*	*Value*	*Control Limit*
EA/ED: Physical and Aggregate Properties (QCLot: 619999)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620000)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620001)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620002)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	92.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620003)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----

CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 6		
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0804582		
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong				
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com				
Telephone	: 2271 3000	Telephone	: +852 2610 1044				
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021				
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 25 Mar 2008		
Order number	: ----			Date of issue	: 27 Mar 2008		
C-O-C number	: ----			No. of samples	- Received	:	60
Site	: ----				- Analysed	:	60

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0804582 supersedes any previous reports with this reference. The completion date of analysis is 26 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0804582 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong, Chapter 553, Section 6.

Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Duplicate (DUP) Results				
				LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 620018)								
HK0804582-001	2008/03/23/1233/C1/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	7	6	0.0
	REPL. 1							
HK0804582-011	2008/03/23/1249/SR1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	12	12	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 620019)								
HK0804582-021	2008/03/23/1308/D1/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	9	9	0.0
	REPL. 1							
HK0804582-031	2008/03/23/1902/C1/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	13	13	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 620020)								
HK0804582-041	2008/03/23/1918/SR1/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	7	14.9
	REPL. 2							
HK0804582-051	2008/03/23/1936/D1/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	6	7	0.0
	REPL. 1							

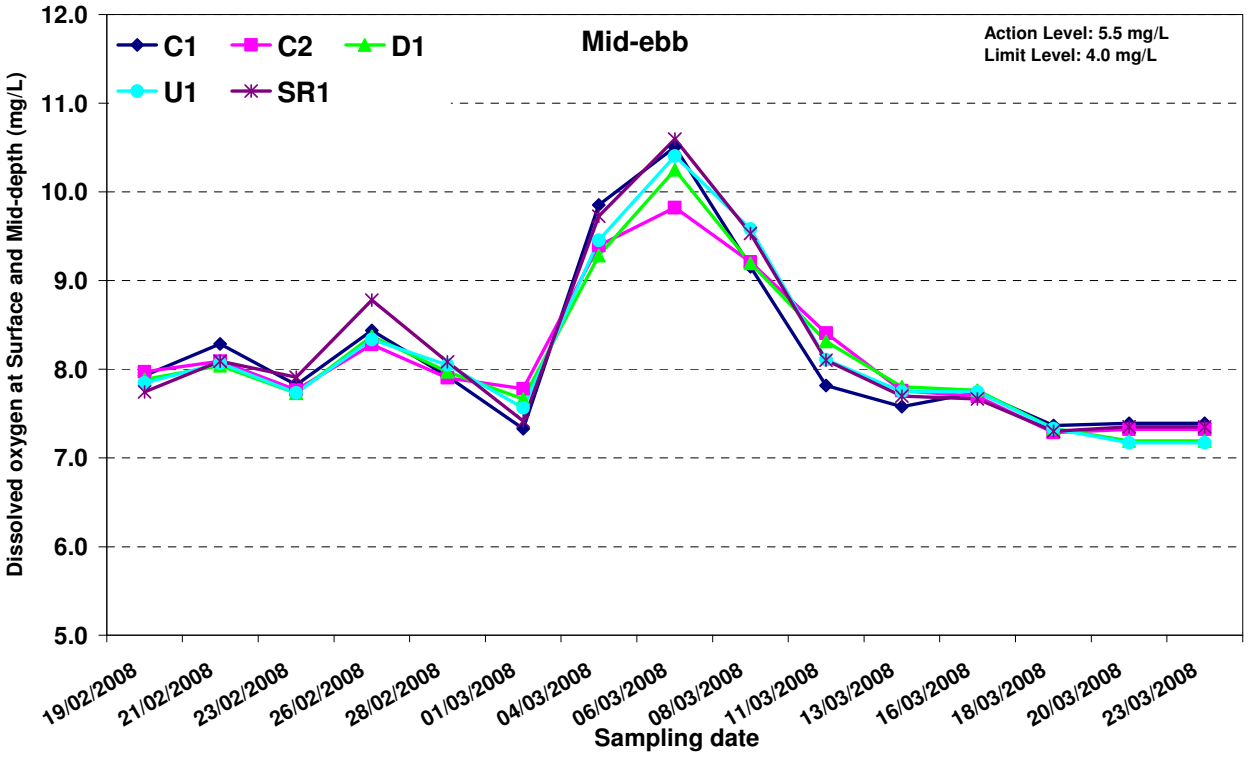
Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

Method: Analysis Description	CAS number	Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 620018)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620019)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 620020)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	101	----	85	115	----	----

Annex E

Impact Water Quality Monitoring Results



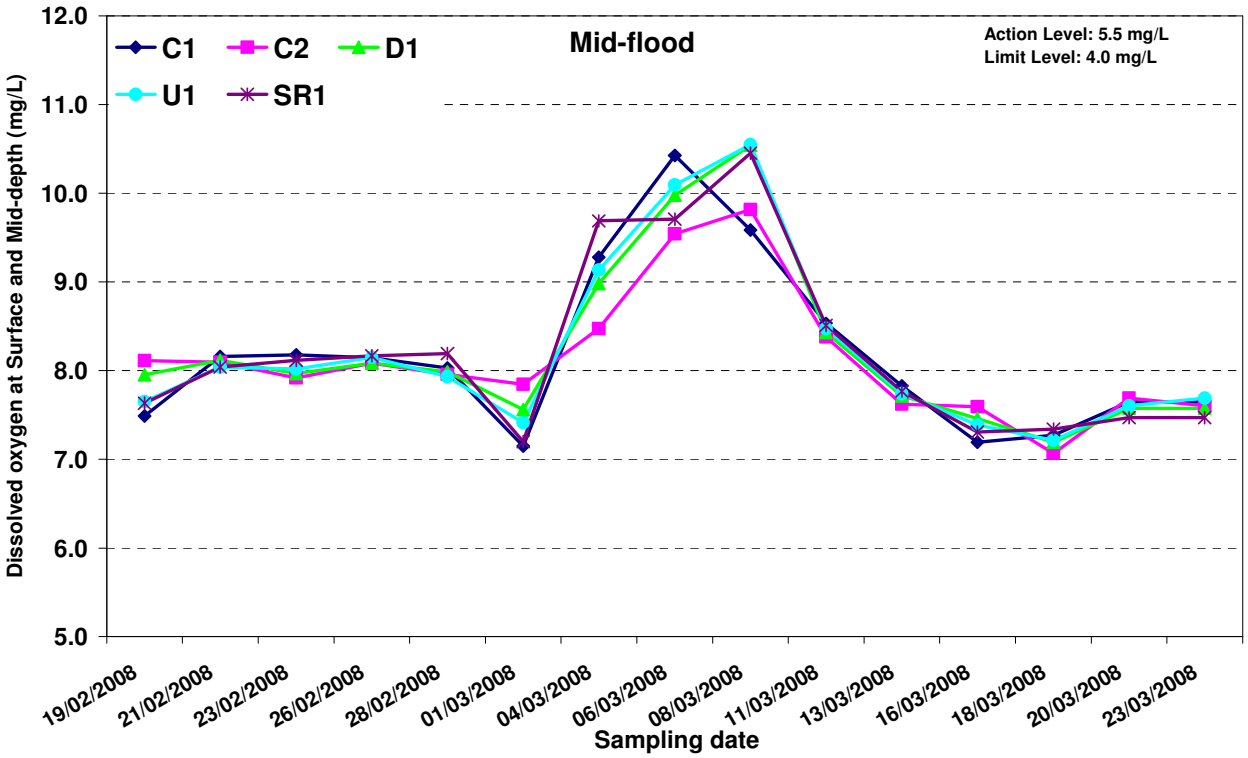
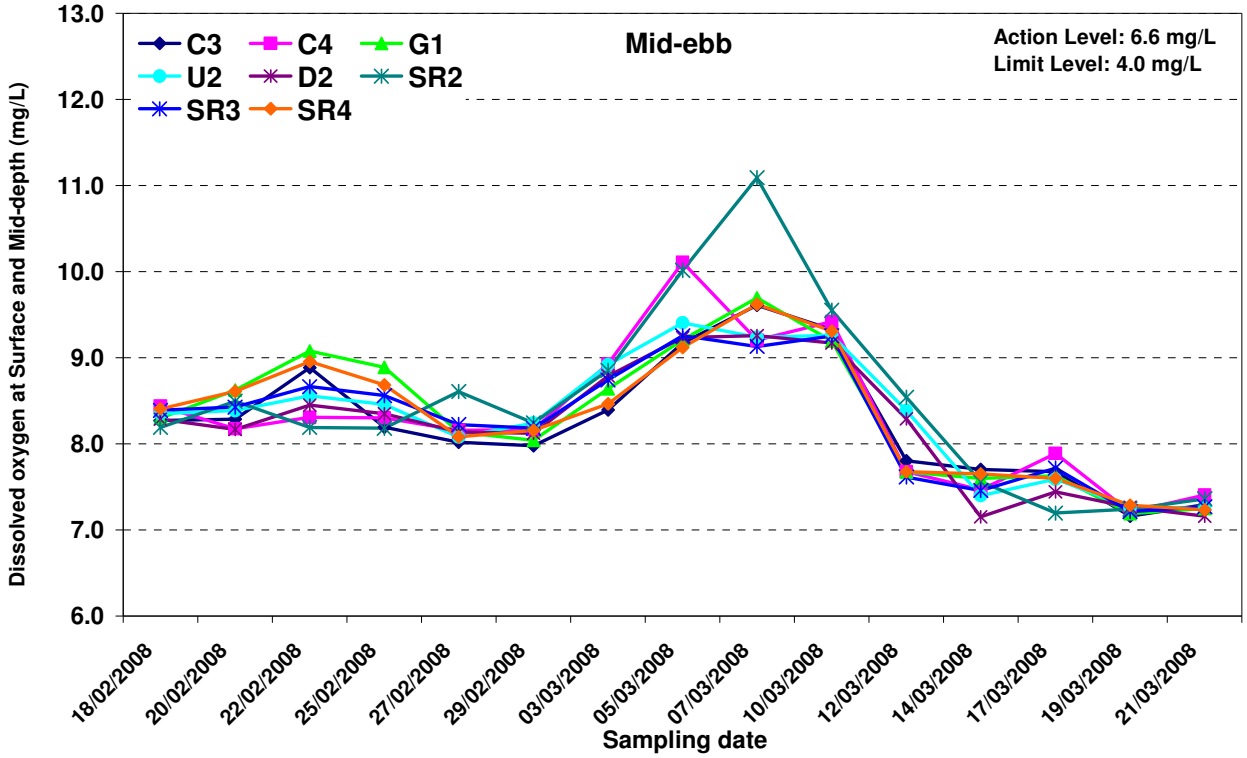


Figure E1 Dissolved oxygen concentration (mean of surface and mid-depth) (mg/L) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 19 February and 23 March 2008



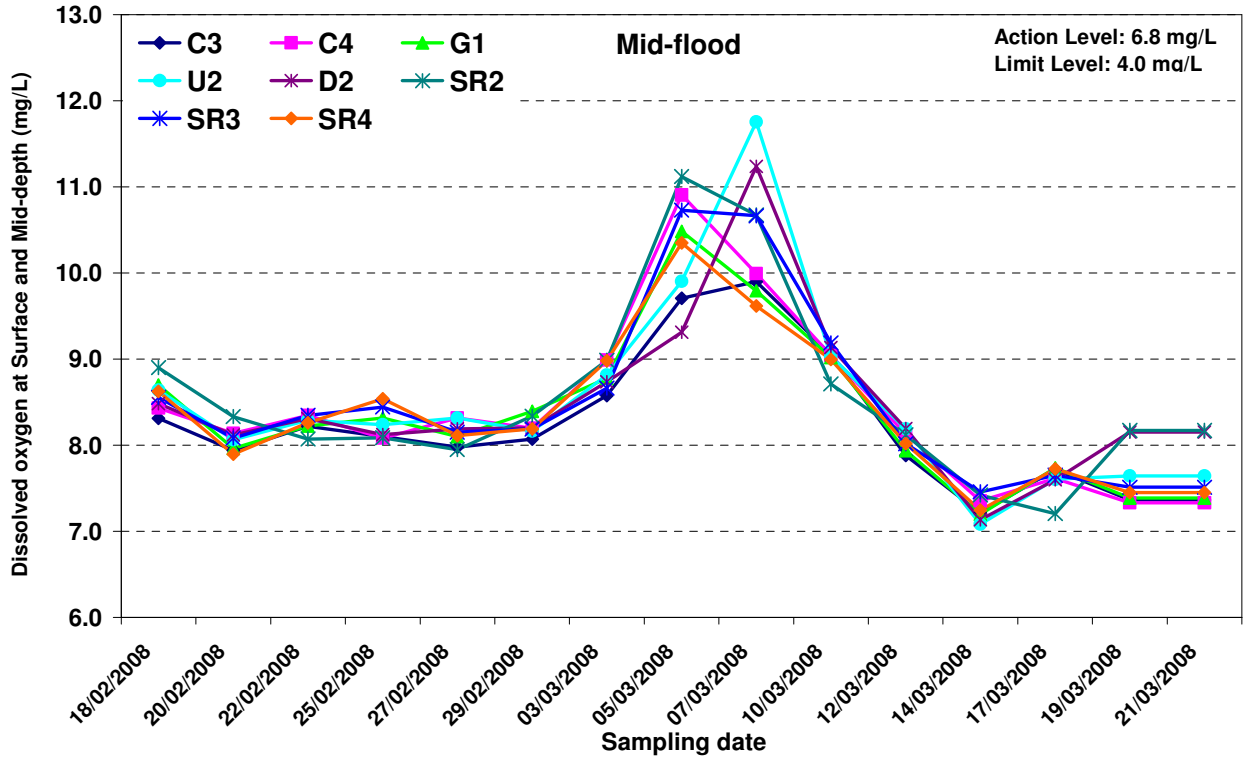
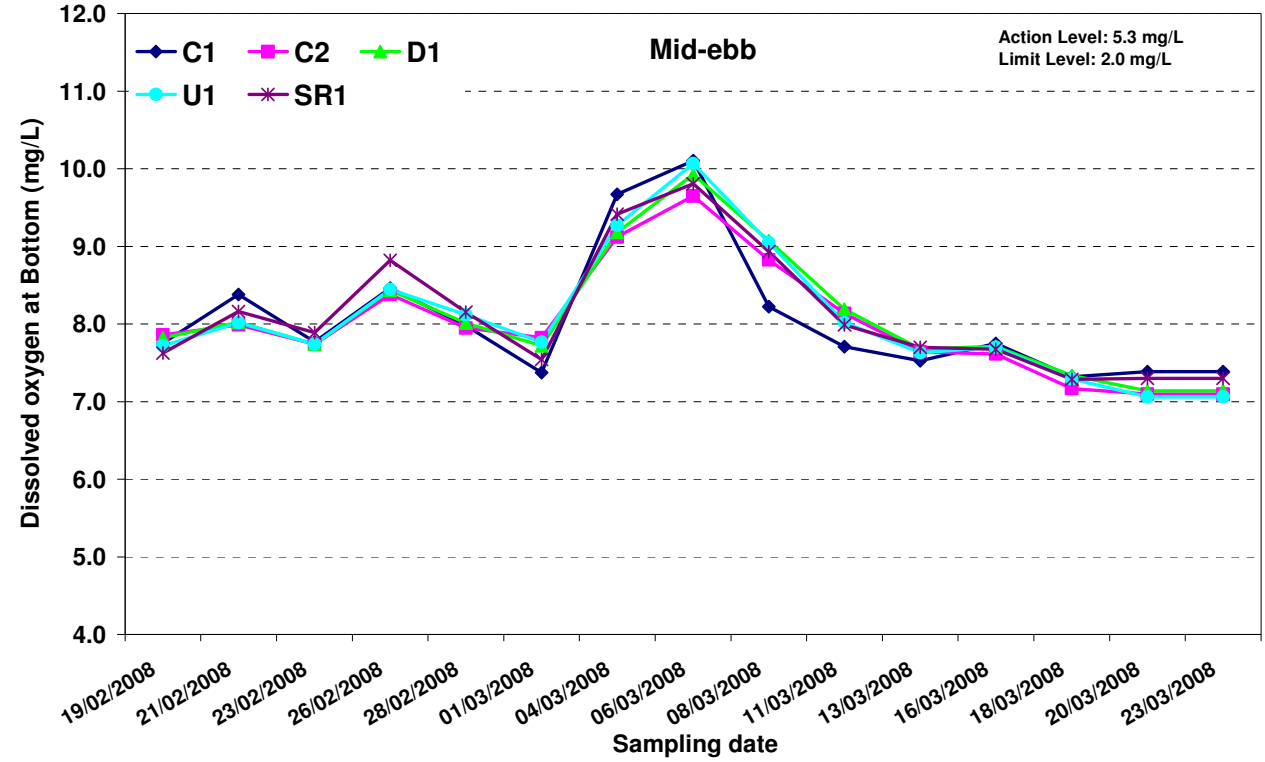


Figure E2 Dissolved oxygen concentration (mean of surface and mid-depth) (mg/L) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood 18 February 2008 and 21 March 2008

ERM



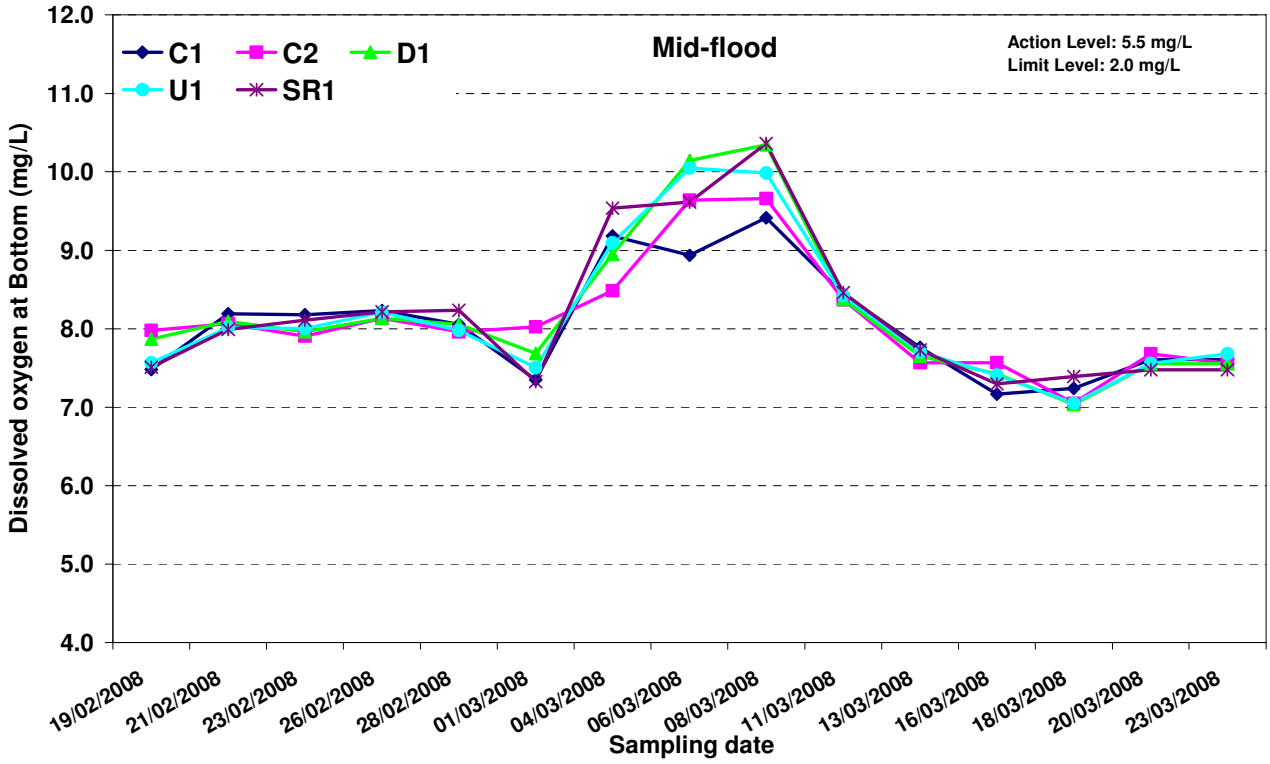
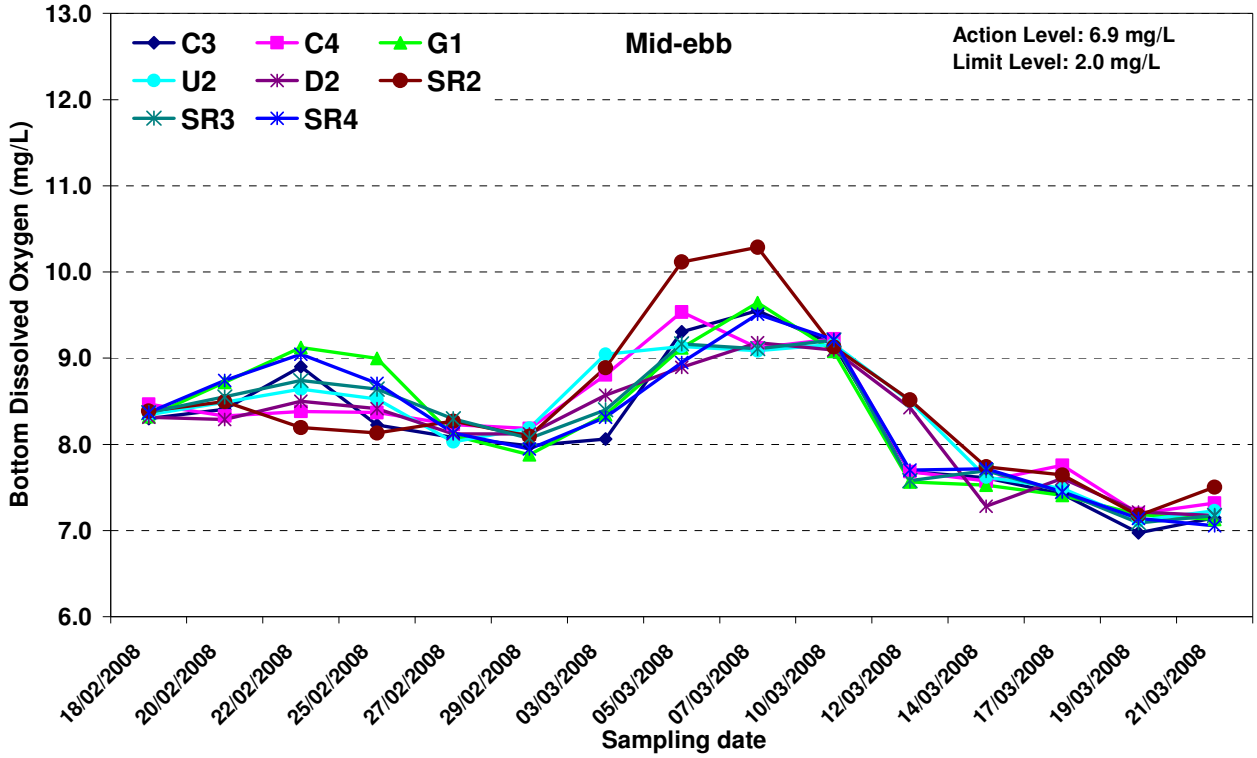


Figure E3 Dissolved oxygen concentration (bottom) (mg/L) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 19 February and 23 March 2008

ERM



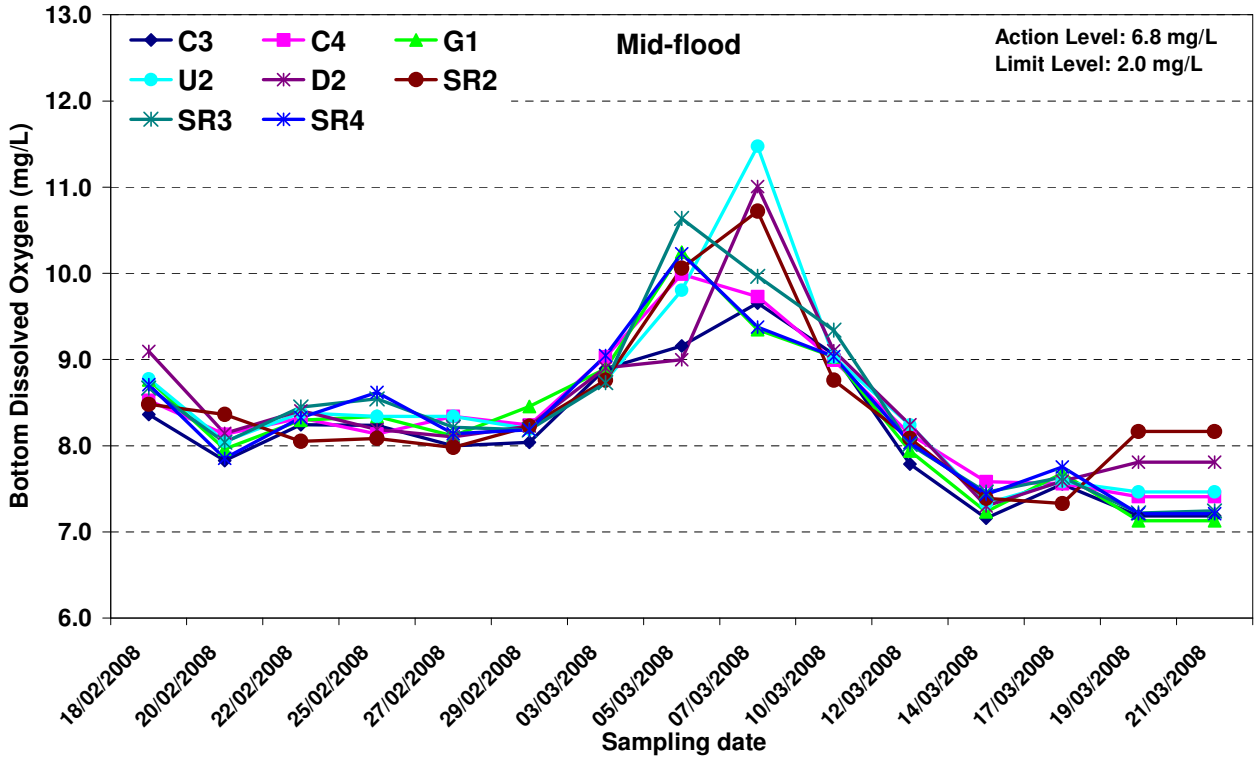


Figure E4 Dissolved oxygen concentration (bottom) (mg/L) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood 18 February 2008 and 21 March 2008

ERM

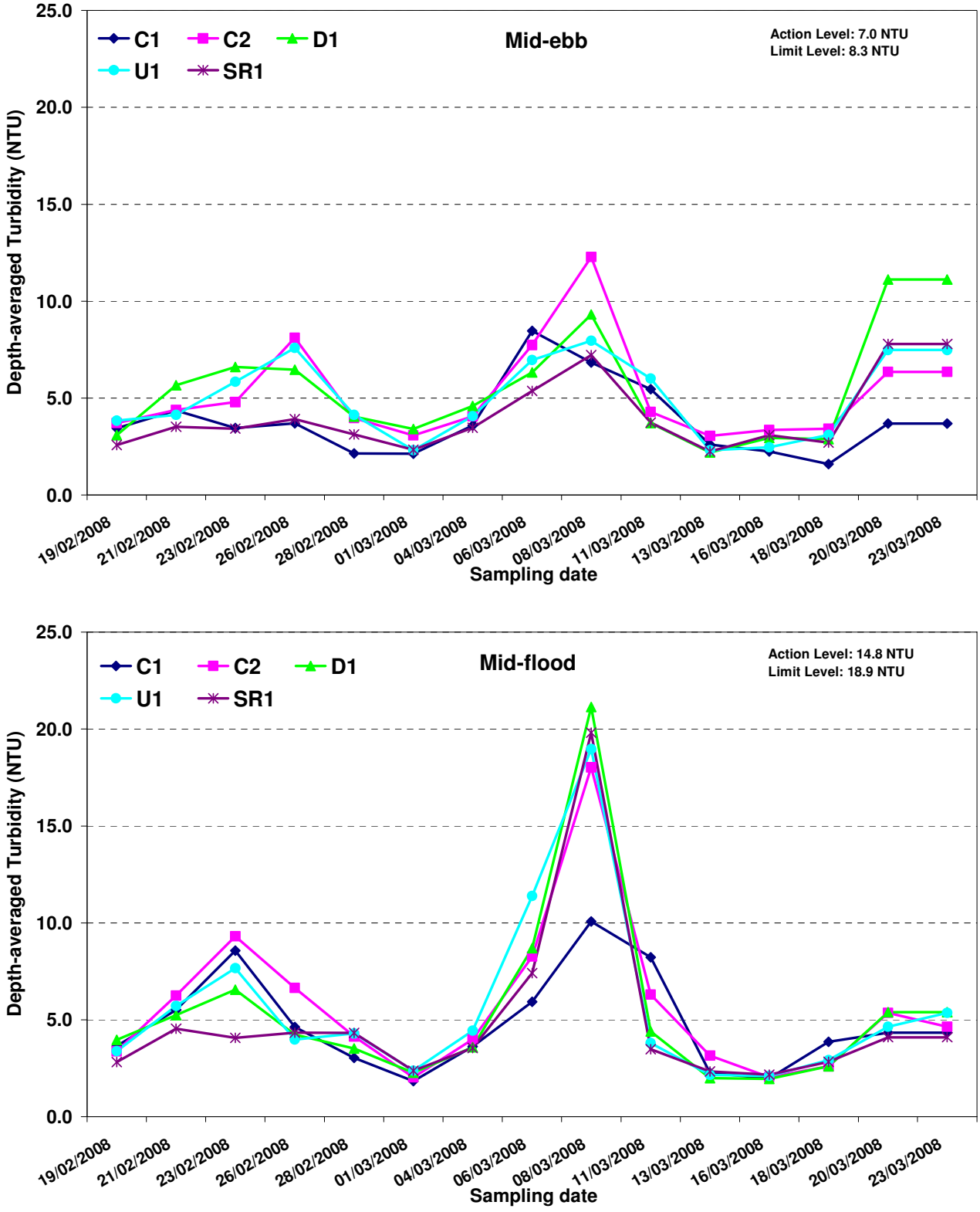


Figure E5 Depth-averaged turbidity (NTU) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 19 February and 23 March 2008

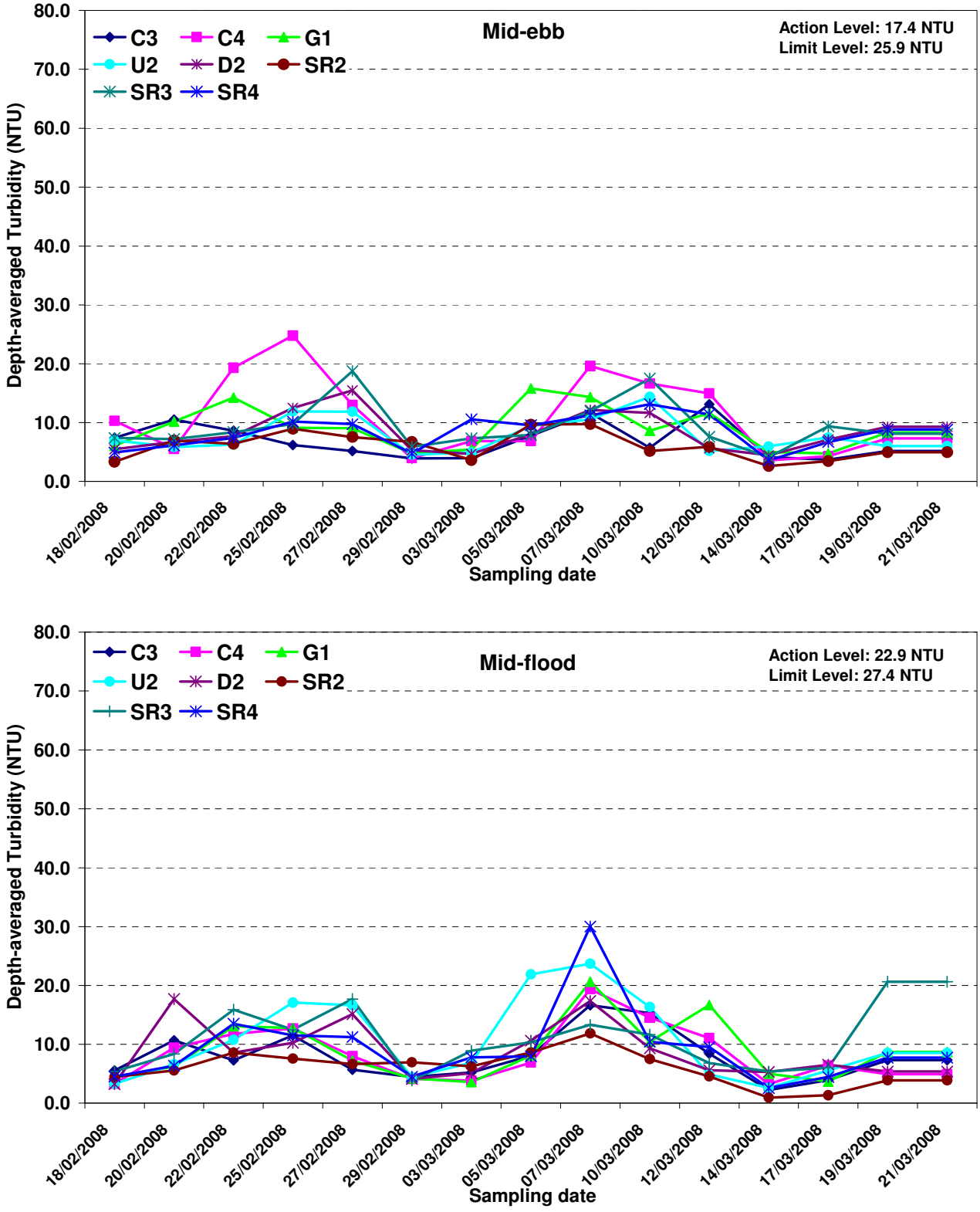
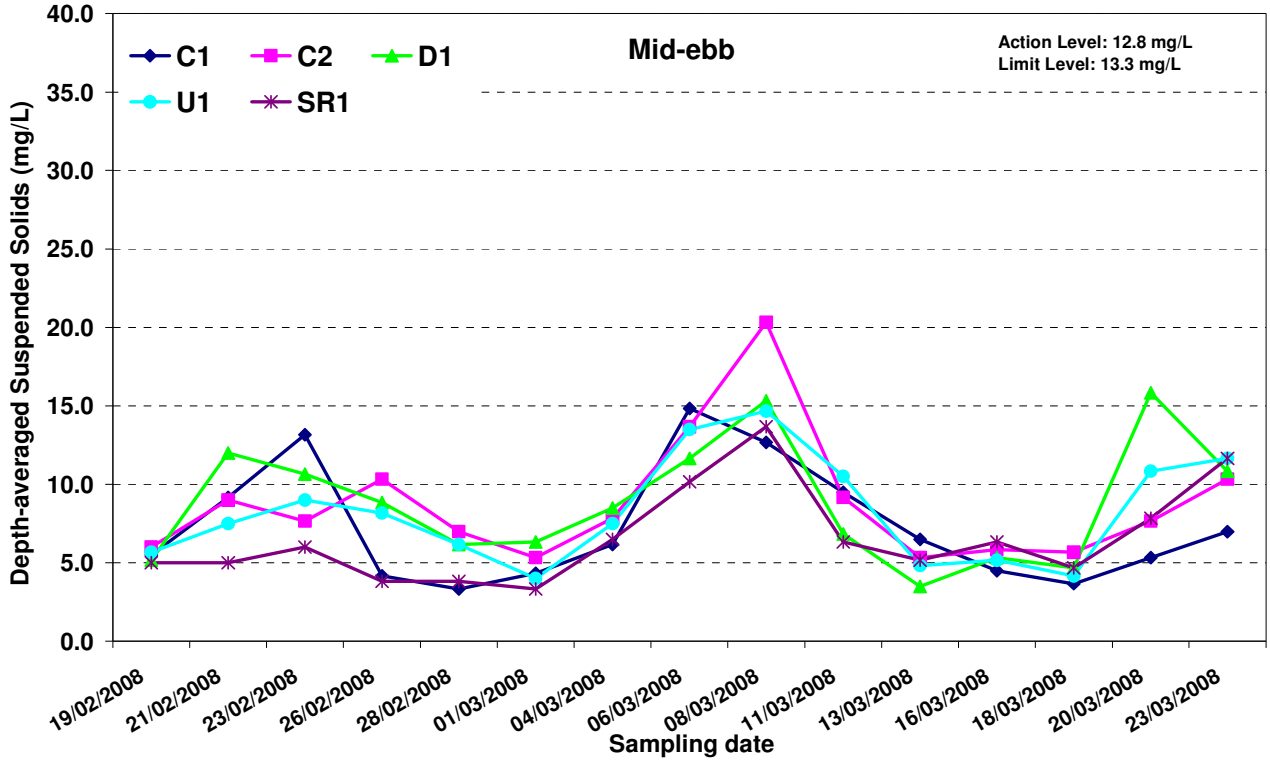


Figure E6 Depth-averaged turbidity (NTU) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood between 18 February 2008 and 21 March 2008

ERM



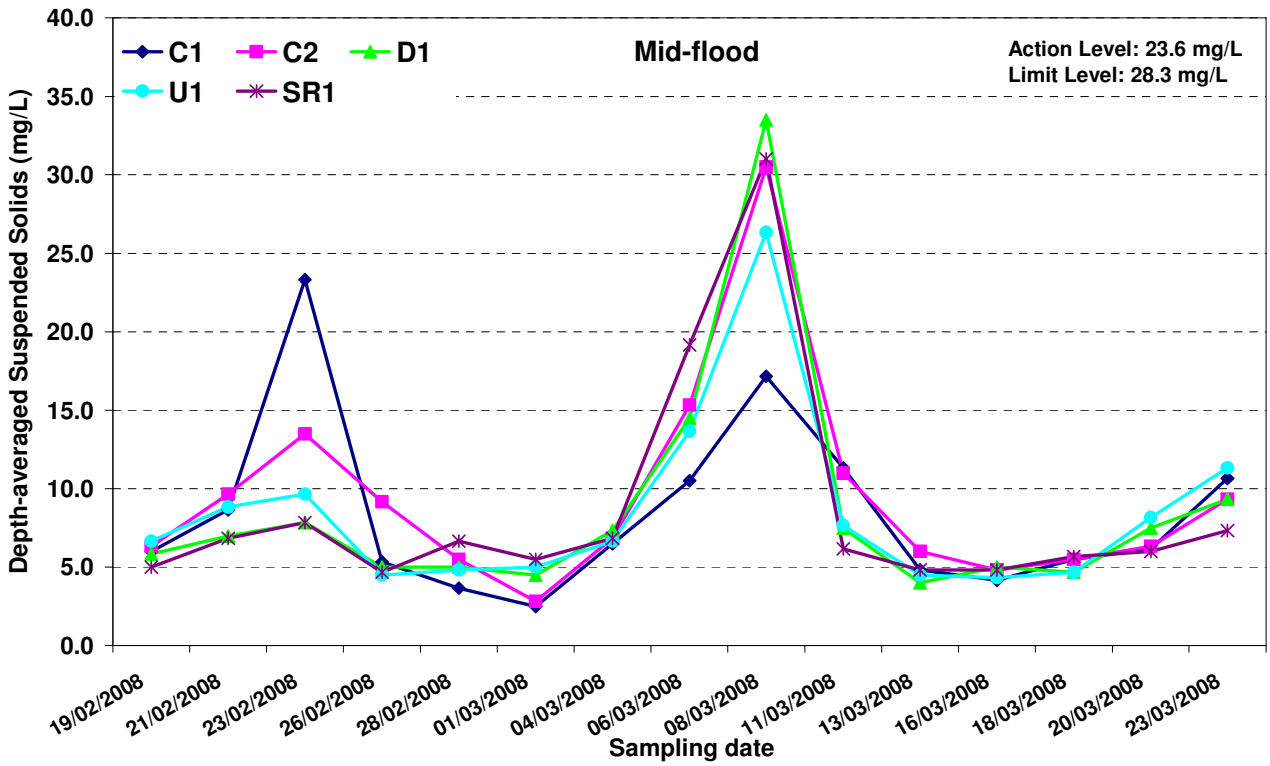
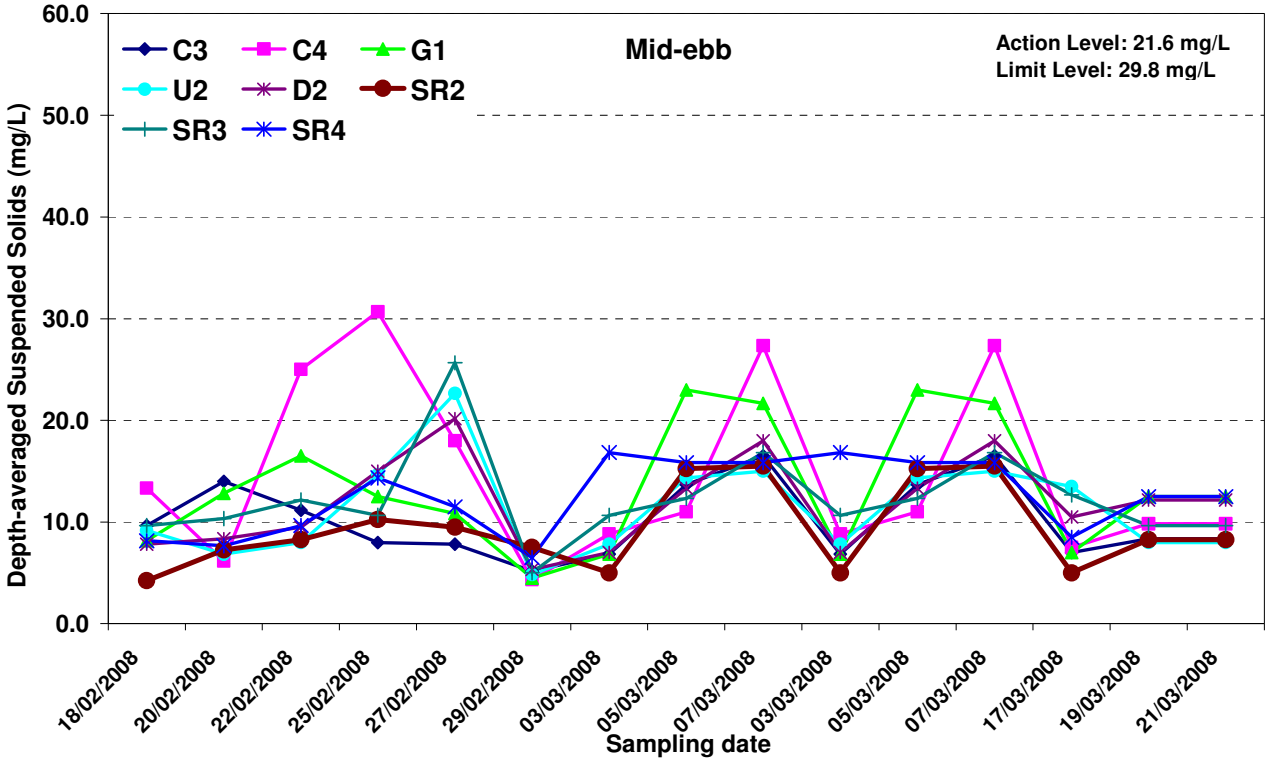


Figure E7 Depth-averaged suspended solids concentration (mg/L) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 19 February and 23 March 2008



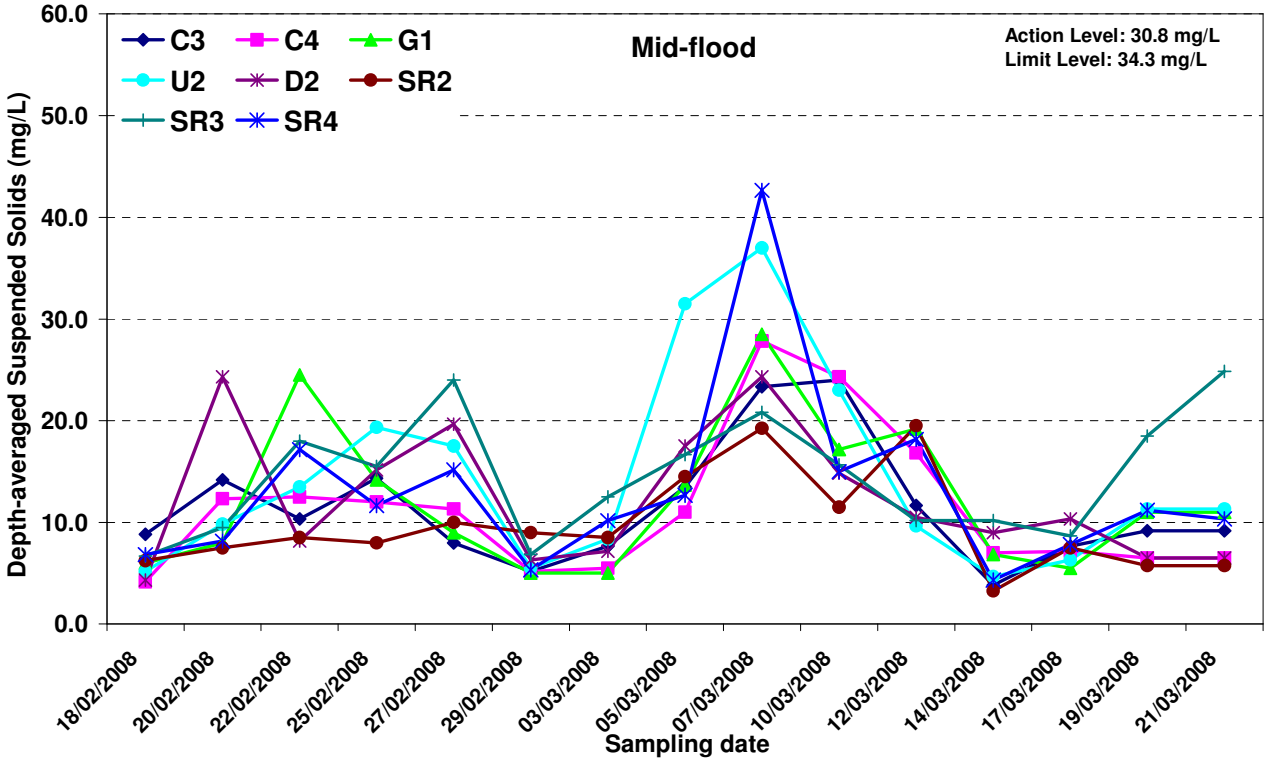


Figure E8 Depth-averaged suspended solids concentration (mg/L) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood between 18 February 2008 and 21 March 2008

ERM

Annex E1 - Water Quality Results at Airport during mid-ebb tide for 17 March 2008

Sampling Date	3/17/2008
Weather & Ambient Temperature	Sunny, 22C

Mid-Ebb

Station	C3								
Time (hh:mm)	21:04-21:09								
Water Depth (m)	11.40								
Monitoring Depth (m)	1.10		5.70		10.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.0	20.0	19.0	18.9	18.5	18.5	19.14	-	
Salinity (ppt)	27.8	27.6	29.6	29.8	30.3	30.3	29.23	-	
pH	7.8	7.8	7.8	7.9	7.8	7.9	7.84		
D.O. Saturation (%)	101.0	100.6	97.2	97.0	94.9	95.1	97.63	-	
D.O. (mg/L)	7.80	7.77	7.57	7.56	7.42	7.43	7.59	7.43	7.68
Turbidity (NTU)	1.60	1.70	4.10	4.60	4.60	5.50	3.71	-	
SS (mg/L)	8.0	9.0	5.0	9.0	7.0	4.0	7.00	-	
Remarks									

Station	U2								
Time (hh:mm)	21:44-21:47								
Water Depth (m)	8.20								
Monitoring Depth (m)	1.00		4.10		6.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.8	19.9	19.3	19.4	19.0	19.0	19.40	-	
Salinity (ppt)	28.1	27.8	28.9	28.8	29.5	29.5	28.76	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	98.7	98.6	97.2	97.5	96.1	96.4	97.41	-	
D.O. (mg/L)	7.64	7.62	7.54	7.56	7.48	7.50	7.56	7.49	7.59
Turbidity (NTU)	2.40	1.60	7.70	4.00	17.10	12.10	7.48	-	
SS (mg/L)	21.0	18.0	4.0	23.0	11.0	4.0	13.50	-	
Remarks									

Station	C4								
Time (hh:mm)	22:02-22:05								
Water Depth (m)	8.30								
Monitoring Depth (m)	1.10		4.60		8.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.9	19.9	19.9	19.5	19.0	19.0	19.55	-	
Salinity (ppt)	27.7	27.7	27.9	28.6	29.7	29.7	28.53	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90		
D.O. Saturation (%)	102.0	102.0	102.2	101.6	99.6	100.0	101.23	-	
D.O. (mg/L)	7.89	7.89	7.90	7.87	7.75	7.77	7.85	7.76	7.89
Turbidity (NTU)	1.20	1.40	2.50	4.00	9.10	7.70	4.31	-	
SS (mg/L)	13.0	5.0	5.0	11.0	7.0	4.0	7.50	-	
Remarks									

Station	SR2								
Time (hh:mm)	21:08-21:13								
Water Depth (m)	4.30								
Monitoring Depth (m)	1.10				3.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.4	20.4			19.8	19.7	20.05	-	
Salinity (ppt)	27.7	27.8			29.1	29.1	28.42	-	
pH	7.7	7.7			7.7	7.8	7.72		
D.O. Saturation (%)	94.8	93.1			95.4	95.0	94.58	-	
D.O. (mg/L)	7.27	7.14			7.34	7.32	7.27	7.33	7.21
Turbidity (NTU)	0.20	0.40			2.10	2.60	1.34	-	
SS (mg/L)	5.0	4.0			6.0	5.0	5.00	-	
Remarks									

Station	D2								
Time (hh:mm)	21:52-21:55								
Water Depth (m)	6.90								
Monitoring Depth (m)	1.00		3.60		6.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.0	19.8	19.3	19.5	19.0	19.0	19.43	-	
Salinity (ppt)	28.1	28.6	29.1	28.9	29.7	29.7	29.01	-	
pH	7.8	7.9	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	96.5	96.0	96.1	96.7	98.0	97.6	96.79	-	
D.O. (mg/L)	7.43	7.40	7.45	7.48	7.62	7.59	7.50	7.61	7.44
Turbidity (NTU)	3.50	5.40	7.90	7.20	9.30	9.40	7.11	-	
SS (mg/L)	12.0	11.0	8.0	15.0	9.0	8.0	10.50	-	
Remarks									

Station	SR3								
Time (hh:mm)	21:34-21:37								
Water Depth (m)	12.40								
Monitoring Depth (m)	1.10		5.80		11.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.2	20.1	19.2	19.4	19.0	19.0	19.47	-	
Salinity (ppt)	27.1	27.2	29.1	28.8	29.4	29.4	28.49	-	
pH	7.8	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	101.0	100.9	97.9	98.6	95.6	95.7	98.26	-	
D.O. (mg/L)	7.81	7.80	7.61	7.65	7.45	7.45	7.63	7.45	7.72
Turbidity (NTU)	1.10	1.00	7.90	5.50	20.30	20.30	9.36	-	
SS (mg/L)	22.0	8.0	7.0	26.0	9.0	4.0	12.67	-	
Remarks									

Station	G1								
Time (hh:mm)	21:17-21:20								
Water Depth (m)	12.20								
Monitoring Depth (m)	1.10		5.90		10.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.0	19.6	18.9	18.8	18.6	18.6	19.06	-	
Salinity (ppt)	27.3	28.2	29.6	29.9	30.3	30.3	29.28	-	
pH	7.8	7.9	7.9	7.9	7.9	7.9	7.87		
D.O. Saturation (%)	100.4	98.9	96.8	96.5	94.8	95.0	97.06	-	
D.O. (mg/L)	7.77	7.67	7.54	7.53	7.40	7.42	7.56	7.41	7.63
Turbidity (NTU)	1.80	3.20	5.60	5.10	6.30	6.30	4.75	-	
SS (mg/L)	4.0	6.0	8.0	6.0	7.0	11.0	7.00	-	
Remarks									

Station	SR4								
Time (hh:mm)	21:26-21:30								
Water Depth (m)	13.10								
Monitoring Depth (m)	1.10		6.60		12.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.0	19.0	19.0	18.9	18.9	19.30	-	
Salinity (ppt)	27.2	27.3	29.4	29.4	29.7	29.7	28.78	-	
pH	7.8	7.8	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	100.3	100.0	95.5	95.5	95.7	95.6	97.10	-	
D.O. (mg/L)	7.76	7.74	7.44	7.44	7.45	7.45	7.55	7.45	7.60
Turbidity (NTU)	2.10	2.50	9.40	9.90	8.40	8.00	6.69	-	
SS (mg/L)	3.0	4.0	10.0	12.0	11.0	11.0	8.50	-	
Remarks									

Annex E2 - Water Quality Results at Airport during mid-flood tide for 17 March 2008

Sampling Date	3/17/2008
Weather & Ambient Temperature	Sunny, 23C

Mid-Flood

Station	C3								
Time (hh:mm)	08:41-08:44								
Water Depth (m)	11.20								
Monitoring Depth (m)	1.10		5.60		10.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.1	19.0	18.9	18.9	18.6	18.6	18.85	-	
Salinity (ppt)	29.3	29.5	29.7	29.6	30.0	30.0	29.68	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90		
D.O. Saturation (%)	100.0	100.1	97.8	98.5	96.1	97.3	98.27	-	
D.O. (mg/L)	7.78	7.79	7.62	7.67	7.51	7.60	7.66	7.56	7.72
Turbidity (NTU)	2.00	1.90	3.00	3.40	7.60	5.60	3.92	-	
SS (mg/L)	4.0	5.0	8.0	5.0	12.0	12.0	7.67	-	
Remarks									

Station	U2								
Time (hh:mm)	09:16-09:19								
Water Depth (m)	8.50								
Monitoring Depth (m)	1.10		4.20		6.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.7	19.6	19.5	19.4	19.2	19.2	19.43	-	
Salinity (ppt)	28.4	28.5	28.7	28.9	29.2	29.2	28.81	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	98.6	98.3	97.4	98.2	97.7	97.6	98.00	-	
D.O. (mg/L)	7.63	7.61	7.55	7.62	7.59	7.58	7.60	7.59	7.60
Turbidity (NTU)	3.60	4.50	6.40	6.10	6.40	6.30	5.59	-	
SS (mg/L)	4.0	4.0	6.0	6.0	9.0	9.0	6.33	-	
Remarks									

Station	C4								
Time (hh:mm)	09:33-09:36								
Water Depth (m)	9.10								
Monitoring Depth (m)	1.00		4.50		8.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.9	19.7	19.2	19.0	18.9	18.9	19.27	-	
Salinity (ppt)	26.3	27.1	29.2	29.4	29.5	29.5	28.51	-	
pH	7.8	7.8	7.9	7.9	7.9	7.9	7.87		
D.O. Saturation (%)	98.5	96.7	98.1	97.6	97.1	96.8	97.48	-	
D.O. (mg/L)	7.68	7.53	7.63	7.61	7.57	7.55	7.60	7.56	7.61
Turbidity (NTU)	3.40	6.90	5.20	6.90	7.70	8.20	6.39	-	
SS (mg/L)	3.0	3.0	9.0	8.0	9.0	11.0	7.17	-	
Remarks									

Station	SR2								
Time (hh:mm)	08:57-09:01								
Water Depth (m)	4.30								
Monitoring Depth (m)	1.10				3.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.8	19.7			19.0	19.0	19.36	-	
Salinity (ppt)	28.2	28.5			29.7	29.8	29.03	-	
pH	7.8	7.8			7.9	7.9	7.86		
D.O. Saturation (%)	93.2	93.0			99.3	97.3	95.68	-	
D.O. (mg/L)	7.20	7.19			7.72	7.57	7.42	7.65	7.20
Turbidity (NTU)	1.70	2.00			5.20	4.90	3.46	-	
SS (mg/L)	6.0	4.0			10.0	10.0	7.50	-	
Remarks									

Station	D2								
Time (hh:mm)	09:24-09:28								
Water Depth (m)	7.40								
Monitoring Depth (m)	1.00		3.60		6.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.4	19.8	19.1	19.0	18.9	18.9	19.19	-	
Salinity (ppt)	28.3	26.9	29.3	29.4	29.6	29.6	28.83	-	
pH	7.9	7.8	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	97.4	96.5	98.0	98.4	97.8	97.0	97.54	-	
D.O. (mg/L)	7.58	7.52	7.63	7.66	7.62	7.56	7.60	7.59	7.60
Turbidity (NTU)	4.30	3.30	6.10	7.90	12.30	5.30	6.54	-	
SS (mg/L)	6.0	4.0	9.0	11.0	18.0	14.0	10.33	-	
Remarks									

Station	SR3								
Time (hh:mm)	09:09-09:12								
Water Depth (m)	12.60								
Monitoring Depth (m)	1.00		6.10		11.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.5	19.6	19.1	19.2	19.0	19.0	19.21	-	
Salinity (ppt)	28.7	28.4	29.3	29.1	29.5	29.5	29.09	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.91		
D.O. Saturation (%)	99.0	99.1	98.3	97.6	98.1	97.9	98.37	-	
D.O. (mg/L)	7.68	7.69	7.65	7.58	7.64	7.63	7.65	7.64	7.65
Turbidity (NTU)	5.20	4.10	7.10	6.60	6.30	6.50	6.00	-	
SS (mg/L)	8.0	7.0	9.0	10.0	9.0	9.0	8.67	-	
Remarks									

Station	G1								
Time (hh:mm)	08:51-08:54								
Water Depth (m)	12.40								
Monitoring Depth (m)	1.20		6.20		10.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.1	19.1	18.9	18.9	18.8	18.8	18.93	-	
Salinity (ppt)	29.5	29.5	29.7	29.7	29.9	29.9	29.68	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93		
D.O. Saturation (%)	100.0	100.3	98.9	98.8	98.9	98.1	99.12	-	
D.O. (mg/L)	7.77	7.78	7.70	7.69	7.71	7.65	7.72	7.68	7.74
Turbidity (NTU)	2.60	2.40	3.10	3.30	4.10	6.50	3.69	-	
SS (mg/L)	3.0	4.0	5.0	4.0	7.0	10.0	5.50	-	
Remarks									

Station	SR4								
Time (hh:mm)	09:01-09:05								
Water Depth (m)	13.20								
Monitoring Depth (m)	1.00		6.70		11.80				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.5	19.5	19.3	19.2	18.9	18.9	19.22	-	
Salinity (ppt)	28.4	28.6	29.1	29.3	29.7	29.8	29.15	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.91		
D.O. Saturation (%)	99.5	99.5	99.8	99.4	101.1	97.9	99.57	-	
D.O. (mg/L)	7.72	7.72	7.74	7.72	7.88	7.63	7.74	7.76	7.73
Turbidity (NTU)	2.80	3.30	3.30	4.50	3.50	9.30	4.46	-	
SS (mg/L)	4.0	6.0	6.0	5.0	11.0	15.0	7.83	-	
Remarks									

Annex E3 - Water Quality Results at Tuen Mun during mid-ebb tide for 18 March 2008

Date	03/18/2008							
Station	C1							
Time (hh:mm)	10:01 - 10:04							
Ambient Temperature (℃)	23							
Weather	Sunny							
Water Depth (m)	8.20							
Monitoring Depth (m)	1.00		4.00		7.00			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.4	19.4	19.3	19.3	19.3	19.3	19.33	-
Salinity (ppt)	29.1	29.0	29.1	29.1	29.2	29.2	29.12	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	95.2	95.6	94.4	94.9	94.3	94.5	94.84	-
D.O. (mg/L)	7.38	7.41	7.32	7.36	7.31	7.33	7.35	7.32
Turbidity (NTU)	1.40	1.50	1.70	1.50	1.70	1.70	1.59	-
SS (mg/L)	5.0	3.0	3.0	4.0	4.0	3.0	3.67	-
Remarks	-							

Date	03/18/2008							
Station	C2							
Time (hh:mm)	10:33 - 10:37							
Ambient Temperature (℃)	23							
Weather	Sunny							
Water Depth (m)	13.20							
Monitoring Depth (m)	1.10		6.60		12.00			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.3	19.3	19.2	19.2	18.9	18.9	19.15	-
Salinity (ppt)	29.1	29.1	29.2	29.2	29.7	29.8	29.36	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	
D.O. Saturation (%)	94.4	94.2	93.5	93.4	91.9	92.3	93.29	-
D.O. (mg/L)	7.32	7.31	7.26	7.25	7.15	7.19	7.25	7.17
Turbidity (NTU)	2.60	2.70	3.50	3.30	4.10	4.20	3.42	-
SS (mg/L)	3.0	4.0	6.0	5.0	7.0	9.0	5.67	-
Remarks	-							

Date	03/18/2008							
Station	D1							
Time (hh:mm)	10:25 - 10:27							
Ambient Temperature (℃)	23							
Weather	Sunny							
Water Depth (m)	8.60							
Monitoring Depth (m)	1.00		4.50		8.20			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.4	19.4	19.3	19.3	19.3	19.3	19.34	-
Salinity (ppt)	29.0	29.0	29.0	29.0	29.0	29.1	29.01	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.86	
D.O. Saturation (%)	94.6	94.7	94.5	94.3	94.7	94.3	94.52	-
D.O. (mg/L)	7.34	7.34	7.33	7.32	7.35	7.32	7.33	7.34
Turbidity (NTU)	2.90	2.50	2.80	3.00	2.60	3.40	2.89	-
SS (mg/L)	5.0	5.0	4.0	4.0	4.0	6.0	4.67	-
Remarks	-							

Date	03/18/2008							
Station	U1							
Time (hh:mm)	10:18 - 10:20							
Ambient Temperature (℃)	23							
Weather	Sunny							
Water Depth (m)	9.40							
Monitoring Depth (m)	1.10		4.50		7.90			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.4	19.4	19.4	19.4	19.3	19.3	19.36	-
Salinity (ppt)	29.0	29.1	29.1	29.1	29.1	29.1	29.07	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.86	
D.O. Saturation (%)	94.8	94.9	94.0	94.4	93.9	94.1	94.37	-
D.O. (mg/L)	7.35	7.36	7.29	7.32	7.28	7.30	7.32	7.29
Turbidity (NTU)	2.50	2.30	3.20	2.70	4.50	3.30	3.10	-
SS (mg/L)	3.0	4.0	5.0	3.0	5.0	5.0	4.17	-
Remarks	-							

Date	03/18/2008							
Station	SR1							
Time (hh:mm)	10:11 - 10:14							
Ambient Temperature (℃)	23							
Weather	Sunny							
Water Depth (m)	5.60							
Monitoring Depth (m)	1.10		2.60		4.10			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.4	19.4	19.4	19.4	19.4	19.4	19.36	-
Salinity (ppt)	29.0	29.0	29.0	29.0	29.0	29.0	29.01	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.85	
D.O. Saturation (%)	94.0	94.4	94.0	94.2	93.9	94.0	94.09	-
D.O. (mg/L)	7.29	7.32	7.29	7.30	7.28	7.29	7.30	7.29
Turbidity (NTU)	2.60	3.00	2.60	2.50	2.70	2.70	2.70	-
SS (mg/L)	5.0	4.0	4.0	4.0	6.0	5.0	4.67	-
Remarks	-							

Annex E4 - Water Quality Results at Tuen Mun during mid-flood tide for 18 March 2008

Date	03/18/2008							
Station	C1							
Time (hh:mm)	15:33 - 15:36							
Ambient Temperature (℃)	25							
Weather	Sunny							
Water Depth (m)	8.30							
Monitoring Depth (m)	1.10		4.20		7.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.5	19.9	19.2	19.4	19.2	19.2	19.41	-
Salinity (ppt)	29.0	28.9	29.3	29.2	29.3	29.3	29.16	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80	
D.O. Saturation (%)	92.5	97.0	93.0	93.8	92.9	93.6	93.81	-
D.O. (mg/L)	7.15	7.45	7.22	7.27	7.21	7.27	7.26	7.24
Turbidity (NTU)	3.90	1.70	3.90	3.50	5.00	5.10	3.87	-
SS (mg/L)	4.0	4.0	4.0	5.0	9.0	7.0	5.50	-
Remarks	-							

Date	03/18/2008							
Station	C2							
Time (hh:mm)	16:07 - 16:10							
Ambient Temperature (℃)	25							
Weather	Sunny							
Water Depth (m)	13.10							
Monitoring Depth (m)	1.10		6.70		12.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.5	19.5	19.2	19.2	18.8	18.9	19.17	-
Salinity (ppt)	29.3	29.2	29.6	29.6	30.0	30.0	29.62	-
	7.8	7.8	7.9	7.8	7.9	7.9	7.84	
D.O. Saturation (%)	92.3	92.7	89.8	90.4	88.1	93.0	91.06	-
D.O. (mg/L)	7.13	7.16	6.97	7.01	6.86	7.24	7.06	7.05
Turbidity (NTU)	1.90	1.90	2.90	2.70	4.20	1.90	2.60	-
SS (mg/L)	4.0	6.0	5.0	4.0	7.0	7.0	5.50	-
Remarks	-							

Date	03/18/2008							
Station	D1							
Time (hh:mm)	15:58 - 16:01							
Ambient Temperature (℃)	25							
Weather	Sunny							
Water Depth (m)	7.90							
Monitoring Depth (m)	1.10		4.00		7.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.9	19.3	19.6	19.1	19.1	19.45	-
Salinity (ppt)	29.0	29.0	29.3	29.1	29.6	29.6	29.26	-
pH	7.9	7.8	7.8	7.8	7.9	7.8	7.84	
D.O. Saturation (%)	95.1	95.5	89.5	93.1	89.8	91.3	92.36	-
D.O. (mg/L)	7.31	7.34	6.93	7.19	6.98	7.09	7.14	7.04
Turbidity (NTU)	1.60	1.60	3.50	2.40	3.50	3.00	2.62	-
SS (mg/L)	4.0	5.0	3.0	4.0	6.0	6.0	4.67	-
Remarks	-							

Date	03/18/2008							
Station	U1							
Time (hh:mm)	15:50 - 15:53							
Ambient Temperature (℃)	25							
Weather	Sunny							
Water Depth (m)	8.40							
Monitoring Depth (m)	1.10		3.90		7.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.6	19.5	19.3	19.2	18.9	18.9	19.24	-
Salinity (ppt)	29.0	29.1	29.3	29.4	29.8	29.8	29.41	-
pH	7.8	7.8	7.8	7.8	7.9	7.8	7.84	
D.O. Saturation (%)	95.2	94.1	92.0	91.6	89.9	91.3	92.34	-
D.O. (mg/L)	7.34	7.27	7.14	7.11	6.99	7.11	7.16	7.05
Turbidity (NTU)	1.80	2.20	2.60	3.30	4.10	3.40	2.92	-
SS (mg/L)	4.0	3.0	3.0	5.0	7.0	6.0	4.67	-
Remarks	-							

Date	03/18/2008							
Station	SR1							
Time (hh:mm)	15:42 - 15:45							
Ambient Temperature (℃)	25							
Weather	Sunny							
Water Depth (m)	5.20							
Monitoring Depth (m)	1.00		2.40		4.10			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.9	19.9	19.4	19.5	19.3	19.4	19.54	-
Salinity (ppt)	28.9	29.0	29.2	29.2	29.3	29.3	29.13	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.84	
D.O. Saturation (%)	97.4	97.0	92.8	93.8	92.2	98.5	95.28	-
D.O. (mg/L)	7.48	7.45	7.18	7.25	7.15	7.63	7.36	7.39
Turbidity (NTU)	1.70	2.00	3.60	3.40	4.70	1.50	2.83	-
SS (mg/L)	4.0	3.0	5.0	5.0	9.0	8.0	5.67	-
Remarks	-							

Annex E5 - Water Quality Results at Airport during mid-ebb tide for 19 March 2008

Sampling Date	19/3/2008
Weather & Ambient Temperature	Sunny

Mid-Ebb

Station	C3								
Time (hh:mm)	11:38-11:41								
Water Depth (m)	11.00								
Monitoring Depth (m)	1.00		5.70		10.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.2	20.4	19.3	19.3	19.2	19.2	19.61	-	
Salinity (ppt)	27.3	27.0	29.0	29.0	29.2	29.2	28.45	-	
pH	7.9	7.8	7.9	7.9	7.9	7.9	7.87		
D.O. Saturation (%)	95.9	96.0	92.6	92.8	91.8	92.4	93.56	-	
D.O. (mg/L)	7.40	7.39	7.18	7.20	7.13	7.17	7.25	7.15	7.29
Turbidity (NTU)	2.90	2.90	4.10	4.50	9.10	7.40	5.16	-	
SS (mg/L)	6.0	4.0	4.0	6.0	18.0	12.0	8.33	-	
Remarks									

Station	U2								
Time (hh:mm)	12:13-12:16								
Water Depth (m)	8.00								
Monitoring Depth (m)	1.00		4.10		7.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.1	19.8	19.8	19.8	19.8	19.8	19.85	-	
Salinity (ppt)	26.9	27.4	27.7	27.6	27.7	27.7	27.51	-	
pH	7.8	7.8	7.8	7.8	7.9	7.8	7.84		
D.O. Saturation (%)	93.7	93.8	93.4	93.5	93.2	93.3	93.50	-	
D.O. (mg/L)	7.26	7.28	7.24	7.25	7.23	7.23	7.25	7.23	7.26
Turbidity (NTU)	4.30	6.60	6.20	6.70	5.90	6.20	6.02	-	
SS (mg/L)	7.0	7.0	7.0	10.0	10.0	7.0	8.00	-	
Remarks									

Station	C4								
Time (hh:mm)	12:32-12:35								
Water Depth (m)	8.00								
Monitoring Depth (m)	0.90		4.00		7.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.5	21.1	19.8	19.8	19.7	19.6	20.08	-	
Salinity (ppt)	26.3	26.2	27.6	27.5	28.1	28.3	27.34	-	
pH	7.8	7.8	7.9	7.9	7.9	7.9	7.83		
D.O. Saturation (%)	95.5	96.9	95.7	95.7	94.1	94.7	95.44	-	
D.O. (mg/L)	7.37	7.41	7.42	7.42	7.30	7.34	7.38	7.32	7.41
Turbidity (NTU)	4.20	5.80	6.20	6.40	11.80	9.60	7.35	-	
SS (mg/L)	8.0	7.0	8.0	10.0	12.0	14.0	9.83	-	
Remarks									

Station	SR2								
Time (hh:mm)	10:55-11:00								
Water Depth (m)	4.00								
Monitoring Depth (m)	1.00				2.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.3	20.4			19.6	19.8	20.03	-	
Salinity (ppt)	27.3	27.3			28.6	28.2	27.82	-	
pH	7.8	7.9			7.9	7.9	7.86		
D.O. Saturation (%)	95.0	96.3			96.9	97.2	96.35	-	
D.O. (mg/L)	7.32	7.40			7.50	7.51	7.43	7.51	7.36
Turbidity (NTU)	2.90	2.90			8.40	5.70	4.97	-	
SS (mg/L)	5.0	5.0			11.0	12.0	8.25	-	
Remarks									

Station	D2								
Time (hh:mm)	12:22-12:26								
Water Depth (m)	7.00								
Monitoring Depth (m)	1.10		3.80		6.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.5	20.3	19.8	19.7	19.7	19.7	19.94	-	
Salinity (ppt)	26.7	27.0	27.6	27.7	28.0	27.9	27.49	-	
pH	7.8	7.8	7.8	7.8	7.9	7.8	7.83		
D.O. Saturation (%)	92.6	93.0	92.3	92.6	92.5	92.3	92.57	-	
D.O. (mg/L)	7.13	7.18	7.16	7.19	7.17	7.16	7.17	7.17	7.17
Turbidity (NTU)	5.50	7.30	11.20	11.10	10.40	10.40	9.31	-	
SS (mg/L)	7.0	8.0	14.0	16.0	15.0	13.0	12.17	-	
Remarks									

Station	SR3								
Time (hh:mm)	12:05-12:08								
Water Depth (m)	12.00								
Monitoring Depth (m)	1.10		5.90		11.30				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.0	20.0	19.6	19.7	19.4	19.5	19.70	-	
Salinity (ppt)	26.7	26.8	28.3	28.1	28.8	28.6	27.90	-	
pH	7.8	7.8	7.9	7.9	7.9	7.9	7.84		
D.O. Saturation (%)	93.6	93.5	93.6	94.1	92.1	92.9	93.33	-	
D.O. (mg/L)	7.27	7.26	7.25	7.29	7.15	7.20	7.24	7.18	7.27
Turbidity (NTU)	7.40	4.00	8.60	6.30	11.70	10.70	8.11	-	
SS (mg/L)	5.0	5.0	10.0	9.0	16.0	13.0	9.67	-	
Remarks									

Station	G1								
Time (hh:mm)	11:48-11:52								
Water Depth (m)	12.00								
Monitoring Depth (m)	1.00		6.10		11.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.0	20.0	19.4	19.4	19.2	19.2	19.55	-	
Salinity (ppt)	27.2	27.1	28.8	28.8	29.2	29.2	28.37	-	
pH	7.8	7.8	7.9	7.9	7.9	7.9	7.86		
D.O. Saturation (%)	94.7	92.7	93.0	93.4	91.5	92.0	92.92	-	
D.O. (mg/L)	7.34	7.18	7.22	7.25	7.11	7.15	7.21	7.13	7.25
Turbidity (NTU)	4.70	3.90	5.30	4.20	16.30	15.40	8.32	-	
SS (mg/L)	4.0	7.0	7.0	8.0	20.0	29.0	12.50	-	
Remarks									

Station	SR4								
Time (hh:mm)	11:58-12:01								
Water Depth (m)	13.00								
Monitoring Depth (m)	0.90		6.70		12.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	***Depth-averaged***	***Bottom***	***Surface&Middle***
Water Temperature (℃)	20.0	20.2	19.5	19.5	19.3	19.3	19.62	-	
Salinity (ppt)	26.8	26.5	28.7	28.6	29.0	29.0	28.10	-	
pH	7.8	7.8	7.9	7.9	7.9	7.9	7.85		
D.O. Saturation (%)	93.6	94.2	92.2	92.9	90.5	91.2	92.47	-	
D.O. (mg/L)	7.27	7.31	7.15	7.20	7.03	7.08	7.17	7.06	7.23
Turbidity (NTU)	5.40	3.90	10.70	10.50	12.20	10.30	8.82	-	
SS (mg/L)	5.0	9.0	14.0	12.0	18.0	17.0	12.50	-	
Remarks									

Annex E6 - Water Quality Results at Airport during mid-flood tide for 19 March 2008

Sampling Date	19/3/2008
Weather & Ambient Temperature	Sunny

Mid-Flood

Station	C3								
Time (hh:mm)	17:12-17:15								
Water Depth (m)	11.00								
Monitoring Depth (m)	1.20		5.60		10.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.3	20.2	19.7	19.8	19.4	19.3	19.79	-	
Salinity (ppt)	27.3	27.5	27.9	27.9	29.0	29.1	28.11	-	
pH	7.8	7.8	7.8	7.8	7.9	7.8	7.83		
D.O. Saturation (%)	96.6	96.8	93.9	94.1	92.4	92.8	94.43	-	
D.O. (mg/L)	7.44	7.45	7.28	7.28	7.17	7.20	7.30	7.19	7.36
Turbidity (NTU)	3.60	3.90	5.30	6.80	11.50	12.70	7.31	-	
SS (mg/L)	5.0	4.0	5.0	7.0	20.0	14.0	9.17	-	
Remarks									

Station	U2								
Time (hh:mm)	16:17-16:20								
Water Depth (m)	8.00								
Monitoring Depth (m)	1.00		4.10		7.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	21.7	21.5	20.7	20.7	20.3	20.1	20.83	-	
Salinity (ppt)	26.0	26.0	26.5	26.6	27.6	28.0	26.81	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80		
D.O. Saturation (%)	103.7	100.3	97.9	99.1	97.0	97.3	99.22	-	
D.O. (mg/L)	7.85	7.60	7.52	7.60	7.45	7.48	7.58	7.47	7.64
Turbidity (NTU)	5.50	5.00	6.30	6.50	12.20	15.70	8.55	-	
SS (mg/L)	4.0	6.0	9.0	7.0	23.0	19.0	11.33	-	
Remarks									

Station	C4								
Time (hh:mm)	16:00-16:03								
Water Depth (m)	8.00								
Monitoring Depth (m)	1.00		4.00		7.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.2	20.1	20.1	20.2	20.2	20.1	20.15	-	
Salinity (ppt)	26.3	26.4	26.7	26.6	26.9	27.3	26.70	-	
pH	7.7	7.7	7.7	7.8	7.7	7.8	7.74		
D.O. Saturation (%)	93.9	94.1	94.3	95.8	96.2	95.7	95.00	-	
D.O. (mg/L)	7.28	7.31	7.31	7.42	7.43	7.39	7.36	7.41	7.33
Turbidity (NTU)	5.10	5.10	5.20	5.00	4.00	5.10	4.95	-	
SS (mg/L)	6.0	6.0	6.0	8.0	7.0	6.0	6.50	-	
Remarks									

Station	SR2								
Time (hh:mm)	16:14-16:17								
Water Depth (m)	4.00								
Monitoring Depth (m)	1.00				3.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	21.5	21.5			21.5	21.5	21.49	-	
Salinity (ppt)	26.9	26.9			26.9	26.9	26.88	-	
pH	7.8	7.8			7.8	7.8	7.80		
D.O. Saturation (%)	108.6	107.8			108.4	107.9	108.19	-	
D.O. (mg/L)	8.20	8.14			8.18	8.15	8.17	8.17	8.17
Turbidity (NTU)	4.10	3.70			4.00	3.70	3.91	-	
SS (mg/L)	6.0	6.0			6.0	5.0	5.75	-	
Remarks									

Station	D2								
Time (hh:mm)	16:09-16:12								
Water Depth (m)	7.00								
Monitoring Depth (m)	1.00		3.50		6.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	21.2	21.3	21.0	21.0	20.7	20.5	20.96	-	
Salinity (ppt)	26.4	26.2	26.5	26.6	26.8	27.0	26.56	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.81		
D.O. Saturation (%)	106.9	109.9	106.2	104.9	101.0	102.6	105.25	-	
D.O. (mg/L)	8.14	8.36	8.10	8.01	7.74	7.88	8.04	7.81	8.15
Turbidity (NTU)	3.90	5.70	4.40	4.80	6.50	6.80	5.38	-	
SS (mg/L)	4.0	4.0	7.0	6.0	8.0	10.0	6.50	-	
Remarks									

Station	SR3								
Time (hh:mm)	16:24-16:28								
Water Depth (m)	12.00								
Monitoring Depth (m)	1.10		6.20		10.70				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.9	20.8	20.0	20.0	19.8	19.9	20.23	-	
Salinity (ppt)	27.0	27.4	28.2	28.2	28.3	28.3	27.89	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82		
D.O. Saturation (%)	101.9	102.3	93.3	94.5	93.5	94.3	96.63	-	
D.O. (mg/L)	7.78	7.80	7.19	7.27	7.22	7.27	7.42	7.25	7.51
Turbidity (NTU)	6.60	9.00	33.10	20.80	31.40	22.80	20.62	-	
SS (mg/L)	5.0	8.0	35.0	29.0	44.0	28.0	24.83	-	
Remarks									

Station	G1								
Time (hh:mm)	16:45-16:49								
Water Depth (m)	12.00								
Monitoring Depth (m)	1.00		6.20		11.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.5	20.5	19.9	19.6	19.4	19.4	19.87	-	
Salinity (ppt)	26.4	26.4	28.0	28.3	28.8	28.9	27.81	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.81		
D.O. Saturation (%)	97.6	96.8	94.5	93.6	92.2	91.6	94.38	-	
D.O. (mg/L)	7.53	7.46	7.30	7.25	7.15	7.11	7.30	7.13	7.39
Turbidity (NTU)	3.80	4.50	5.70	7.40	12.70	18.00	8.70	-	
SS (mg/L)	4.0	6.0	7.0	7.0	18.0	24.0	11.00	-	
Remarks									

Station	SR4								
Time (hh:mm)	16:36-16:39								
Water Depth (m)	13.00								
Monitoring Depth (m)	1.10		6.70		12.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.4	20.4	19.7	19.7	19.5	19.5	19.88	-	
Salinity (ppt)	26.7	26.8	28.0	28.0	28.5	28.4	27.73	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82		
D.O. Saturation (%)	98.9	98.3	94.1	94.3	92.4	93.5	95.25	-	
D.O. (mg/L)	7.62	7.57	7.30	7.31	7.17	7.25	7.37	7.21	7.45
Turbidity (NTU)	4.30	4.70	7.40	7.00	13.70	9.30	7.75	-	
SS (mg/L)	7.0	6.0	7.0	8.0	18.0	16.0	10.33	-	
Remarks									

Annex E7 - Water Quality Results at Tuen Mun during mid-ebb tide for 20 March 2008

Date	3/20/2008							
Station	C1							
Time (hh:mm)	11:46-11:49							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	8.00							
Monitoring Depth (m)	0.90		4.10		7.20			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.7	19.7	19.7	19.7	19.7	19.69	-
Salinity (ppt)	28.5	28.5	28.5	28.5	28.5	28.5	28.49	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	95.6	95.7	95.6	95.5	95.6	95.5	95.58	-
D.O. (mg/L)	7.39	7.40	7.39	7.38	7.39	7.38	7.39	7.39
Turbidity (NTU)	3.52	3.72	3.62	3.72	3.72	3.82	3.69	-
SS (mg/L)	4.0	5.0	6.0	4.0	6.0	7.0	5.33	-
Remarks	-							

Date	3/20/2008							
Station	U1							
Time (hh:mm)	12:04-12:07							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	9.00							
Monitoring Depth (m)	1.10		4.50		8.00			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.6	19.6	19.2	19.2	19.0	19.0	19.28	-
Salinity (ppt)	28.7	28.7	29.8	29.7	30.1	30.1	29.51	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	
D.O. Saturation (%)	94.4	91.9	91.9	92.4	91.1	91.0	92.12	-
D.O. (mg/L)	7.30	7.10	7.12	7.16	7.06	7.06	7.13	7.06
Turbidity (NTU)	5.23	6.04	6.44	6.04	10.97	10.16	7.48	-
SS (mg/L)	9.0	9.0	7.0	8.0	15.0	17.0	10.83	-
Remarks	-							

Date	3/20/2008							
Station	C2							
Time (hh:mm)	12:26-12:31							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	13.00							
Monitoring Depth (m)	0.90		6.70		12.00			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.6	19.7	19.4	19.4	19.1	19.1	19.39	-
Salinity (ppt)	28.8	28.7	29.2	29.1	30.0	30.0	29.29	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	
D.O. Saturation (%)	95.8	96.2	93.1	93.9	91.6	91.6	93.68	-
D.O. (mg/L)	7.40	7.42	7.21	7.27	7.10	7.09	7.25	7.10
Turbidity (NTU)	4.93	4.02	6.04	5.53	9.05	8.55	6.35	-
SS (mg/L)	9.0	8.0	6.0	10.0	7.0	6.0	7.67	-
Remarks	-							

Date	3/20/2008							
Station	SR1							
Time (hh:mm)	11:56-11:59							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	5.00							
Monitoring Depth (m)	0.90		2.70		4.00			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.8	19.7	19.7	19.7	19.4	19.69	-
Salinity (ppt)	28.5	28.5	28.6	28.6	28.5	29.2	28.65	-
pH	7.8	7.9	7.9	7.9	7.9	7.9	7.85	
D.O. Saturation (%)	95.0	96.2	95.0	94.7	95.3	93.5	94.95	-
D.O. (mg/L)	7.33	7.42	7.34	7.31	7.37	7.23	7.33	7.30
Turbidity (NTU)	5.94	8.35	5.73	10.06	5.83	10.86	7.80	-
SS (mg/L)	6.0	5.0	10.0	8.0	8.0	10.0	7.83	-
Remarks	-							

Date	3/20/2008							
Station	D1							
Time (hh:mm)	12:13-12:17							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	8.00							
Monitoring Depth (m)	1.10		4.00		7.10			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.2	19.3	19.1	19.2	19.1	19.1	19.17	-
Salinity (ppt)	29.8	29.5	29.9	29.8	30.0	30.0	29.82	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	
D.O. Saturation (%)	92.8	94.0	92.4	92.6	92.1	92.2	92.68	-
D.O. (mg/L)	7.18	7.27	7.16	7.17	7.14	7.14	7.18	7.14
Turbidity (NTU)	9.96	7.24	12.17	11.47	12.68	13.18	11.12	-
SS (mg/L)	16.0	12.0	18.0	12.0	18.0	19.0	15.83	-
Remarks	-							

Annex E8 - Water Quality Results at Tuen Mun during mid-flood tide for 20 March 2008

Date	3/20/2008							
Station	C1							
Time (hh:mm)	17:11-17:16							
Ambient Temperature (℃)								
Weather	Cloudy							
Water Depth (m)	8.00							
Monitoring Depth (m)	1.00		4.00		7.10			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.7	19.7	19.7	19.7	19.7	19.71	-
Salinity (ppt)	28.9	28.9	28.9	28.9	28.9	28.9	28.89	-
pH	7.9	7.9	7.9	7.9	7.8	7.9	7.87	
D.O. Saturation (%)	99.3	99.4	99.0	99.1	99.0	98.4	99.04	-
D.O. (mg/L)	7.66	7.66	7.63	7.64	7.63	7.59	7.64	7.61
Turbidity (NTU)	4.02	3.82	3.92	4.02	5.33	4.93	4.34	-
SS (mg/L)	6.0	6.0	4.0	5.0	7.0	9.0	6.17	-
Remarks	-							

Date	3/20/2008							
Station	C2							
Time (hh:mm)	17:35-17:41							
Ambient Temperature (℃)								
Weather	Cloudy							
Water Depth (m)	13.00							
Monitoring Depth (m)	0.90		6.70		11.70			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.8	19.7	19.8	19.7	19.7	19.75	-
Salinity (ppt)	28.7	28.7	28.8	28.8	28.9	28.9	28.81	-
	7.9	7.9	7.9	7.9	7.9	7.9	7.89	
D.O. Saturation (%)	99.0	99.0	98.4	98.2	98.0	98.1	98.45	-
D.O. (mg/L)	7.63	7.63	7.59	7.56	7.56	7.56	7.59	7.56
Turbidity (NTU)	4.23	4.53	4.33	4.63	5.03	5.13	4.65	-
SS (mg/L)	7.0	4.0	5.0	9.0	8.0	5.0	6.33	-
Remarks	-							

Date	3/20/2008							
Station	D1							
Time (hh:mm)	17:47-17:50							
Ambient Temperature (℃)								
Weather	Cloudy							
Water Depth (m)	9.00							
Monitoring Depth (m)	1.00		4.60		8.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.8	19.7	19.7	19.7	19.7	19.72	-
Salinity (ppt)	28.9	28.9	28.9	28.9	28.9	28.9	28.89	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	
D.O. Saturation (%)	98.7	98.1	98.3	98.1	98.1	98.0	98.24	-
D.O. (mg/L)	7.61	7.56	7.58	7.56	7.56	7.55	7.57	7.56
Turbidity (NTU)	6.44	4.63	5.43	4.63	5.73	5.53	5.40	-
SS (mg/L)	6.0	9.0	9.0	6.0	9.0	6.0	7.50	-
Remarks	-							

Date	3/20/2008							
Station	U1							
Time (hh:mm)	17:56-17:59							
Ambient Temperature (℃)								
Weather	Cloudy							
Water Depth (m)	9.00							
Monitoring Depth (m)	1.10		4.60		8.10			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.8	19.8	19.8	19.8	19.8	19.76	-
Salinity (ppt)	28.9	28.9	28.9	28.9	28.9	28.9	28.86	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89	
D.O. Saturation (%)	100.0	99.8	99.9	99.7	99.9	99.6	99.80	-
D.O. (mg/L)	7.70	7.69	7.69	7.68	7.69	7.67	7.69	7.68
Turbidity (NTU)	4.73	5.63	4.83	5.43	6.14	5.43	5.37	-
SS (mg/L)	8.0	9.0	7.0	7.0	8.0	10.0	8.17	-
Remarks	-							

Date	3/20/2008							
Station	SR1							
Time (hh:mm)	17:23-17:26							
Ambient Temperature (℃)								
Weather	Cloudy							
Water Depth (m)	5.00							
Monitoring Depth (m)	1.00		2.60		4.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.8	19.8	19.8	19.8	19.8	19.83	-
Salinity (ppt)	28.9	28.9	28.9	28.9	28.8	28.9	28.85	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.86	
D.O. Saturation (%)	97.2	97.0	97.2	97.0	97.4	97.0	97.10	-
D.O. (mg/L)	7.48	7.46	7.48	7.46	7.49	7.46	7.47	7.48
Turbidity (NTU)	4.12	4.33	4.12	3.92	4.12	4.02	4.11	-
SS (mg/L)	5.0	6.0	6.0	8.0	5.0	6.0	6.00	-
Remarks	-							

Annex E9 - Water Quality Results at Airport during mid-ebb tide for 21 March 2008

Sampling Date	21/3/2008
Weather & Ambient Temperature	Sunny

Mid-Ebb

Station	C3								
Time (hh:mm)	11:34-11:41								
Water Depth (m)	11.00								
Monitoring Depth (m)	0.90		5.60		9.80				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.3	19.3	19.2	19.2	19.2	19.2	19.25	-	
Salinity (ppt)	29.6	29.6	29.8	29.8	29.9	29.9	29.76	-	
pH	7.9	7.9	7.9	7.9	7.8	7.9	7.86		
D.O. Saturation (%)	94.0	94.0	92.7	92.7	92.2	92.1	92.95	-	
D.O. (mg/L)	7.27	7.27	7.17	7.17	7.14	7.12	7.19	7.13	7.22
Turbidity (NTU)	6.40	6.50	7.40	7.90	15.90	27.60	11.95	-	
SS (mg/L)	9.0	7.0	8.0	10.0	29.0	32.0	15.83	-	
Remarks									

Station	U2								
Time (hh:mm)	12:20-12:23								
Water Depth (m)	8.00								
Monitoring Depth (m)	1.00		4.10		7.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.5	19.5	19.4	19.4	19.4	19.4	19.45	-	
Salinity (ppt)	29.2	29.1	29.3	29.3	29.3	29.4	29.27	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	94.3	94.6	94.0	93.9	93.8	93.8	94.05	-	
D.O. (mg/L)	7.29	7.31	7.27	7.26	7.25	7.25	7.27	7.25	7.28
Turbidity (NTU)	10.30	9.80	10.60	11.30	12.10	14.00	11.32	-	
SS (mg/L)	12.0	11.0	12.0	15.0	16.0	13.0	13.17	-	
Remarks									

Station	C4								
Time (hh:mm)	12:39-12:46								
Water Depth (m)	9.00								
Monitoring Depth (m)	1.10		4.30		8.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.7	19.8	19.5	19.5	19.5	19.5	19.60	-	
Salinity (ppt)	29.1	29.1	29.2	29.2	29.2	29.3	29.16	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	96.9	97.4	95.0	94.7	94.5	94.3	95.45	-	
D.O. (mg/L)	7.45	7.49	7.34	7.31	7.30	7.28	7.36	7.29	7.40
Turbidity (NTU)	7.30	5.40	10.10	11.30	18.90	17.50	11.75	-	
SS (mg/L)	6.0	8.0	15.0	12.0	22.0	24.0	14.50	-	
Remarks									

Station	SR2								
Time (hh:mm)	11:48-11:53								
Water Depth (m)	4.00								
Monitoring Depth (m)	1.40				3.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.7	19.7			19.6	19.6	19.65	-	
Salinity (ppt)	29.3	29.3			29.6	29.7	29.45	-	
pH	7.9	7.9			7.9	7.9	7.89		
D.O. Saturation (%)	96.6	96.1			98.7	96.2	96.92	-	
D.O. (mg/L)	7.44	7.40			7.59	7.39	7.46	7.49	7.42
Turbidity (NTU)	5.80	8.30			6.00	8.50	7.11	-	
SS (mg/L)	10.0	11.0			15.0	16.0	13.00	-	
Remarks									

Station	D2								
Time (hh:mm)	12:30-12:33								
Water Depth (m)	7.00								
Monitoring Depth (m)	1.10		3.50		5.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.7	19.6	19.6	19.6	19.6	19.5	19.59	-	
Salinity (ppt)	28.9	29.0	29.1	29.2	29.2	29.2	29.09	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	93.5	93.5	93.3	93.3	93.6	93.1	93.42	-	
D.O. (mg/L)	7.21	7.22	7.21	7.20	7.22	7.19	7.21	7.21	7.21
Turbidity (NTU)	14.40	15.10	15.70	13.90	13.00	14.10	14.35	-	
SS (mg/L)	17.0	18.0	18.0	20.0	18.0	16.0	17.83	-	
Remarks									

Station	SR3								
Time (hh:mm)	12:10-12:16								
Water Depth (m)	12.00								
Monitoring Depth (m)	0.90		6.00		11.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.8	19.8	19.4	19.4	19.3	19.3	19.52	-	
Salinity (ppt)	29.0	28.9	29.3	29.5	29.7	29.6	29.33	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90		
D.O. Saturation (%)	95.6	95.6	94.2	94.2	94.3	94.1	94.69	-	
D.O. (mg/L)	7.36	7.35	7.28	7.28	7.29	7.27	7.31	7.28	7.32
Turbidity (NTU)	11.90	11.30	7.80	11.30	9.70	13.70	10.92	-	
SS (mg/L)	8.0	8.0	12.0	10.0	11.0	15.0	10.67	-	
Remarks									

Station	G1								
Time (hh:mm)	11:48-11:51								
Water Depth (m)	12.00								
Monitoring Depth (m)	1.00		5.90		11.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.5	19.6	19.3	19.4	19.2	19.2	19.38	-	
Salinity (ppt)	29.2	29.2	29.6	29.5	29.9	29.9	29.52	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	95.5	95.7	93.7	93.9	93.0	92.9	94.14	-	
D.O. (mg/L)	7.38	7.39	7.25	7.26	7.19	7.19	7.28	7.19	7.32
Turbidity (NTU)	7.10	7.10	8.10	8.50	6.90	6.80	7.43	-	
SS (mg/L)	8.0	9.0	11.0	10.0	8.0	8.0	9.00	-	
Remarks									

Station	SR4								
Time (hh:mm)	11:59-12:05								
Water Depth (m)	13.00								
Monitoring Depth (m)	1.20		6.50		12.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	19.8	19.8	19.3	19.5	19.3	19.3	19.49	-	
Salinity (ppt)	28.9	28.9	29.6	29.3	29.7	29.7	29.36	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	95.8	95.8	94.0	94.7	93.8	92.9	94.48	-	
D.O. (mg/L)	7.38	7.37	7.27	7.31	7.25	7.18	7.29	7.22	7.33
Turbidity (NTU)	7.10	6.90	11.10	8.10	11.90	13.70	9.79	-	
SS (mg/L)	9.0	9.0	18.0	13.0	16.0	20.0	14.17	-	
Remarks									

Annex E10 - Water Quality Results at Airport during mid-flood tide for 21 March 2008

Sampling Date	21/3/2008
Weather & Ambient Temperature	Cloudy

Mid-Flood

Station	C3								
Time (hh:mm)	17:29-17:34								
Water Depth (m)	10.00								
Monitoring Depth (m)	0.90		5.00		8.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.1	19.8	19.8	19.5	19.5	19.78	-	
Salinity (ppt)	28.7	28.7	29.2	29.2	29.4	29.4	29.11	-	
pH	7.8	7.9	7.9	7.9	7.8	7.9	7.86		
D.O. Saturation (%)	98.6	98.6	97.0	97.0	95.1	95.2	96.92	-	
D.O. (mg/L)	7.56	7.56	7.45	7.46	7.34	7.34	7.45	7.34	7.51
Turbidity (NTU)	5.90	5.90	7.20	7.80	9.00	11.50	7.88	-	
SS (mg/L)	5.0	8.0	10.0	7.0	12.0	13.0	9.17	-	
Remarks									

Station	U2								
Time (hh:mm)	18:15-18:23								
Water Depth (m)	7.00								
Monitoring Depth (m)	1.10		3.50		6.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.1	20.1	20.0	20.0	20.0	20.07	-	
Salinity (ppt)	28.4	28.5	28.5	28.7	28.9	28.8	28.61	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	100.5	100.5	100.4	100.0	99.7	99.8	100.15	-	
D.O. (mg/L)	7.71	7.71	7.70	7.67	7.65	7.66	7.68	7.66	7.70
Turbidity (NTU)	9.60	9.60	11.10	18.20	30.90	23.80	17.19	-	
SS (mg/L)	11.0	11.0	13.0	22.0	44.0	43.0	24.00	-	
Remarks									

Station	C4								
Time (hh:mm)	18:41-18:47								
Water Depth (m)	9.00								
Monitoring Depth (m)	1.10		4.50		8.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.2	19.9	19.9	19.8	19.8	19.95	-	
Salinity (ppt)	28.3	28.3	28.9	28.8	29.2	29.1	28.77	-	
pH	7.9	7.8	7.9	7.9	7.9	7.9	7.86		
D.O. Saturation (%)	101.0	101.5	100.0	100.1	99.6	99.3	100.25	-	
D.O. (mg/L)	7.75	7.78	7.68	7.69	7.66	7.63	7.70	7.65	7.73
Turbidity (NTU)	4.00	3.80	8.50	8.90	16.10	15.30	9.42	-	
SS (mg/L)	3.0	3.0	8.0	7.0	19.0	24.0	10.67	-	
Remarks									

Station	SR2								
Time (hh:mm)	17:44-17:49								
Water Depth (m)	4.00								
Monitoring Depth (m)	1.10				3.10				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.7	20.6			20.6	20.6	20.64	-	
Salinity (ppt)	28.1	28.1			28.1	28.1	28.09	-	
pH	7.8	7.9			7.8	7.9	7.84		
D.O. Saturation (%)	100.2	100.7			100.8	101.1	100.72	-	
D.O. (mg/L)	7.63	7.67			7.67	7.70	7.67	7.69	7.65
Turbidity (NTU)	5.50	5.60			6.20	7.00	6.03	-	
SS (mg/L)	8.0	11.0			17.0	13.0	12.25	-	
Remarks									

Station	D2								
Time (hh:mm)	18:29-18:34								
Water Depth (m)	8.00								
Monitoring Depth (m)	1.00		4.00		7.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.4	20.3	20.3	20.3	20.1	20.0	20.22	-	
Salinity (ppt)	28.1	28.2	28.3	28.4	28.6	28.8	28.39	-	
pH	7.8	7.9	7.9	7.9	7.9	7.9	7.86		
D.O. Saturation (%)	101.2	101.3	100.9	100.8	100.2	100.5	100.82	-	
D.O. (mg/L)	7.74	7.76	7.72	7.71	7.68	7.71	7.72	7.70	7.73
Turbidity (NTU)	7.60	8.00	9.80	11.60	11.80	14.80	10.57	-	
SS (mg/L)	12.0	7.0	10.0	16.0	14.0	20.0	13.17	-	
Remarks									

Station	SR3								
Time (hh:mm)	18:03-18:10								
Water Depth (m)	12.00								
Monitoring Depth (m)	1.10		6.10		11.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.0	19.9	19.9	19.9	19.9	19.95	-	
Salinity (ppt)	28.6	28.7	29.0	29.1	29.1	29.1	28.92	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	99.6	99.6	99.2	99.4	99.3	99.5	99.43	-	
D.O. (mg/L)	7.65	7.65	7.62	7.62	7.62	7.63	7.63	7.63	7.64
Turbidity (NTU)	6.70	9.10	11.80	12.60	14.90	16.20	11.87	-	
SS (mg/L)	8.0	10.0	17.0	15.0	17.0	20.0	14.50	-	
Remarks									

Station	G1								
Time (hh:mm)	17:40-17:45								
Water Depth (m)	11.00								
Monitoring Depth (m)	0.90		5.60		10.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.2	19.6	19.6	19.5	19.5	19.74	-	
Salinity (ppt)	28.7	28.4	29.3	29.4	29.5	29.5	29.13	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88		
D.O. Saturation (%)	98.9	99.7	96.4	96.6	96.0	95.8	97.22	-	
D.O. (mg/L)	7.59	7.64	7.43	7.44	7.41	7.38	7.48	7.40	7.53
Turbidity (NTU)	5.90	4.80	9.70	8.40	13.10	15.30	9.53	-	
SS (mg/L)	6.0	6.0	14.0	12.0	18.0	22.0	13.00	-	
Remarks									

Station	SR4								
Time (hh:mm)	17:51-17:58								
Water Depth (m)	13.00								
Monitoring Depth (m)	1.10		6.50		11.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*	*Surface&Middle*
Water Temperature (℃)	20.1	20.2	19.6	19.7	19.6	19.5	19.81	-	
Salinity (ppt)	28.4	28.3	29.3	29.1	29.4	29.5	29.01	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89		
D.O. Saturation (%)	99.4	99.7	96.5	97.4	96.4	96.3	97.61	-	
D.O. (mg/L)	7.63	7.64	7.43	7.49	7.43	7.42	7.51	7.43	7.55
Turbidity (NTU)	4.70	4.70	10.90	8.00	15.50	20.40	10.70	-	
SS (mg/L)	4.0	6.0	20.0	22.0	17.0	26.0	15.83	-	
Remarks									

Annex E11 - Water Quality Results at Tuen Mun during mid-ebb tide for 23 March 2008

Date	3/23/2008							
Station	C1							
Time (hh:mm)	12:33-12:37							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	8.00							
Monitoring Depth (m)	1.30		4.00		7.00			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.7	19.7	19.7	19.7	19.7	19.68	-
Salinity (ppt)	29.1	29.1	29.2	29.2	29.2	29.2	29.18	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	91.9	92.0	90.8	90.5	90.5	90.1	90.92	-
D.O. (mg/L)	7.07	7.08	6.99	6.97	6.97	6.93	7.00	6.95
Turbidity (NTU)	4.33	4.02	5.53	5.63	6.24	6.14	5.32	-
SS (mg/L)	8.0	5.0	5.0	9.0	7.0	8.0	7.00	-
Remarks	-							

Date	3/23/2008							
Station	U1							
Time (hh:mm)	12:54-13:01							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	9.00							
Monitoring Depth (m)	1.30		4.60		7.90			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.6	19.6	19.4	19.3	19.3	19.3	19.42	-
Salinity (ppt)	29.6	29.6	29.9	30.3	30.3	30.3	30.00	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	
D.O. Saturation (%)	90.1	90.2	89.9	89.4	89.7	89.6	89.83	-
D.O. (mg/L)	6.94	6.95	6.92	6.89	6.91	6.90	6.92	6.91
Turbidity (NTU)	5.83	5.73	6.94	8.05	12.68	12.07	8.55	-
SS (mg/L)	7.0	9.0	9.0	11.0	15.0	19.0	11.67	-
Remarks	-							

Date	3/23/2008							
Station	C2							
Time (hh:mm)	13:16-13:22							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	13.00							
Monitoring Depth (m)	1.30		6.60		12.10			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.5	19.6	19.4	19.4	19.3	19.3	19.42	-
Salinity (ppt)	29.6	29.6	30.0	30.0	30.4	30.4	30.01	-
pH	7.9	7.8	7.9	7.9	7.9	7.9	7.86	
D.O. Saturation (%)	90.4	90.6	89.8	89.6	89.4	88.9	89.75	-
D.O. (mg/L)	6.96	6.97	6.91	6.90	6.88	6.84	6.91	6.86
Turbidity (NTU)	5.83	5.33	8.15	8.35	11.07	10.46	8.20	-
SS (mg/L)	7.0	8.0	11.0	10.0	11.0	15.0	10.33	-
Remarks	-							

Date	3/23/2008							
Station	SR1							
Time (hh:mm)	12:46-12:50							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	5.00							
Monitoring Depth (m)	1.10		2.50		4.10			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.6	19.6	19.5	19.5	19.4	19.4	19.50	-
Salinity (ppt)	29.4	29.4	29.7	29.7	30.1	30.1	29.73	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.86	
D.O. Saturation (%)	90.1	90.1	89.7	89.5	89.4	89.2	89.65	-
D.O. (mg/L)	6.94	6.94	6.91	6.89	6.88	6.87	6.91	6.88
Turbidity (NTU)	6.04	5.53	7.55	8.65	11.17	10.36	8.22	-
SS (mg/L)	8.0	10.0	12.0	12.0	15.0	13.0	11.67	-
Remarks	-							

Date	3/23/2008							
Station	D1							
Time (hh:mm)	13:07-13:11							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	8.00							
Monitoring Depth (m)	1.20		4.00		6.90			
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.6	19.6	19.3	19.4	19.3	19.3	19.41	-
Salinity (ppt)	29.3	29.6	30.4	30.1	30.4	30.4	30.04	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.86	
D.O. Saturation (%)	90.9	90.5	89.5	89.8	89.7	89.5	90.01	-
D.O. (mg/L)	7.00	6.96	6.89	6.92	6.91	6.90	6.93	6.91
Turbidity (NTU)	4.83	5.43	10.26	6.64	10.56	9.05	7.80	-
SS (mg/L)	9.0	8.0	12.0	9.0	13.0	14.0	10.83	-
Remarks	-							

Annex E12 - Water Quality Results at Tuen Mun during mid-flood tide for 23 March 2008

Date	3/23/2008							
Station	C1							
Time (hh:mm)	19:02-19:08							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	7.00							
Monitoring Depth (m)	1.30		3.40		5.90			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.7	19.6	19.5	19.5	19.6	19.60	-
Salinity (ppt)	29.2	29.3	29.5	29.7	29.7	29.6	29.49	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	90.2	89.4	89.7	89.2	89.4	90.6	89.74	-
D.O. (mg/L)	6.94	6.88	6.90	6.87	6.88	6.97	6.91	6.93
Turbidity (NTU)	5.23	6.54	6.24	11.77	9.76	9.76	8.22	-
SS (mg/L)	8.0	12.0	7.0	17.0	13.0	7.0	10.67	-
Remarks	-							

Date	3/23/2008							
Station	U1							
Time (hh:mm)	19:23-19:28							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	8.00							
Monitoring Depth (m)	1.30		3.90		7.30			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.8	19.7	19.7	19.7	19.7	19.70	-
Salinity (ppt)	28.9	28.9	29.3	29.3	29.3	29.4	29.18	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.83	
D.O. Saturation (%)	89.5	89.0	88.4	88.0	88.2	87.4	88.41	-
D.O. (mg/L)	6.89	6.85	6.80	6.77	6.79	6.73	6.81	6.76
Turbidity (NTU)	4.73	5.53	9.36	9.56	9.96	14.08	8.87	-
SS (mg/L)	4.0	10.0	12.0	11.0	14.0	17.0	11.33	-
Remarks	-							

Date	3/23/2008							
Station	C2							
Time (hh:mm)	19:47-19:53							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	12.00							
Monitoring Depth (m)	1.00		6.00		11.40			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.8	19.8	19.7	19.6	19.6	19.6	19.69	-
Salinity (ppt)	28.6	28.9	29.3	29.4	29.4	29.4	29.19	-
	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	88.2	87.6	87.2	87.0	87.0	87.4	87.39	-
D.O. (mg/L)	6.79	6.75	6.71	6.70	6.69	6.72	6.73	6.71
Turbidity (NTU)	5.03	5.63	7.55	9.26	9.05	8.95	7.58	-
SS (mg/L)	8.0	8.0	8.0	10.0	11.0	11.0	9.33	-
Remarks	-							

Date	3/23/2008							
Station	SR1							
Time (hh:mm)	19:16-19:19							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	4.00							
Monitoring Depth (m)	1.20		2.10		3.00			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.7	19.7	19.7	19.6	19.6	19.65	-
Salinity (ppt)	29.2	29.3	29.2	29.3	29.4	29.4	29.29	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.83	
D.O. Saturation (%)	88.1	87.5	87.9	87.3	87.2	87.1	87.50	-
D.O. (mg/L)	6.78	6.74	6.77	6.72	6.71	6.70	6.74	6.71
Turbidity (NTU)	6.44	6.74	6.64	6.94	7.55	7.04	6.89	-
SS (mg/L)	7.0	10.0	7.0	6.0	8.0	6.0	7.33	-
Remarks	-							

Date	3/23/2008							
Station	D1							
Time (hh:mm)	19:34-19:41							
Ambient Temperature (℃)								
Weather	Fine							
Water Depth (m)	8.00							
Monitoring Depth (m)	1.00		3.90		7.20			
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth-averaged*	*Bottom*
Water Temperature (℃)	19.7	19.7	19.7	19.7	19.7	19.7	19.68	-
Salinity (ppt)	29.2	29.0	29.3	29.3	29.3	29.3	29.24	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.83	
D.O. Saturation (%)	87.9	88.1	87.7	86.9	87.4	87.8	87.61	-
D.O. (mg/L)	6.76	6.78	6.75	6.69	6.72	6.76	6.74	6.74
Turbidity (NTU)	6.54	5.83	7.14	7.55	9.66	8.05	7.46	-
SS (mg/L)	6.0	6.0	10.0	15.0	9.0	10.0	9.33	-
Remarks	-							

Annex F

Dolphin Observation Recording Forms

HONG KONG MARINE CONTRACTORS LIMITED

DOLPHIN OBSERVATION RECORDING FORM

Weather: Fair + Humid

Date: (dd/mm/yyy): 17/3/2008 Vessel Name: CLB

Observer's name: Kevin Chan

Start Time: 8:00 End Time: 8:30 Total: Time: 0:30

Observer's Height Above Sea Level (m) 17m Field of View 180 degree FWD / 90 degree L / 90 degree R

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
8:00	812941	822268	0.0 kn	2	LIG	1-5 km	CLB	Nil
8:15	812941	822268	0.0 kn	2	LIG	1-5 km	CLB	Nil
8:30	812941	822268	0.0 kn	2	LIG	1-5 km	CLB	Nil

DATA DEFINITIONS:

Time: 24hrs clock. **Location:** Record Easting & Northing (HK80 GRID) **Speed:** Record in knots. **Sea State:** 0 = mirror calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam steaks. **Swell Height:** Light = 0-1m: Moderate = 1-2m; Heavy = > 2m. **Visibility:** < 1km; 1-5km; 6-10km; >10km. **Boat Activity:** TB = Tugboat; CLB = Cable Lay Barge **Sighting Reference:** Refer to number(s) on Sighting Record Form

HONG KONG MARINE CONTRACTORS LIMITED

DOLPHIN OBSERVATION RECORDING FORM

Weather: Foggy + Humid.

Date: (dd/mm/yyy): 18/07/2008 **Vessel Name:** CMB

Observer's name: Kevin Chan

Start Time: 10:30 **End Time:** 11:00 **Total: Time:** 0:30

Observer's Height Above Sea Level (m) 17 **Field of View 180 degree FWD / 90 degree L / 90 degree R**

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
10:30	813697	822781	0.0 knots	2	LIG	1-3 km	CLB	Nil
10:45	813697	822781	0.0 knots	2	LIG	1-3 km	CLB	Nil
11:00	813697	822781	0.0 knots	2	LIG	1-3 km	CLB	Nil

DATA DEFINITIONS:

Time: 24hrs clock. **Location:** Record Easting & Northing (HK80 GRID) **Speed:** Record in knots. **Sea State:** 0 = mirror calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam steaks. **Swell Height:** Light = 0-1m: Moderate = 1-2m; Heavy = > 2m. **Visibility:** < 1km; 1-5km; 6-10km; >10km. **Boat Activity:** TB = Tugboat; CLB = Cable Lay Barge **Sighting Reference:** Refer to number(s) on Sighting Record Form

HONG KONG MARINE CONTRACTORS LIMITED

DOLPHIN OBSERVATION RECORDING FORM

Date: (dd/mm/yyy): 19/3/2008 Vessel Name: CHB

Observer's name: Kevin Chan

Start Time: 9:30 End Time: 10:00 Total: Time: 0:50

Observer's Height Above Sea Level (m) 17 Field of View 180 degree FWD / 90 degree L / 90 degree R

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
9:30	813286	823374	8.0 knot	2	LIG	1-5km	CLB	Nil
9:45	813286	823374	8.0 knot	2	LIG	1-5km	CLB	Nil
10:00	813286	823374	8.0 knot	2	LIG	1-5km	CLB	Nil

DATA DEFINITIONS:

Time: 24hrs clock. **Location:** Record Easting & Northing (HK80 GRID) **Speed:** Record in knots. **Sea State:** 0 = mirror calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam steaks. **Swell Height:** Light = 0-1m: Moderate = 1-2m; Heavy = > 2m. **Visibility:** < 1km; 1-5km; 6-10km; >10km. **Boat Activity:** TB = Tugboat; CLB = Cable Lay Barge **Sighting Reference:** Refer to number(s) on Sighting Record Form

HONG KONG MARINE CONTRACTORS LIMITED

DOLPHIN OBSERVATION RECORDING FORM

Date: (dd/mm/yyy): 20/03/2008 Vessel Name: CH8

Observer's name: Kevin Chan

Start Time: 9:00 End Time: 9:30 Total: Time: 0:30.

Observer's Height Above Sea Level (m) 17 Field of View 180 degree FWD / 90 degree L / 90 degree R

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
9:00	813540	824347	0-0 knot	3	LIG	6-10 km	CLB	Nil
9:15	813540	824347	0-0 knot	3	LIG	6-10 km	CLB	Nil
9:30	813540	824347	0-0 knot	3	LIG	6-10 km	CLB	Nil

DATA DEFINITIONS:

Time: 24hrs clock. **Location:** Record Easting & Northing (HK80 GRID) **Speed:** Record in knots. **Sea State:** 0 = mirror calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam steaks. **Swell Height:** Light = 0-1m: Moderate = 1-2m; Heavy = > 2m. **Visibility:** < 1km; 1-5km; 6-10km; >10km. **Boat Activity:** TB = Tugboat; CLB = Cable Lay Barge **Sighting Reference:** Refer to number(s) on Sighting Record Form