

**The Government of
The Hong Kong Special Administrative Region**

Environmental Protection Department

Contract No. EP/SP/19/94

Outlying Islands Transfer Facilities Contract

Sok Kwu Wan Transfer Facility

Annual Environmental Audit Report (Operation)

April 2012 – March 2013

Checked by



25.10.2012

Patrick YEUNG / Senior Environmental Protection Inspector
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Audited by



19.11.2012

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1. INTRODUCTION

Under the requirements of Section 4 of Environmental Permit No EP-014/1998/A, the measures were undertaken to assure the Sok Kwu Wan Transfer Facility was operated in accordance with the permit.

This report documents the findings of environmental monitoring and audit works for the facility from April 2012 to March 2013.

Environmental monitoring for the odour, noise and water quality was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Full details of the above environmental monitoring tests are described in the **Section 2**. In addition, the environmental complaint handling procedures were also checked and reported in **Section 4** of this report.

2. DESCRIPTION OF ENVIRONMENTAL MONITORING TESTS

Table 1: Summary of Environmental Monitoring Parameters

<u>Test</u>	<u>Location</u>	<u>Frequency</u>	<u>Parameter</u>	<u>Limits</u>
Odour	Site Boundary See Map (Appendix A1)	Weekly	Odour	Odour strength not exceed "Slight" odour intensity
Noise	Nearest Sensitive Receiver See Map (Appendix B1)	Quarterly	L _{Aeq} (30min)	55 dBA (07:00-23:00) 45 dBA (23:00-07:00)
Marine Water	Four monitoring locations and two control sites. See Map (Appendix C1)	Weekly	Dissolved Oxygen (DO)	<u>Surface & Middle</u> 4 mg/L except 5 mg/L for FCZ or 1%-ile of baseline data for surface and middle layer <u>Bottom</u> 2 mg/L and or 1%-ile of baseline data for bottom layer
			Water Turbidity (Turbidity)	99%-ile of baseline or 130% of upstream control station's Turbidity at the same tide of the same day
			Suspended Solids (SS)	99%-ile of baseline or 130% of upstream control station's SS of the same tide of the same day

2.1 Odour

2.1.1 Monitoring Location

The monitoring takes place at the boundary of the facility. The patrol route is shown in **Appendix A1**.

2.1.2 Monitoring Frequency

The odour monitoring is conducted once or twice per week.

2.1.3 Monitoring Methodology

The odour patrol is conducted by a sensory team, which includes a representative (1) from Independent Third-party Accredited Laboratory, one (1) from the Contractor and one (1) from the EPD. The test consists of three (3) person patrolling the site boundary and recording the location and strength of odour identifiable as arising from the facility. The odour intensity is categorized into five (5) classes:

Table 2: Odour Intensity Classification

Class	Remarks
None	No odour perceived or an odour so weak that it cannot be readily characterized or described
Slight	Identifiable odour, slight
Moderate	Identifiable odour, moderate
Strong	Identifiable odour, strong
Extreme	Severe odour

The odour patrol record is set out in **Appendix A2**.

2.2 Noise

2.2.1 Monitoring Location

Noise monitoring is carried out at the nearest Noise Sensitive Receiver (NSR) in accordance with the EM&A Manual. **Appendix B1** shows the location of this monitoring position.

2.2.2 Monitoring Frequency

The noise monitoring is conducted once (1) per quarter.

2.2.3 Monitoring Methodology

The noise monitoring during the Operations phase for the SKWTF was performed in accordance with the “Technical Memorandum for the Assessment of Noise from places other than Domestic, Public or Construction Sites”. The monitoring requirements are summarized as follow:

- The Sound Level Meters in compliance with the IEC61672: 2002 Class 1 and 2 for carrying out the noise monitoring.
- The Sound Level Meter will be set on a tripod at a height of 1.2 m above the ground, subject to local monitoring condition.
- The battery condition will be checked to ensure the correct functioning of the meter.
- Noise monitoring $Leq_{(30\text{ min})}$ to be taken on a monthly basis for daytime measurements.
- Prior to and after each noise measurement, the meter will be calibrated using a Calibrator for 94.0 dB at 1000 Hz. The measurement may be accepted as valid only if the calibration level agrees to within 1.0 dB.
- The wind speed will be frequently checked with the portable wind meter.
- Site conditions and interference noise sources will be recorded.
- Noise monitoring will be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

The Noise monitoring record is set out in **Appendix B2**.

2.3 Water quality

2.3.1 Monitoring Location

The number of marine water monitoring stations for Sok Kwu Wan Transfer Facility is shown in **Table 3** and **Appendix C1** shows the locations of the marine water quality monitoring stations.

Table 3: Locations of the marine water quality monitoring stations

Facility	Station ID	No. of Stations
Sok Kwu Wan	Control Stations: SC1 & SC2 Impact Stations: S1, S2, S3 & S4	6

2.3.2 Monitoring Methodology

The marine water quality monitoring during the Operations phase for the SKWTF was performed in accordance with the EM&A Manual. The following set out the methods of measurement to be used during the environmental monitoring.

Dissolved Oxygen and Turbidity

The in-situ measurements of dissolved oxygen and turbidity are carried out using an In-situ Aqua Troll 600 Multi-parameter Sonde.

Where the depth of water is less than 3m, duplicate measurements of D.O. are to be taken at one depth to obtain an average reading.

With depths between 3m and 6m, measurements will be taken at 1m below the surface and 1m above the sea bed. In each depth, duplicate readings will be taken and an average value will be calculated.

With a water depth greater than 6m, measurements will be taken at 1m below surface, the mid-depth and 1m above the sea bed. In each depth, duplicate readings will be taken and an average value will be calculated.

Suspended solids

The suspended solids monitoring is carried out in according to the in-house method (E-T-053) with reference to the standard method APHA 17ed 2540 D. The testing method is summarized as below:

A well-mixed sea water sample is filtered through a weighed standard glass-fiber filter and wash thoroughly with water to remove dissolved solids on the filter. The non-filterable residue retained on the filter is dried at 103 to 105°C. The increase in weight of the filter represents the suspended solids content.

3 **RESULTS**

3.1 **Odour**

3.1.1 Summary of Number of Monitoring Events and Exceedances for Odour monitoring

Table 4: Summary of Number of Monitoring Events and Exceedances for Odour monitoring

Monitoring Parameter	Location	No. of monitoring events	No. of Exceedance
		April 2012 – March 2013	
Odour	Point 1	61	0
	Point 2	61	0
	Point 3	61	0
	Point 4	61	0
	Point 5	61	0
	Point 6	61	0
Total		366	0

3.1.2 Conclusion

No odour could be detected during the odour patrols. The results show compliance with the odour objectives.

Please refer to the **Appendix A2** for the odour monitoring record.

3.2 **Noise**

3.2.1 Summary of Number of Monitoring Events and Exceedances for Noise monitoring

Table 5: Summary of Number of Monitoring Events and Exceedances for Noise monitoring

Monitoring Parameter	Location	No. of monitoring events	No. of Exceedance
		April 2012 – March 2013	
Noise	NSR	5	4
Total		5	4

3.2.2 Conclusion

During the reporting period, some of noise monitoring results have exceeded the compliance objectives. According to the notes recorded by the field operator of the Independent Third-party Accredited Laboratory, the major noise source was identified from road traffic, marine vessels, air craft and insect noise. Noise emanated from SKWTF was considered insignificant.

In addition, EPD site staff conducted random checking of on-site CCTV record and confirmed no operational activities were being carried out at the facility during night time. Hence, it is reasonable to believe that the night-time noise level at SKWTF is insignificant.

The noise level monitoring record taken at the NSR of SKWTF is set out in **Appendix B2**.

3.3 Water Quality

3.3.1 Summary of Number of Monitoring Events and Exceedances for Water quality monitoring

A total of 833 sets of water samples were collected in 49 sampling days during the report period. A summary of exceedance of dissolved oxygen, turbidity and suspended solids at SKWTF is shown in the following **Table 6**.

Table 6: Summary of exceedance of Marine Water Quality at SKWTF

Sampling Point	Type of Exceedance		
	DO	Turbidity	SS
S1	19	1	5
S2	19	0	3
S3	1	1	5
S4	16	2	5
Total	55	4	18

The laboratory analysis shows that there are 77 samples exceed the limit level of Dissolved Oxygen (55 exceedances), Turbidity (4 exceedances) and Suspended Solids (18 exceedances).

3.3.2 Conclusion

Since there is no wastewater discharge from the SKWTF and no construction activities during the report period, the exceedance of compliance objectives for dissolved oxygen, turbidity and suspended solids were not caused by the operation activities at SKWTF.

The water quality monitoring record is set out in **Appendix C2**

4 **STATUS OF ENVIRONMENTAL COMPLAINT HANDLING**

No verbal or written complaints were received during the reporting period.

5 **CONCLUSION**

Based on the monitoring results during the audit period as well as a review of our observations the following can be concluded.

The environmental protection systems that are currently in use, when combined with the existing level of environmental awareness at the facility, are sufficient to meet current regulatory constraints relating to the environment.

The methods and frequency of environmental monitoring produce a data base that is adequate to assist station management in making accurate and timely decisions relating to the modification of environmental systems or operational practices if needed.

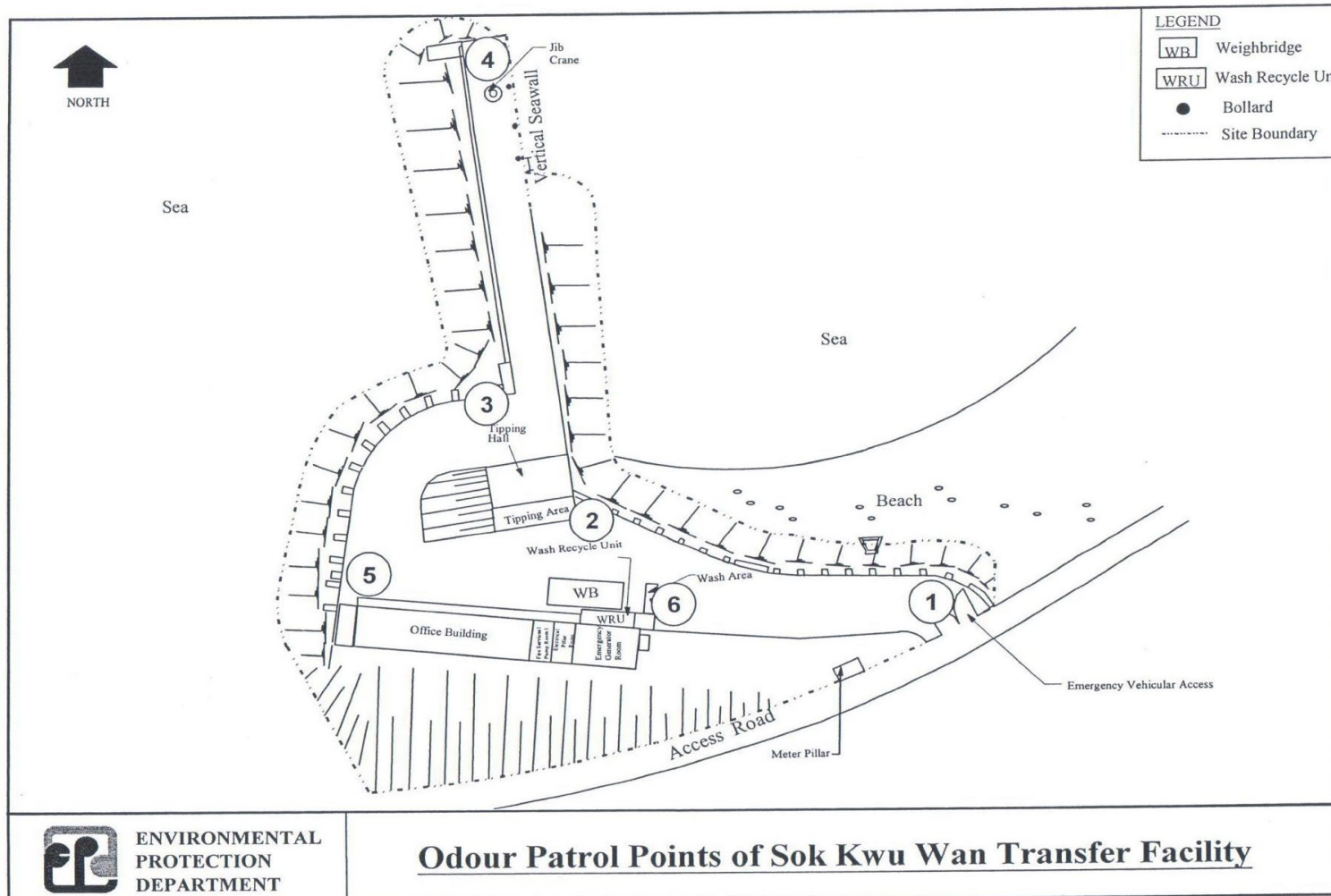
The current environmental management systems and performance provide a good foundation to develop a positive relationship with the community.

Appendix A

Appendix A1

Odour Patrol Points of Sok Kwu Wan Transfer Facility

Appendix A1



Appendix A2

Odour Patrol Record

Appendix A2



Location	Date	Classification	Location	Date	Classification
Peng Chau	2 Apr 2012	None	Hei Ling Chau	2 Apr 2012	None
	5 Apr 2012	None		5 Apr 2012	None
	11 Apr 2012	None		11 Apr 2012	None
	17 Apr 2012	None		17 Apr 2012	None
	23 Apr 2012	None		23 Apr 2012	None
	27 Apr 2012	None		27 Apr 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	2 Apr 2012	None	Sok Kwu Wan	2 Apr 2012	None
	5 Apr 2012	None		5 Apr 2012	None
	11 Apr 2012	None		11 Apr 2012	None
	17 Apr 2012	None		17 Apr 2012	None
	23 Apr 2012	None		23 Apr 2012	None
	27 Apr 2012	None		27 Apr 2012	None

Location	Date	Classification
Ma Wan	2 Apr 2012	None
	5 Apr 2012	None
	11 Apr 2012	None
	17 Apr 2012	None
	23 Apr 2012	None
	27 Apr 2012	None



Location	Date	Classification	Location	Date	Classification
Peng Chau	3 May 2012	None	Hei Ling Chau	3 May 2012	None
	9 May 2012	None		9 May 2012	None
	15 May 2012	None		15 May 2012	None
	21 May 2012	None		21 May 2012	None
	25 May 2012	None		25 May 2012	None
	31 May 2012	None		31 May 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	3 May 2012	None	Sok Kwu Wan	3 May 2012	None
	9 May 2012	None		9 May 2012	None
	15 May 2012	None		15 May 2012	None
	21 May 2012	None		21 May 2012	None
	25 May 2012	None		25 May 2012	None
	31 May 2012	None		31 May 2012	None

Location	Date	Classification
Ma Wan	3 May 2012	None
	9 May 2012	None
	15 May 2012	None
	21 May 2012	None
	25 May 2012	None
	31 May 2012	None



Location	Date	Classification	Location	Date	Classification
Peng Chau	6 June 2012	None	Hei Ling Chau	6 June 2012	None
	12 June 2012	None		12 June 2012	None
	18 June 2012	None		18 June 2012	None
	22 June 2012	None		22 June 2012	None
	28 June 2012	None		28 June 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	6 June 2012	None	Sok Kwu Wan	6 June 2012	None
	12 June 2012	None		12 June 2012	None
	18 June 2012	None		18 June 2012	None
	22 June 2012	None		22 June 2012	None
	28 June 2012	None		28 June 2012	None

Location	Date	Classification
Ma Wan	6 June 2012	None
	12 June 2012	None
	18 June 2012	None
	22 June 2012	None
	28 June 2012	None



Location	Date	Classification	Location	Date	Classification
Peng Chau	4 July 2012	None	Hei Ling Chau	4 July 2012	None
	10 July 2012	None		10 July 2012	None
	16 July 2012	None		16 July 2012	None
	20 July 2012	None		20 July 2012	None
	26 July 2012	None		26 July 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	4 July 2012	None	Sok Kwu Wan	4 July 2012	None
	10 July 2012	None		10 July 2012	None
	16 July 2012	None		16 July 2012	None
	20 July 2012	None		20 July 2012	None
	26 July 2012	None		26 July 2012	None

Location	Date	Classification
Ma Wan	4 July 2012	None
	10 July 2012	None
	16 July 2012	None
	20 July 2012	None
	26 July 2012	None



Table 5

Odour

Location	Date	Classification	Location	Date	Classification
Mui Wo	1 Aug 2012	None	Cheung Chau	1 Aug 2012	None
	7 Aug 2012	None		7 Aug 2012	None
	13 Aug 2012	None		13 Aug 2012	None
	17 Aug 2012	None		17 Aug 2012	None
	23 Aug 2012	None		23 Aug 2012	None
	29 Aug 2012	None		29 Aug 2012	None

Location	Date	Classification	Location	Date	Classification
Peng Chau	1 Aug 2012	None	Hei Ling Chau	1 Aug 2012	None
	7 Aug 2012	None		7 Aug 2012	None
	13 Aug 2012	None		13 Aug 2012	None
	17 Aug 2012	None		17 Aug 2012	None
	23 Aug 2012	None		23 Aug 2012	None
	29 Aug 2012	None		29 Aug 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	1 Aug 2012	None	Sok Kwu Wan	1 Aug 2012	None
	7 Aug 2012	None		7 Aug 2012	None
	13 Aug 2012	None		13 Aug 2012	None
	18 Aug 2012	None		18 Aug 2012	None
	23 Aug 2012	None		23 Aug 2012	None
	29 Aug 2012	None		29 Aug 2012	None



Location	Date	Classification	Location	Date	Classification
Peng Chau	4 Sep 2012	None	Hci Ling Chau	4 Sep 2012	None
	10 Sep 2012	None		10 Sep 2012	None
	14 Sep 2012	None		14 Sep 2012	None
	20 Sep 2012	None		20 Sep 2012	None
	26 Sep 2012	None		26 Sep 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	4 Sep 2012	None	Sok Kwu Wan	4 Sep 2012	None
	10 Sep 2012	None		10 Sep 2012	None
	14 Sep 2012	None		14 Sep 2012	None
	20 Sep 2012	None		20 Sep 2012	None
	26 Sep 2012	None		26 Sep 2012	None

Location	Date	Classification
Ma Wan	4 Sep 2012	None
	10 Sep 2012	None
	14 Sep 2012	None
	20 Sep 2012	None
	26 Sep 2012	None



Table 5

Odour

Location	Date	Classification	Location	Date	Classification
Mui Wo	3 Oct., 2012	None	Cheung Chau	3 Oct., 2012	None
	9 Oct., 2012	None		9 Oct., 2012	None
	15 Oct., 2012	None		15 Oct., 2012	None
	19 Oct., 2012	None		19 Oct., 2012	None
	25 Oct., 2012	None		25 Oct., 2012	None
	31 Oct., 2012	None		31 Oct., 2012	None

Location	Date	Classification	Location	Date	Classification
Peng Chau	3 Oct., 2012	None	Hei Ling Chau	3 Oct., 2012	None
	9 Oct., 2012	None		9 Oct., 2012	None
	15 Oct., 2012	None		15 Oct., 2012	None
	19 Oct., 2012	None		19 Oct., 2012	None
	25 Oct., 2012	None		25 Oct., 2012	None
	31 Oct., 2012	None		31 Oct., 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	3 Oct., 2012	None	Sok Kwu Wan	3 Oct., 2012	None
	9 Oct., 2012	None		9 Oct., 2012	None
	15 Oct., 2012	None		15 Oct., 2012	None
	19 Oct., 2012	None		19 Oct., 2012	None
	25 Oct., 2012	None		25 Oct., 2012	None
	31 Oct., 2012	None		31 Oct., 2012	None



Location	Date	Classification	Location	Date	Classification
Peng Chau	5 Nov., 2012	None	Hei Ling Chau	5 Nov., 2012	None
	13 Nov., 2012	None		13 Nov., 2012	None
	19 Nov., 2012	None		19 Nov., 2012	None
	26 Nov., 2012	None		26 Nov., 2012	None
	30 Nov., 2012	None		30 Nov., 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	7 Nov., 2012	None	Sok Kwu Wan	7 Nov., 2012	None
	12 Nov., 2012	None		12 Nov., 2012	None
	16 Nov., 2012	None		16 Nov., 2012	None
	23 Nov., 2012	None		23 Nov., 2012	None
	30 Nov., 2012	None		30 Nov., 2012	None

Location	Date	Classification
Ma Wan	7 Nov., 2012	None
	12 Nov., 2012	None
	16 Nov., 2012	None
	23 Nov., 2012	None
	30 Nov., 2012	None

4 GENERAL

- Equipment, including Terbergs, JCB, and compactors, functioned properly enabling SITA to provide uninterrupted waste service to station users throughout the month of November 2012.
- Mosquito elimination treatment has been carried out at all facilities.
- Tool Box Talks on prevention of Atypical Pneumonia and Influenza A(H1N1) were given to all staff.
- Additional cleaning materials and equipment were obtained. Housekeeping measures were increased.



Location	Date	Classification	Location	Date	Classification
Peng Chau	6 Dec 2012	None	Hei Ling Chau	6 Dec 2012	None
	12 Dec 2012	None		12 Dec 2012	None
	18 Dec 2012	None		18 Dec 2012	None
	24 Dec 2012	None		24 Dec 2012	None
	28 Dec 2012	None		28 Dec 2012	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	6 Dec 2012	None	Sok Kwu Wan	6 Dec 2012	None
	12 Dec 2012	None		12 Dec 2012	None
	18 Dec 2012	None		18 Dec 2012	None
	24 Dec 2012	None		24 Dec 2012	None
	28 Dec 2012	None		28 Dec 2012	None

Location	Date	Classification
Ma Wan	6 Dec 2012	None
	12 Dec 2012	None
	18 Dec 2012	None
	24 Dec 2012	None
	28 Dec 2012	None



Table 5

Odour

Location	Date	Classification	Location	Date	Classification
Mui Wo	3 Jan 2013	None	Cheung Chau	3 Jan 2013	None
	9 Jan 2013	None		9 Jan 2013	None
	15 Jan 2013	None		15 Jan 2013	None
	21 Jan 2013	None		21 Jan 2013	None
	25 Jan 2013	None		25 Jan 2013	None
	31 Jan 2013	None		31 Jan 2013	None

Location	Date	Classification	Location	Date	Classification
Peng Chau	3 Jan 2013	None	Hei Ling Chau	3 Jan 2013	None
	9 Jan 2013	None		9 Jan 2013	None
	15 Jan 2013	None		15 Jan 2013	None
	21 Jan 2013	None		21 Jan 2013	None
	25 Jan 2013	None		25 Jan 2013	None
	31 Jan 2013	None		31 Jan 2013	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	3 Jan 2013	None	Sok Kwu Wan	3 Jan 2013	None
	9 Jan 2013	None		9 Jan 2013	None
	15 Jan 2013	None		15 Jan 2013	None
	21 Jan 2013	None		21 Jan 2013	None
	25 Jan 2013	None		25 Jan 2013	None
	31 Jan 2013	None		31 Jan 2013	None



Location	Date	Classification	Location	Date	Classification
Peng Chau	6 Feb 2013	None	Hei Ling Chau	6 Feb 2013	None
	14 Feb 2013	None		14 Feb 2013	None
	20 Feb 2013	None		20 Feb 2013	None
	26 Feb 2013	None		26 Feb 2013	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	6 Feb 2013	None	Sok Kwu Wan	6 Feb 2013	None
	14 Feb 2013	None		14 Feb 2013	None
	20 Feb 2013	None		20 Feb 2013	None
	26 Feb 2013	None		26 Feb 2013	None

Location	Date	Classification
Ma Wan	6 Feb 2013	None
	14 Feb 2013	None
	20 Feb 2013	None
	26 Feb 2013	None

4 GENERAL

- Equipment, including Terbergs, JCB, and compactors, functioned properly enabling SITA to provide uninterrupted waste service to station users throughout the month of February 2013.
- Mosquito elimination treatment has been carried out at all facilities.
- Tool Box Talks on prevention of Atypical Pneumonia and Influenza A(H1N1) were given to all staff.
- Additional cleaning materials and equipment were obtained. Housekeeping measures were increased.



Location	Date	Classification	Location	Date	Classification
Peng Chau	4 Mar 2013	None	Hei Ling Chau	4 Mar 2013	None
	8 Mar 2013	None		8 Mar 2013	None

Location	Date	Classification	Location	Date	Classification
Yung Shue Wan	4 Mar 2013	None	Sok Kwu Wan	4 Mar 2013	None
	8 Mar 2013	None		8 Mar 2013	None

Location	Date	Classification
Ma Wan	4 Mar 2013	None
	8 Mar 2013	None

4 GENERAL

- Equipment, including Terbergs, JCB, and compactors, functioned properly enabling SITA to provide uninterrupted waste service to station users in 1 March 2013 to 12 March 2013.
- Mosquito elimination treatment has been carried out at all facilities.
- Tool Box Talks on prevention of Atypical Pneumonia and Influenza A(H1N1) were given to all staff.
- Additional cleaning materials and equipment were obtained. Housekeeping measures were increased.

5 SAFETY

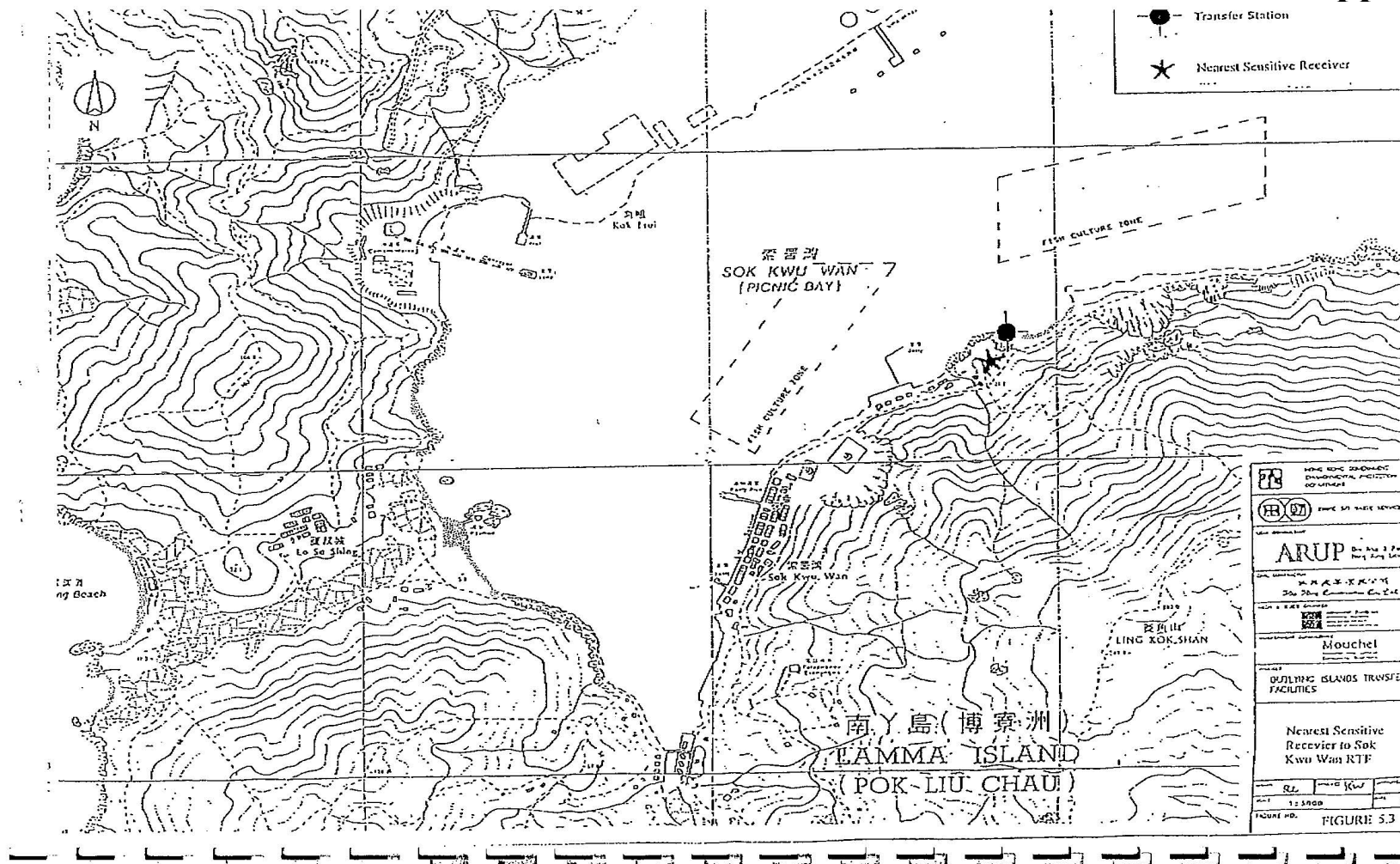
- The Superintendent carried out monthly safety inspections.
- Tool Box Talks on safety related subjects were given to all staff.
- There were no reportable accidents in 1 March 2013 to 12 March 2013.

Appendix B

Appendix B1

Location of Noise Sensitive Receiver (NSR)

Appendix B1



Appendix B2

Noise Monitoring Record (NSR)

Appendix B2 – Noise Monitoring Record (NSR)

Sok Kwu Wan Transfer Facility

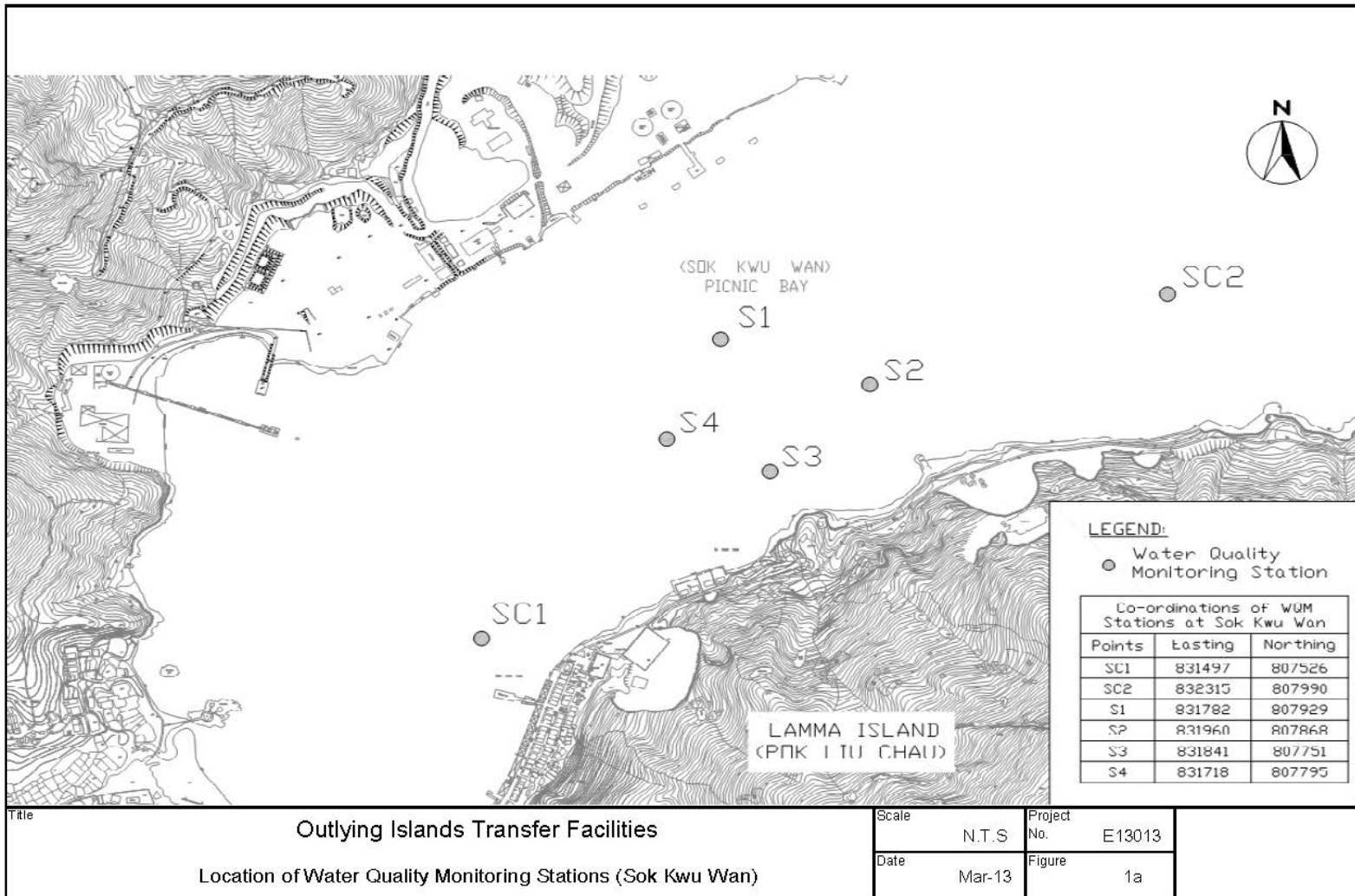
Measurement Date and Time	Noise Level Leq A (30min) / (dB(A))	Remarks
22 June 2012 (14:55 – 15:25)	48.1	--
22 June 2012 (23:00 – 23:30)	48.9	The major noise source identified were road traffic, marine vessels, air craft and insect noise. The noise generated by the Transfer Facility was considered insignificant.
20 Sep 2012 (09:22 – 09:52)	61.9	The major noise source identified were road traffic, marine vessels, air craft and insect noise. The noise generated by the Transfer Facility was considered insignificant.
18 Dec 2012 (14:40 – 15:10)	61.6	The major noise source identified were road traffic, marine vessels, air craft and insect noise. The noise generated by the Transfer Facility was considered insignificant.
18 Dec 2012 (23:00 – 23:30)	49.1	The major noise source identified were road traffic, marine vessels, air craft and insect noise. The noise generated by the Transfer Facility was considered insignificant.

Appendix C

Appendix C1

Location of Marine Water Monitoring Stations

Appendix C1



Appendix C

Appendix C2

Marine Water Monitoring Record

Appendix C2

SITA Waste Services Limited
 Progress Report No. 042012
 OITF/PRG/MON/EPD/042012 Issue 1



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 2 Apr 2012 (12:35-13:25) *mid- flood	SC1	7.7 / 96.6	7.6 / 94.5	5.0	8.0	21.9	19.4
	SC2	7.7 / 95.7	7.6 / 93.7	5.0	5.0	21.9	19.3
	S1	7.8 / 96.8	7.6 / 94.8	4.7	4.7	21.9	19.3
	S2	7.8 / 97.5	7.7 / 95.5	4.8	3.3	21.9	19.3
	S3	7.6 / 94.9	7.5 / 93.0	4.5	5.0	21.9	19.5
	S4	7.6 / 94.7	7.5 / 92.7	4.6	6.7	21.9	19.4
Sok Kwu Wan 11 Apr 2012 (12:15-13:00) *mid- ebb	SC1	8.2 / 98.7	8.2 / 98.6	6.1	9.7	25.0	23.0
	SC2	8.3 / 100.5	8.2 / 99.2	6.0	13.3	25.0	22.9
	S1	8.2 / 99.6	8.2 / 99.3	5.3	9.0	25.0	22.8
	S2	8.3 / 99.9	8.2 / 99.6	5.6	16.7	25.0	23.0
	S3	8.2 / 98.2	8.2 / 99.1	4.9	5.0	25.0	23.0
	S4	8.4 / 100.9	8.6 / 103.2	5.4	7.3	25.0	23.0
Sok Kwu Wan 17 Apr 2012 (12:00-12:50) *mid- ebb	SC1	6.9 / 99.5	6.8 / 97.4	3.6	7.3	21.3	20.6
	SC2	6.9 / 98.7	6.7 / 96.6	3.6	6.3	21.3	20.5
	S1	6.9 / 100.0	6.8 / 97.8	3.3	5.7	21.3	20.5
	S2	7.1 / 101.6	6.9 / 98.5	3.4	4.3	21.3	20.5
	S3	6.8 / 97.8	6.7 / 95.9	3.1	8.0	21.3	20.8
	S4	6.8 / 97.5	6.6 / 95.4	3.2	7.7	21.3	20.6
Sok Kwu Wan 23 Apr 2012 (14:15-15:05) *mid- ebb	SC1	8.2 / 98.8	8.1 / 97.4	5.5	5.7	25.4	23.9
	SC2	8.4 / 101.2	8.4 / 100.8	6.0	6.3	25.4	23.9
	S1	8.2 / 99.3	8.2 / 99.5	6.2	5.0	25.4	24.0
	S2	8.3 / 99.9	8.4 / 100.8	5.8	4.7	25.4	23.9
	S3	8.2 / 99.3	8.3 / 100.3	5.8	5.7	25.4	24.0
	S4	8.2 / 99.1	7.9 / 95.8	5.5	5.3	25.4	23.8



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 3 May 2012 (14:10-15:05) *mid- flood	SC1	7.3 / 91.9	7.2 / 89.9	4.3	6.0	29.0	28.1
	SC2	7.3 / 91.1	7.2 / 89.2	4.3	4.0	29.0	28.0
	S1	7.4 / 92.1	7.3 / 90.2	4.0	5.7	29.0	28.0
	S2	7.4 / 92.8	7.3 / 90.9	4.2	5.7	29.0	28.1
	S3	7.2 / 90.3	7.1 / 88.5	3.9	3.3	29.0	28.5
	S4	7.2 / 90.0	7.1 / 88.2	3.9	4.0	29.0	28.2
Sok Kwu Wan 9 May 2012 (14:30-15:40) *mid- ebb	SC1	7.1 / 91.8	7.1 / 89.7	3.7	4.7	29.2	26.9
	SC2	7.1 / 91.0	7.1 / 89.0	3.4	5.7	29.2	27.1
	S1	7.2 / 92.0	7.2 / 90.0	2.9	9.7	29.2	26.8
	S2	7.2 / 92.7	7.2 / 90.7	4	6.7	29.2	26.8
	S3	7.0 / 90.0	7.0 / 88.3	3.8	4.5	29.2	27.3
	S4	7.0 / 90.1	7.0 / 88.0	3.9	5	29.2	27.2
Sok Kwu Wan 15 May 2012 (09:01-09:55) *mid- ebb	SC1	6.7 / 97.0	6.6 / 94.8	3.4	7.7	28.0	26.4
	SC2	6.7 / 96.2	6.5 / 94.1	3.5	7.7	28.0	26.4
	S1	6.8 / 97.2	6.6 / 95.2	3.2	10.0	28.0	26.4
	S2	6.8 / 97.9	6.7 / 95.9	3.3	8.0	28.0	26.4
	S3	6.6 / 95.3	6.5 / 93.4	3.1	8.5	28.0	26.6
	S4	6.6 / 95.0	6.4 / 93.0	3.0	10.7	28.0	26.5
Sok Kwu Wan 21 May 2012 (10:10-10:45) *mid- ebb	SC1	6.9 / 93.4	6.7 / 90.8	4.4	3.3	25.9	24.0
	SC2	6.9 / 93.5	6.7 / 91.4	4.6	4.3	25.9	24.1
	S1	6.8 / 92.5	6.6 / 90.1	3.9	6.7	25.9	24.4
	S2	6.9 / 94.0	6.7 / 91.2	4.2	6.0	25.9	24.1
	S3	6.9 / 93.7	6.7 / 91.3	4.0	6.0	25.9	24.3
	S4	6.8 / 92.2	6.6 / 89.1	4.0	5.3	25.9	24.1
Sok Kwu Wan 31 May 2012 (12:01-12:50) *mid- flood	SC1	6.8 / 97.5	6.6 / 95.4	3.9	4.3	27.0	27.4
	SC2	6.7 / 96.7	6.6 / 94.6	3.9	4.3	27.0	27.4
	S1	6.8 / 98.0	6.7 / 95.8	3.6	4.7	27.0	27.4
	S2	6.9 / 99.5	6.7 / 96.5	3.7	4.7	27.0	27.4
	S3	6.7 / 95.8	6.5 / 94.0	3.4	3.5	27.0	27.6
	S4	6.6 / 95.5	6.5 / 93.5	3.5	6.3	27.0	27.5



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 6 June 2012 (09:00-09:55) *mid- flood	SC1	6.8 / 96.1	6.6 / 94.0	5.8	4.3	28.3	28.2
	SC2	6.7 / 95.3	6.6 / 93.3	5.9	3.3	28.3	28.1
	S1	6.8 / 96.3	6.7 / 94.4	5.6	6.3	28.3	28.1
	S2	6.8 / 97.1	6.7 / 95.1	5.7	5.0	28.3	28.1
	S3	6.7 / 94.4	6.5 / 92.6	5.5	6.0	28.3	28.4
	S4	6.6 / 94.2	6.5 / 92.2	5.4	4.3	28.3	28.3
Sok Kwu Wan 12 June 2012 (10:25-11:25) *mid- flood	SC1	7.0 / 88.8	6.9 / 87.6	5.2	8.3	28.9	27.9
	SC2	7.3 / 92.8	7.2 / 91.9	5.8	7.0	28.9	27.9
	S1	7.7 / 97.9	7.5 / 95.9	3.8	5.3	28.9	27.8
	S2	7.6 / 96.5	7.3 / 92.5	4.6	10.0	28.9	27.8
	S3	7.4 / 94.4	7.2 / 91.7	3.7	8.0	28.9	27.9
	S4	7.0 / 89.2	6.9 / 87.8	3.9	8.0	28.9	27.8
Sok Kwu Wan 18 June 2012 (09:10-10:00) *mid- ebb	SC1	6.8 / 92.7	6.5 / 88.3	6.8	4.2	27.3	28.6
	SC2	6.8 / 92.5	6.7 / 91.1	6.3	5.0	27.3	28.4
	S1	7.1 / 96.9	7.0 / 95.4	6.5	3.3	27.3	28.3
	S2	7.1 / 97.1	7.1 / 97.0	6.9	4.7	27.3	28.5
	S3	7.1 / 96.6	7.0 / 96.3	6.8	5.0	27.3	28.6
	S4	7.2 / 98.2	6.9 / 93.8	7.5	4.8	27.3	28.5
Sok Kwu Wan 28 June 2012 (09:00-09:50) *mid- ebb	SC1	6.4 / 85.8	6.1 / 81.8	7.9	5.3	29.4	28.9
	SC2	6.4 / 85.8	6.3 / 84.5	7.4	4.3	29.4	28.7
	S1	6.8 / 89.8	6.6 / 88.4	7.6	4.3	29.4	28.6
	S2	6.7 / 90.0	6.7 / 89.9	8.0	4.3	29.4	28.8
	S3	6.7 / 89.5	6.6 / 89.2	7.9	4.0	29.4	28.9
	S4	6.8 / 91.0	6.5 / 87.0	8.6	6.7	29.4	28.8



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 4 July 2012 (09:05-09:55) *mid- ebb	SC1	6.6 / 94.8	6.4 / 92.7	7.9	5.3	29.6	27.7
	SC2	6.6 / 94.0	6.4 / 92.0	7.9	4.7	29.6	27.6
	S1	6.6 / 95.3	6.5 / 93.2	7.6	5.3	29.6	27.6
	S2	6.7 / 96.7	6.5 / 93.8	7.7	4.3	29.6	27.6
	S3	6.5 / 93.1	6.3 / 91.3	7.4	6.0	29.6	27.8
	S4	6.4 / 92.9	6.3 / 90.9	7.5	4.0	29.6	27.7
Sok Kwu Wan 10 July 2012 (09:00-09:55) *mid- flood	SC1	5.5 / 69.2	5.4 / 67.7	8.1	10.3	29.9	28.7
	SC2	5.5 / 68.6	5.4 / 67.1	8.2	15.0	29.9	28.8
	S1	5.5 / 69.4	5.4 / 67.9	7.9	8.3	29.9	28.6
	S2	5.6 / 69.9	5.5 / 68.4	8.0	8.3	29.9	28.8
	S3	5.4 / 68.0	5.3 / 66.6	7.8	12.5	29.9	28.8
	S4	5.4 / 67.7	5.3 / 66.3	7.7	11.0	29.9	28.7
Sok Kwu Wan 16 July 2012 (12:55-13:40) *mid- ebb	SC1	6.5 / 82.1	6.1 / 77.5	1.9	11.7	29.8	27.9
	SC2	6.3 / 79.9	5.8 / 73.5	2.7	10.0	29.8	27.9
	S1	6.4 / 81.6	6.5 / 82.6	1.9	10.0	29.8	28.2
	S2	5.9 / 75.4	5.8 / 73.4	2.6	8.3	29.8	27.8
	S3	6.3 / 79.5	6.4 / 80.9	2.0	9.5	29.8	28.4
	S4	6.3 / 80.8	6.6 / 83.8	3.6	8.7	29.8	27.9
Sok Kwu Wan 26 July 2012 (14:10-15:00) *mid- flood	SC1	6.3 / 84.5	6.0 / 80.5	5.5	7.0	25.5	26.4
	SC2	6.3 / 84.6	6.2 / 83.4	5.0	6.3	25.5	26.1
	S1	6.6 / 88.5	6.5 / 87.1	5.2	5.0	25.5	26.0
	S2	6.6 / 88.7	6.6 / 88.6	5.7	5.3	25.5	26.2
	S3	6.6 / 88.3	6.6 / 88.1	5.5	4.5	25.5	26.3
	S4	6.7 / 89.7	6.4 / 85.7	6.4	5.0	25.5	26.3



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 1 Aug 2012 (12:00-12:55) *mid-cbb*	SC1	5.4 / 67.0	5.2 / 68.2	3.7	8.0	30.6	27.1
	SC2	5.3 / 69.6	5.2 / 67.8	3.8	8.3	30.6	27.0
	S1	5.4 / 70.1	5.3 / 68.6	3.5	7.0	30.6	27.0
	S2	5.4 / 71.1	5.3 / 69.4	3.6	8.3	30.6	27.0
	S3	5.3 / 68.5	5.1 / 66.9	3.4	8.0	30.6	27.2
	S4	5.2 / 68.1	5.1 / 66.4	3.3	7.0	30.6	27.1
Sok Kwu Wan 7 Aug 2012 (14:40-15:30) *mid-cbb*	SC1	6.0 / 85.3	4.9 / 69.4	4.3	8.0	30.0	26.7
	SC2	5.8 / 81.6	4.2 / 59.9	4.6	6.7	30.0	26.7
	S1	5.4 / 75.8	4.7 / 66.7	4.9	8.0	30.0	26.8
	S2	5.5 / 77.0	4.7 / 65.5	4.4	9.3	30.0	26.7
	S3	6.6 / 93.1	6.3 / 88.6	4.7	6.7	30.0	26.9
	S4	6.6 / 93.2	6.5 / 91.8	4.2	7.0	30.0	26.6
Sok Kwu Wan 13 Aug 2012 (12:30-13:15) *mid-cbb*	SC1	6.9 / 97.5	6.8 / 96.0	4.4	7.0	30.0	26.5
	SC2	6.9 / 97.7	6.9 / 97.6	4.8	3.7	30.0	26.7
	S1	6.9 / 97.2	6.8 / 96.9	4.7	6.5	30.0	26.8
	S2	7.0 / 98.7	6.7 / 94.3	5.4	4.0	30.0	26.8
	S3	6.3 / 89.1	6.3 / 89.7	4.1	7.0	30.0	26.8
	S4	6.6 / 93.0	6.4 / 90.7	4.9	8.3	30.0	26.3
Sok Kwu Wan 23 Aug 2012 (12:05-13:00) *mid-flood*	SC1	6.2 / 88.2	6.2 / 87.8	4.6	7.3	30.0	26.9
	SC2	6.4 / 90.9	6.3 / 88.6	4.4	8.3	30.0	26.8
	S1	8.2 / 98.9	8.2 / 98.9	4.4	5.7	27.8	28.6
	S2	8.3 / 99.8	8.4 / 101.0	4.3	7.0	27.8	28.5
	S3	8.4 / 100.8	8.5 / 102.6	3.6	5.7	27.8	28.4
	S4	8.3 / 100.0	8.4 / 100.6	3.9	6.0	27.8	28.6
Sok Kwu Wan 29 Aug 2012 (12:05-12:50) *mid-flood*	SC1	8.3 / 100.0	8.2 / 99.6	3.2	8.0	27.8	28.6
	SC2	8.2 / 99.2	8.3 / 100.5	3.7	8.0	27.8	28.6
	S1	7.8 / 93.7	7.8 / 94.1	6.9	9.3	28.9	27.8
	S2	7.8 / 94.7	7.8 / 94.7	6.8	9.3	28.9	28.3
	S3	7.8 / 93.8	7.8 / 93.8	6.7	9.7	28.9	28.4
	S4	7.7 / 92.6	7.6 / 91.7	6.5	9.7	28.9	28.4



Location	Measurement Point	Dissolved Oxygen		Turbidity	Suspended Solids	Temperature (°C)	
		(mg/L / %)		(NTU)	(mg/L)	Air	Water
		Average	At 2m above Seabed	Average	Average		
Sok Kwu Wan 4 Sep 2012 (14:40-15:30) *mid-ebb*	SC1	6.6 / 86.9	6.4 / 84.3	4.7	7.7	27.9	27.7
	SC2	6.7 / 87.9	6.9 / 90.5	4.2	13.0	27.9	27.6
	S1	6.7 / 88.1	6.9 / 90.5	4.4	9.3	27.9	27.7
	S2	6.7 / 87.1	6.5 / 85.2	4.8	9.3	27.9	27.6
	S3	6.8 / 88.2	6.6 / 86.4	4.7	6.5	27.9	27.9
	S4	6.9 / 90.4	6.4 / 83.4	5.4	8.3	27.9	27.6
Sok Kwu Wan 10 Sep 2012 (12:30-13:40) *mid-flood*	SC1	5.6 / 73.7	4.8 / 63.0	5.9	8.7	29.3	28.4
	SC2	5.4 / 70.7	4.4 / 57.5	6.0	13.3	29.3	28.4
	S1	5.6 / 73.0	4.5 / 58.4	5.8	9.0	29.3	28.5
	S2	5.7 / 74.8	4.9 / 64.1	5.9	10.7	29.3	28.5
	S3	6.1 / 80.2	5.5 / 72.8	5.3	12.5	29.3	29.6
	S4	5.6 / 73.2	4.8 / 62.7	6.0	9.0	29.3	28.5
Sok Kwu Wan 20 Sep 2012 (11:45-12:45) *mid-flood*	SC1	5.7 / 73.9	4.9 / 63.6	5.9	15.3	27.2	27.7
	SC2	5.5 / 71.8	4.3 / 56.3	5.8	15.0	27.2	27.4
	S1	5.4 / 71.1	4.6 / 59.6	5.8	12.0	27.2	27.5
	S2	5.4 / 70.8	4.3 / 55.9	5.6	14.7	27.2	27.6
	S3	5.9 / 77.3	5.3 / 69.7	4.8	9.0	27.2	28.6
	S4	5.7 / 74.7	4.9 / 64.3	6.0	13.0	27.2	27.6
Sok Kwu Wan 26 Sep 2012 (12:05-13:05) *mid-ebb*	SC1	5.4 / 70.3	4.7 / 61.1	5.8	14.3	27.0	26.3
	SC2	5.4 / 70.4	4.1 / 54.0	5.8	15.3	27.0	26.1
	S1	5.6 / 73.6	4.4 / 58.4	5.8	14.7	27.0	26.1
	S2	5.5 / 72.1	4.5 / 58.9	5.8	15.7	27.0	26.1
	S3	6.2 / 80.3	5.9 / 76.6	5.1	13.5	27.0	26.7
	S4	5.7 / 74.1	4.7 / 61.2	6.0	16.0	27.0	26.2



Location	Measurement Point	Dissolved Oxygen		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		(mg/L / %)				Average	Average
		Average	At 2m above Seabed				
Sok Kwu Wan 3 Oct., 2012 (11:15-12:30) *mid-ebb*	SC1	5.5 / 71.6	4.6 / 60.5	5.6	13.0	26.1	25.5
	SC2	5.3 / 70.1	4.4 / 57.7	5.7	12.7	26.1	25.5
	S1	5.6 / 72.5	4.4 / 57.4	6.0	12.7	26.1	25.6
	S2	5.7 / 74.1	4.8 / 62.0	5.8	11.3	26.1	25.5
	S3	6.3 / 81.4	5.9 / 76.6	4.9	13.0	26.1	26.4
	S4	5.5 / 72.2	4.7 / 61.4	5.8	12.0	26.1	25.5
Sok Kwu Wan 9 Oct., 2012 (14:40-15:35) *mid-flood*	SC1	6.8 / 89.5	6.5 / 85.3	4.7	15.7	26.2	28.1
	SC2	6.7 / 87.5	6.9 / 90.5	4.2	15.3	26.2	28.2
	S1	6.8 / 88.8	6.8 / 89.6	4.3	15.0	26.2	28.2
	S2	6.4 / 84.2	6.1 / 80.0	4.9	13.7	26.2	28.3
	S3	6.7 / 87.6	6.4 / 83.7	4.6	15.5	26.2	28.4
	S4	7.0 / 91.3	6.5 / 85.7	5.6	14.3	26.2	27.5
Sok Kwu Wan 15 Oct., 2012 (12:40-13:20) *mid-ebb*	SC1	8.1 / 98.0	8.2 / 99.3	5.8	4.7	26.3	28.6
	SC2	7.8 / 94.0	7.9 / 95.3	5.9	5.7	26.3	28.6
	S1	8.1 / 97.0	8.1 / 97.5	4.9	10.3	26.3	28.5
	S2	7.9 / 94.8	8.1 / 97.6	5.3	7.3	26.3	28.5
	S3	7.9 / 94.7	7.8 / 94.4	3.6	6.0	26.3	28.6
	S4	8.1 / 98.2	8.2 / 98.6	5.1	5.7	26.3	28.6
Sok Kwu Wan 25 Oct., 2012 (15:35-16:30) *mid-flood*	SC1	7.9 / 95.4	7.7 / 92.7	7.9	10.0	25.8	27.6
	SC2	7.8 / 93.3	7.9 / 94.9	8.0	10.7	25.8	27.5
	S1	7.7 / 92.4	7.5 / 90.5	7.0	9.7	25.8	27.5
	S2	7.6 / 91.1	7.4 / 88.8	7.4	8.3	25.8	27.5
	S3	7.9 / 94.4	7.8 / 93.6	5.7	10.0	25.8	27.6
	S4	7.9 / 94.9	7.7 / 92.4	7.2	12.0	25.8	27.6
Sok Kwu Wan 31 Oct., 2012 (13:05-14:00) *mid-ebb*	SC1	6.5 / 85.0	6.3 / 82.7	3.7	6.0	19.8	20.3
	SC2	6.4 / 84.1	6.2 / 81.4	4.8	8.0	19.8	20.3
	S1	6.4 / 83.6	6.1 / 80.2	3.5	8.3	19.8	20.3
	S2	6.3 / 83.0	6.1 / 79.9	3.6	7.7	19.8	20.3
	S3	6.4 / 84.5	6.2 / 81.6	3.5	11.5	19.8	20.4
	S4	6.3 / 82.9	6.2 / 80.8	3.4	9.7	19.8	20.4



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 7 Nov., 2012 (14:35-15:45) *mid-flood*	SC1	6.1 / 80.0	5.8 / 75.8	6.0	6.7	23.2	22.8
	SC2	6.2 / 81.6	6.0 / 78.3	5.8	8.0	23.2	22.8
	S1	6.2 / 81.8	5.9 / 77.2	5.6	6.3	23.2	22.7
	S2	6.2 / 80.8	5.8 / 76.2	6.1	9.0	23.2	22.8
	S3	6.3 / 82.5	6.2 / 80.9	5.1	9.0	23.2	23.3
	S4	6.2 / 81.5	6.0 / 78.5	6.0	8.0	23.2	22.8
Sok Kwu Wan 14 Nov., 2012 (11:30-12:35) *mid-ebb*	SC1	5.5 / 72.3	4.7 / 61.7	5.8	7.3	23.4	25.3
	SC2	5.5 / 72.9	4.5 / 59.6	5.8	7.0	23.4	25.3
	S1	5.8 / 75.1	4.8 / 62.1	5.9	6.7	23.4	25.2
	S2	5.7 / 74.4	4.6 / 60.0	5.9	9.3	23.4	25.2
	S3	6.1 / 79.0	5.5 / 71.9	5.0	12.0	23.4	25.5
	S4	5.4 / 69.9	4.6 / 60.0	5.9	7.3	23.4	25.2
Sok Kwu Wan 23 Nov., 2012 (12:55-14:00) *mid-flood*	SC1	6.1 / 79.8	5.8 / 76.1	5.9	7.0	22.4	22.8
	SC2	6.2 / 81.0	6.0 / 78.1	5.8	7.7	22.4	22.6
	S1	6.2 / 80.9	5.9 / 77.1	5.7	7.3	22.4	22.8
	S2	6.2 / 80.6	5.9 / 76.9	5.9	10.0	22.4	22.7
	S3	6.4 / 83.2	6.2 / 81.3	5.1	7.5	22.4	23.1
	S4	6.2 / 81.0	5.8 / 76.5	5.7	9.7	22.4	22.8
Sok Kwu Wan 30 Nov., 2012 (12:15-13:20) *mid-ebb*	SC1	5.8 / 75.7	4.9 / 64.5	5.6	7.0	20.9	22.8
	SC2	5.5 / 71.6	4.4 / 57.9	5.9	5.7	20.9	22.9
	S1	5.4 / 70.6	4.3 / 56.4	5.9	6.7	20.9	22.9
	S2	5.5 / 71.7	4.4 / 57.3	5.7	10.0	20.9	22.9
	S3	5.9 / 77.2	5.2 / 68.3	5.1	8.5	20.9	22.7
	S4	5.5 / 72.5	4.6 / 59.8	5.9	9.7	20.9	22.9



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 6 Dec 2012 (11:15-12:30 *mid-flood*	SC1	6.2 / 81.2	6.0 / 78.0	6.0	6.3	16.9	19.7
	SC2	6.2 / 81.3	5.9 / 77.1	5.8	5.0	16.9	19.8
	S1	6.2 / 81.0	5.9 / 76.7	6.0	7.7	16.9	19.8
	S2	6.2 / 80.7	5.8 / 75.6	5.8	10.0	16.9	19.8
	S3	6.3 / 82.4	6.2 / 81.0	4.9	8.5	16.9	20.4
Sok Kwu Wan 12 Dec 2012 (14:40-15:35) *mid-flood*	S4	6.1 / 80.1	5.8 / 75.7	5.9	6.7	16.9	19.7
	SC1	6.3 / 82.2	6.0 / 78.9	5.8	6.7	19.9	20.8
	SC2	6.3 / 82.4	5.9 / 78.1	6.0	9.0	19.9	20.8
	S1	6.3 / 82.0	5.9 / 77.6	6.0	10.7	19.9	20.8
	S2	6.2 / 81.8	5.8 / 76.6	5.9	10.3	19.9	20.7
Sok Kwu Wan 18 Dec 2012 (12:15-13:20) *mid-flood*	S3	6.4 / 83.5	6.3 / 82.1	5.3	9.5	19.9	20.8
	S4	6.2 / 81.0	5.9 / 76.7	6.1	6.7	19.9	20.7
	SC1	5.8 / 75.1	4.7 / 61.5	5.9	12.7	17.1	15.3
	SC2	5.6 / 72.8	4.7 / 61.4	6.0	13.7	17.1	15.2
	S1	5.6 / 73.6	4.7 / 61.4	5.8	17.5	17.1	15.3
Sok Kwu Wan 24 Dec 2012 (12:10-13:20) *mid-flood*	S2	5.6 / 73.1	4.5 / 59.4	5.7	14.3	17.1	15.3
	S3	6.2 / 81.0	5.6 / 72.8	5.1	14.7	17.1	15.4
	S4	5.5 / 72.6	4.6 / 60.7	5.9	14.7	17.1	15.2
	SC1	5.6 / 74.3	4.6 / 61.4	6.1	9.0	13.3	14.2
	SC2	5.6 / 75.3	4.8 / 65.3	5.9	12.3	13.3	14.2
Sok Kwu Wan (12:10-13:20) *mid-flood*	S1	5.6 / 72.2	4.9 / 63.2	5.8	7.3	13.3	14.1
	S2	5.5 / 73.2	4.3 / 55.3	5.8	10.0	13.3	14.2
	S3	6.2 / 81.9	5.6 / 74.2	5.3	7.5	13.3	14.1
	S4	5.5 / 72.3	4.5 / 60.5	5.9	9.3	13.3	14.2



Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 3 Jan 2013 (12:00-13:00) *mid-flood*	SC1	5.4 / 71.1	4.7 / 61.4	5.9	5.3	16.8	15.3
	SC2	5.6 / 73.1	4.8 / 63.3	5.9	4.7	16.8	15.2
	S1	5.4 / 70.2	4.2 / 54.5	5.9	6.3	16.8	15.2
	S2	5.3 / 69.1	4.2 / 55.4	5.9	5.3	16.8	15.3
	S3	5.7 / 74.9	5.2 / 68.4	5.0	7.0	16.8	15.4
	S4	5.7 / 74.3	4.8 / 62.1	5.7	7.3	16.8	15.2
Sok Kwu Wan 9 Jan 2013 (12:55-13:50) *mid-flood*	SC1	6.2 / 80.8	5.9 / 76.6	5.7	11.7	16.2	17.4
	SC2	6.2 / 80.8	5.8 / 76.0	5.8	9.0	16.2	17.5
	S1	6.1 / 80.1	5.8 / 75.5	5.9	6.3	16.2	17.3
	S2	6.1 / 80.3	5.8 / 75.9	5.7	8.0	16.2	17.3
	S3	6.3 / 82.7	6.2 / 80.7	5.2	7.5	16.2	17.7
	S4	6.2 / 80.9	5.9 / 76.5	5.8	7.3	16.2	17.4
Sok Kwu Wan 15 Jan 2013 (11:45-13:00) *mid-flood*	SC1	5.6 / 73.6	4.8 / 62.3	5.7	4.3	15.9	17.2
	SC2	5.6 / 73.2	4.5 / 58.4	6.0	6.0	15.9	17.2
	S1	5.5 / 71.6	4.2 / 55.2	6.0	5.0	15.9	17.2
	S2	5.3 / 69.9	4.3 / 56.1	5.8	5.7	15.9	17.2
	S3	5.9 / 77.0	5.4 / 70.7	5.0	6.5	15.9	17.7
	S4	5.6 / 73.5	4.8 / 62.9	5.7	5.3	15.9	17.2
Sok Kwu Wan 21 Jan 2013 (11:15-12:15) *mid-flood*	SC1	5.6 / 72.8	4.7 / 60.9	5.8	13.0	20.4	22.2
	SC2	5.5 / 71.7	4.6 / 59.8	5.9	16.0	20.4	22.2
	S1	5.4 / 70.2	4.3 / 56.2	5.7	14.7	20.4	22.2
	S2	5.4 / 70.8	4.5 / 58.1	5.8	15.0	20.4	22.2
	S3	6.2 / 81.0	5.7 / 74.2	5.4	16.5	20.4	22.7
	S4	5.5 / 72.0	4.2 / 55.0	5.8	6.7	20.4	22.2
Sok Kwu Wan 31 Jan 2013 (11:25-12:20) *mid-flood*	SC1	5.6 / 73.6	4.5 / 59.1	6.0	4.0	18.6	20.9
	SC2	5.6 / 73.1	4.4 / 57.5	5.8	7.0	18.6	20.9
	S1	5.5 / 72.0	4.6 / 59.9	5.6	6.7	18.6	20.9
	S2	5.4 / 71.2	4.6 / 60.6	5.8	6.0	18.6	20.8
	S3	6.1 / 79.2	5.4 / 70.9	5.0	4.0	18.6	21.4
	S4	5.5 / 72.3	4.4 / 56.9	5.7	5.0	18.6	20.9



Location	Measurement Point	Dissolved Oxygen		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		(mg/L / %)				Average	Average
		Average	At 2m above Seabed	Average	Average		
Sok Kwu Wan 6 Feb 2013 (12:00-13:00) *mid-flood*	SC1	5.6 / 73.6	4.5 / 58.8	5.9	4.0	21.3	23.2
	SC2	5.5 / 71.1	4.4 / 56.7	5.9	6.3	21.3	23.3
	S1	5.3 / 69.3	4.2 / 55.1	6.1	5.7	21.3	23.2
	S2	5.7 / 74.5	4.8 / 63.2	6.0	6.3	21.3	23.2
	S3	5.9 / 76.5	5.2 / 68.3	5.0	5.0	21.3	23.5
	S4	5.5 / 71.8	4.4 / 57.1	5.6	6.3	21.3	23.2
Sok Kwu Wan 14 Feb 2013 (12:55-13:50) *mid-ebb*	SC1	5.2 / 68.6	4.4 / 58.1	5.7	4.3	18.5	19.6
	SC2	5.4 / 71.3	4.5 / 59.0	5.9	5.0	18.5	19.8
	S1	5.7 / 74.7	4.9 / 63.7	5.9	5.0	18.5	19.9
	S2	5.5 / 72.5	4.6 / 59.8	6.0	5.0	18.5	19.8
	S3	6.0 / 77.8	5.4 / 70.2	4.9	9.5	18.5	20.0
	S4	5.6 / 72.5	4.5 / 58.1	5.8	6.0	18.5	19.7
Sok Kwu Wan 20 Feb 2013 (11:45-13:00) *mid-flood*	SC1	5.5 / 71.3	4.6 / 60.6	5.9	7.0	17.3	19.6
	SC2	5.6 / 74.1	4.7 / 61.5	6.1	5.7	17.3	19.8
	S1	5.9 / 77.5	5.1 / 66.3	6.1	4.0	17.3	19.8
	S2	5.7 / 75.3	4.8 / 62.3	6.2	6.0	17.3	19.8
	S3	6.2 / 80.7	5.6 / 72.9	5.1	7.0	17.3	20.0
	S4	5.7 / 75.3	4.6 / 60.6	6.0	10.0	17.3	19.7
Sok Kwu Wan 26 Feb 2013 (11:15-12:15) *mid-ebb*	SC1	5.8 / 75.5	5.2 / 68.6	5.9	6.0	21.3	22.9
	SC2	5.8 / 75.9	5.1 / 67.5	6.0	5.7	21.3	22.9
	S1	5.7 / 73.8	5.2 / 67.5	5.8	3.7	21.3	23.0
	S2	5.7 / 75.0	5.2 / 68.2	6.0	4.7	21.3	22.9
	S3	6.1 / 79.9	5.8 / 76.0	5.7	4.0	21.3	22.9
	S4	6.2 / 80.8	5.9 / 77.0	5.8	5.0	21.3	23.0



Table 3
Marine Water

Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Cheung Chau 12 Mar 2013	C1	5.9 / 79.8	5.9 / 79.5	5.3	3.0	20.4	19.3
	C2	5.8 / 79.2	5.8 / 79.0	4.2	5.0	20.4	19.3
	C3	5.6 / 76.2	5.6 / 76.0	3.9	2.7	20.4	19.3
	C4	5.6 / 75.8	5.6 / 75.6	5.9	3.7	20.4	19.3
Yung Shue Wan 12 Mar 2013	H1	5.9 / 77.2	5.5 / 72.5	5.6	3.3	20.4	17.8
	H2	5.9 / 77.1	5.6 / 72.9	5.7	3.2	20.4	18.6
	H3	5.9 / 77.4	5.6 / 73.7	5.7	2.7	20.4	17.9
	H4	6.0 / 78.0	5.7 / 74.5	5.7	4.7	20.4	17.9

Location	Measurement Point	Dissolved Oxygen (mg/L / %)		Turbidity (NTU)	Suspended Solids (mg/L)	Temperature (°C)	
		Average	At 2m above Seabed	Average	Average	Air	Water
Sok Kwu Wan 4 Mar 2013 (13:30-14:25) *mid-ebb*	SC1	7.3 / 93.8	7.3 / 93.7	4.7	9.0	16.7	20.0
	SC2	6.9 / 88.8	6.9 / 88.3	4.7	13.3	16.7	20.0
	S1	7.1 / 91.3	7.2 / 92.5	4.9	5.3	16.7	20.0
	S2	7.0 / 90.4	7.2 / 92.4	4.8	9.3	16.7	19.9
	S3	7.1 / 90.7	7.0 / 90.2	4.8	8.0	16.7	20.0
	S4	7.2 / 92.8	7.3 / 92.9	4.8	9.7	16.7	20.0