MTR Corporation Limited

Shatin to Central Link - Protection Works at Causeway Bay Typhoon Shelter

Baseline Monitoring Report

(for EP-416/2011)

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EXECUTIVE SUMMARY

Background

The SCL Protection Works (the Project) is to temporarily reclaim land for construction of a section of tunnel box for Shatin to Central Link by cut-and-cover method at the crossing above the Central-Wanchai Bypass (CWB) tunnels within the Causeway Bay Typhoon Shelter (CBTS).

The CWB has commenced in mid-2010 and scheduled for commissioning in 2017. In order to minimize the extent and duration of temporary reclamation under the SCL project for compliance with the Protection of Harbour Ordinance, the construction of the 160m SCL tunnel box at the crossing over CWB tunnels and the associated works, including temporary reclamation has to be constructed in conjunction with the CWB construction works in around late 2011 to early 2014.

Subsequently, the SCL Protection Works has been entrusted to the CWB. The Contractor of CWB will undertake construction works for both the Project and CWB. The locations of the temporary reclamation works area and duration of the construction works for the two projects are overlapped. In order to ensure better site management and environmental compliance, the environmental monitoring stations and results of CWB would be shared for this project in avoidance of inconsistency.

Impact Assessment and Baseline Monitoring

With the development of the Environmental Monitoring and Audit Manual (EM&A Manual) in accordance with the guideline set out in the Environmental Impact Assessment (EIA) report prepared by AECOM Asia Company Limited, the baseline monitoring has been conducted to establish action and target levels for air quality, noise and water for the civil construction work of the Project.

Results and Conclusions

Air Quality:

The baseline air quality monitoring was carried out between 4 December 2009 and 17 December 2009 at one designated air quality monitoring location described in the EM&A Manual. Air quality was recorded in terms of 1-hour Total Suspended Particulates (TSP) and 24-hour TSP.

The monitoring results were presented in this report and no major pollution source and extreme weather, which might affect the results, were observed during the baseline monitoring period.

The averaged 1-hour TSP levels and 24-hour TSP levels at the monitoring location, i.e. Royal Hong Kong Yacht Club (CMA3) are summarized as follows:

Air Quality Monitoring Location	**CMA3**
Average 1-hr TSP (μg/m3)	94.3
Average 24-hr TSP (μg/m3)	63.1

Noise:

The baseline noise monitoring was carried out at one noise monitoring location between 4 December 2009 and 17 December 2009. For baseline noise levels, continuous L_{eq} (5-minutes) were recorded. There was no major activity or extreme weather influencing the measured noise level during the baseline noise monitoring period.

The average baseline noise levels at the monitoring location, i.e. Caltex Petrol Filling Station (M2a) are summarized in the following table:

Noise Monitoring Location	**M2a**
Averaged baseline noise level during 0700-1900hrs on normal weekdays, (dB(A))	73.7
Averaged baseline noise level for all days during evening (1900-2300hrs), and general holidays (including Sundays) during the daytime and evening (0700-2300hrs), (dB(A))	67.7
Averaged baseline noise level for all days during the nighttime (2300-0700hrs), (dB(A))	65.3

Water Quality:

The baseline water quality monitoring was carried out 3 days per week for 4 weeks between 21 October 2009 and 16 November 2009 for the two designated water quality monitoring locations (cooling water intakes) described in the EM&A Manual. The water quality parameters such as turbidity, suspended solids, dissolved oxygen, pH, temperature and salinity were monitored either using the calibration equipment or by laboratory analysis.

The monitoring results were presented in this report and no major pollution source and extreme weather, which might affect the results, were observed during the baseline monitoring period. The Action and Limit levels of suspended solids, turbidity and dissolved oxygen were derived based on the baseline monitoring results and the water quality assessment criteria.

The baseline water quality is summarized in the following table:

Location		**Parameters**				
		Salinity (ppt)	**Dissolved Oxygen (mg/L)**	**pH**	**Turbidity (NTU)**	**Suspended Solids (mg/L)**
C6	Avg	32.69	3.60	6.85	5.31	8.21
	Min	31.91	2.63	5.90	3.20	4.00
	Max	33.38	5.64	8.19	8.90	12.00
C7	Avg	32.86	3.84	6.86	4.78	7.71
	Min	31.79	2.82	5.94	2.60	4.00
	Max	33.59	5.15	8.23	8.20	13.00

1 INTRODUCTION

1.1 Background

Shatin to Central Link – Protection Works at Causeway Bay Typhoon Shelter

1.1.1 The proposal of the SCL Protection Works (the Project) is to temporarily reclaim land for construction of a section of tunnel box for Shatin to Central Link by cut-and-cover method at the crossing above the Central-Wanchai Bypass (CWB) tunnels within the Causeway Bay Typhoon Shelter (CBTS).

The Scope of the Project includes:

- Temporary reclamation, which occupies about 0.7 ha of Government foreshore and sea-bed;
- Dredging works at southeast corner of the CBTS to provide space for temporary relocation of anchorage area;
- Construction of a section of the twin track railway tunnel structure (approximately 160m long) above the proposed CWB;
- Relocation of the temporary RHKYC jetty within the CWB temporary reclamation to a new location
- Removal of the temporary reclamation, except the small area at the southeast corner of the reclamation (which will be removed by the SCL project)

1.1.2 As shown in **Figure 1.1** – Project Site Plan, the SCL tunnel box at the CBTS (highighted in orange) will cross over the CWB tunnels. The CWB has commenced in mid-2010 and scheduled for commissioning in 2017. In order to minimize the extent and duration of temporary reclamation under the SCL project for compliance with the Protection of Harbour Ordinance, the construction of the 160m SCL tunnel box at the crossing over CWB tunnels and the associated works, including temporary reclamation has to be constructed in conjunction with the CWB construction works in around late 2011 to early 2014.

1.1.3 Subsequently, the SCL Protection Works has been entrusted to the CWB. The Contractor of CWB will undertake construction works for both the Project and CWB. The locations of the temporary reclamation works areas (refer to Figure 1.1) and duration of the construction works for the two projects are overlapped. In order to ensure better site management and environmental compliance, the environmental monitoring stations and results of CWB would be shared for this project in avoidance of inconsistency.

1.1.4 An EIA study (EIA Report Reference: AEIAR-159/2011) has been conducted by AECOM Asia Company Limited for the Project. An EM&A Manual has provided guidelines in the preparation of this baseline monitoring report.

1.1.5 Baseline levels have been established for dust, noise and water before the commencement of the Project. The purpose of the baseline monitoring is to establish ambient conditions prior to commencement of construction works. As mentioned above, the baseline monitoring data for CWB will be adopted for the Project. The results and their validity are presented in subsequent sections of this report.

1.2 Organization of Report

Following the introduction, the remainder of this Report is arranged as follows:

- Section 2 describes the air quality monitoring methodology and analyses the monitoring results;
- Section 3 describes the noise monitoring methodology and analyses the monitoring results.
- Section 4 describes the water monitoring methodology and analyses the monitoring results.

2 AIR QUALITY

2.1 Monitoring Requirements

2.1.1 In accordance with the EM&A Manual, baseline 1-hour and 24-hour TSP levels at one designated air quality monitoring station should be established by conducting baseline 1-hour and 24-hour TSP monitoring for at least 14 days.

2.2 Monitoring Equipment

2.2.1 The 24-hour TSP air quality monitoring was performed using High Volume Sampler (HVS) located at each designated monitoring station. The HVS meets all the requirements of the EM&A Manual. Portable direct reading dust meters were used to carry out the 1-hour TSP monitoring. Brand and model of the equipment is given in **Table 2.1**.

Table 2.1 Air Quality Monitoring Equipment

Equipment	Brand and Model
Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-3)
High Volume Sampler (24-hour TSP)	Tisch Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler (Model No. TE-5170)

2.3 Monitoring Locations

2.3.1 In accordance with the EM&A Manual, the air quality monitoring station for baseline air quality monitoring is located at Casueway Bay - Royal Hong Kong Yacht Club and presented in **Table 2.2** and also shown in **Figure 2.1**.

Table 2.2 Baseline Air Quality Monitoring Stations

Monitoring Location	Description	Level (in terms of no. of floor)
CMA3 (Previously known as AM1)	Causeway Bay – Royal Hong Kong Yacht Club	3 (roof-top)

2.4 Monitoring Parameters, Frequency and Duration

2.4.1 The monitoring parameters, frequency and duration of air quality monitoring are summarized in **Table 2.3**.

Table 2.3 Air Quality Monitoring Parameters, Frequency and Duration

Parameter	Frequency and Duration
1-hour TSP	3 times (at three consecutive hours) per day while the highest dust impact was expected, for 14 days
24-hour TSP	Daily, for 14 days

2.5 Monitoring Methodology

2.5.1 24-hour TSP Monitoring

(a) The HVS was installed in the vicinity of the air sensitive receivers. The following criteria were considered in the installation of the HVS.

(i) A horizontal platform with appropriate support to secure the sampler against gust wind was provided.
(ii) The distance between the HVS and any obstacles such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
(iii) A minimum of 2 meters separation from walls, parapets and penthouse for rooftop sampler.
(iv) No furnace or incinerator flues nearby.
(v) Airflow around the sampler was unrestricted.
(vi) Permission was obtained to set up the samplers and access to the monitoring stations.
(vii) A secured supply of electricity was obtained to operate the samplers.
(viii) The sampler was located more than 20 meters from any dripline.
(ix) Any wire fence and gate, required to protect the sampler, did not obstruct the monitoring process.
(x) Flow control accuracy was kept within ±2.5% deviation over 24-hour sampling period.

(b) Preparation of Filter Papers
(i) Glass fibre filters, G810 were labelled and sufficient filters that were clean and without pinholes were selected.
(ii) All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 ^{o}C and not variable by more than +/- 3 ^{o}C; the relative humidity (RH) was < 50% and not variable by more than ± 5%. A convenient working RH was 40%.
(iii) All filter papers were prepared and analysed by ALS Technichem (HK) Pty. Ltd. and has comprehensive quality assurance and quality control programmes.

(c) Field Monitoring
(i) The power supply was checked to ensure the HVS works properly.
(ii) The filter holder and the area surrounding the filter were cleaned.

(iii) The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
(iv) The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
(v) The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied was sufficient to avoid air leakage at the edges.
(vi) Then the shelter lid was closed and was secured with the aluminium strip.
(vii) The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
(viii) A new flow rate record sheet was set into the flow recorder.
(ix) On site temperature and atmospheric pressure readings were taken and the flow rate of the HVS was checked and adjusted at around 1.1 m^3/min, and compiled with the range specified in the EM&A Manual (i.e. 0.6 – 1.7 m^3/min).
(x) The programmable digital timer was set for a sampling period of 24 hrs, and the starting time, weather condition and the filter number were recorded.
(xi) The initial elapsed time was recorded.
(xii) At the end of sampling, on site temperature and atmospheric pressure readings were taken and the final flow rate of the HVS was checked and recorded.
(xiii) The final elapsed time was recorded
(xiv) The sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact.
(xv) It was then place in a clean plastic envelope and sealed.
(xvi) All monitoring information was recorded on a standard data sheet.
(xvii) Filters were then sent to laboratory for analysis.

(d) Maintenance and Calibration

(i) The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
(ii) HVSs were calibrated at 2-month intervals using TE-5025A Calibration Kit prior to the commencement of baseline monitoring.
(iii) Calibration certificate of the HVSs are provided in **Appendix A.**

2.5.2 1-hour TSP Monitoring

(a) Measuring Procedures

The measuring procedures of the 1-hour dust meter were in accordance with the Manufacturer's Instruction Manual as follows:

(i) Turn the power on.
(ii) Close the air collecting opening cover.

(iii) Push the "TIME SETTIG" switch to [BG].
(iv) Push "START/STOP" switch to perform background measurement for 6 seconds.
(v) Turn the knob at SENSI ADJ position to insert the light scattering plate.
(vi) Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
(vii) Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
(viii) Pull out the knob and return it to MEASURE position.
(ix) Push the "TIME SETTING" switch the time set in the display to 3 hours.
(x) Lower down the air collection opening cover.
(xi) Push "START/STOP" switch to start measurement.

(b) Maintenance and Calibration
(i) The 1-hour TSP meter was calibrated at 1-year intervals against a continuous particulate TEOM Monitor, Series 1400ab. Calibration certificates of the Laser Dust Monitors are provided in **Appendix A**.

2.6 Results and Observations

2.6.1 The baseline 1-hour and 24-hour monitoring at CMA3 - Causeway Bay – Royal Hong Kong Yacht Club was carried out from 4 December 2009 to 17 December 2009 for consecutive 14 days and the weather were mostly sunny. Major dust sources were from nearby traffic emissions. No major changes in the environment settings are identified except that the CWB works have commenced in 2010 which may generate fugitive dust. Nonetheless, mitigation measures have been fully implemented on site that the dust level has been elevated very slightly; the baseline monitoring results of CWB are considered applicable to represent the baseline conditions of the Project as a conservative approach.

2.6.2 The baseline monitoring results for 1-hour TSP and 24-hour TSP are summarized in **Table 2.4**. Detailed air quality monitoring results are presented in **Appendix B**.

Table 2.4 Summary of 1-hour and 24-hour TSP Baseline Monitoring Results at CMA3

Parameter	Average (μg/m^3)	Range (μg/m^3)
1-hour TSP Level in μg/m^3	94.3	53.5 – 142.0
24-hour TSP Level in μg/m^3	63.1	27.0 – 123.0

2.7 Derivation of Action and Limit Levels

2.7.1 The air quality monitoring results, in terms of 1-hour TSP and 24-hour TSP, were below the Limit Level set out in the Air Quality Objective (AQO) at CMA3 Causeway Bay – Royal Hong Kong Yacht Club.

2.7.2 The Action and Limit Levels for air quality impact monitoring were based on the criteria adopted from the EM&A Manual as present in **Table 2.5**.

Table 2.5 Derivation of Action and Limit Levels for Air Quality

Parameters	**Action**	**Limit**
24-hour TSP Level in μg/ m^3	• BL < 200 μg/m3, AL = (BL * 1.3 +LL)/2 • BL > 200 μg/m3, AL = LL	260 μg/m^3
1-hour TSP Level in μg/ m^3	• BL < 384 μg/m3, AL = (BL * 1.3 +LL)/2 • BL > 384 μg/m3, AL = LL	500 μg/m^3

2.7.3 The derived Action and Limit Levels are presented in **Table 2.6**.

Table 2.6 Derived Action and Limit Levels for Air Quality

Parameter	**Monitoring Location**	**Action Level (μg/m^3)**	**Limit Level (μg/m^3)**
1-hour TSP Level in μg/m^3	CMA3	311.3	500
24-hour TSP Level in μg/m^3	CMA3	171.0	260

2.8 Event and Action Plan

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Notify Contractor. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)

2.9 Conclusions and Recommendations

2.9.1 Baseline air quality monitoring was carried out from 4 December 2009 to 17 December 2009 at CMA3 – Causeway Bay Royal Hong Kong Yacht Club. Action Level for air quality at this location was derived from the baseline monitoring results.

2.9.2 Dust impact monitoring during construction will be carried out at the same location but subject to actual site conditions in the future. If alternative location is proposed for impact monitoring, it will be chosen based on the criteria stated in EM&A Manual.

3 NOISE

3.1 Monitoring Requirements

3.1.1 In accordance with the EM&A Manual, baseline monitoring at one designated monitoring location was conducted, for consecutively 14 days, to obtain background noise levels at the area.

3.2 Monitoring Equipment

3.2.1 Noise monitoring was performed using sound level meter at the designated monitoring location. The sound level meters deployed comply with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in **Table 3.1.**

Table 3.1 Noise Monitoring Equipment

Equipment	Brand and Model
Integrated Sound Level Meter	B&K (Model No. 2238)
	B&K (Model 2250L)
	Rion (Model NL-31)
Acoustic Calibrator	B&K (Model No. 4231)
	Rion NC-73

3.3 Monitoring Locations

3.3.1 In accordance with the EM&A Manual, the noise monitoring station is located at Marco Polo Mansion as presented in **Table 3.2**. Owing to owner's rejection in providing access and installation of monitoring equipment, baseline monitoring could not be conducted at the proposed location.

Table 3.2 Original Baseline Noise Monitoring Station

Monitoring Location	Description
M2 (Previously known as NM1)	Marco Polo Mansion

3.3.2 M2a – Caltex Petrol Filling Station, as presented in **Table 3.3** and shown in ***Figure 3.1*** was identified as an alternative location for the baseline monitoring. M2a was chosen based on the criteria presented in EM&A Manual that it should be close to the major works area that are likely to have noise impacts and monitoring is close to the noise sensitive receivers as defined in the Technical Memorandum. The proposed location is also having similar

environment settings as M2 – Marco Polo Mansion. The alternative baseline monitoring proposal was submitted to EPD and approval was granted.

Table 3.3 Alternative Baseline Noise Monitoring Station

Monitoring Station	Description	Level (in terms of no. of floor)
M2a	Caltex Petrol Filling Station	2 (roof-top)

3.4 Monitoring Parameters, Frequency and Duration

3.4.1 The monitoring parameters, frequency and duration of noise monitoring are summarized in **Table 3.4**.

Table 3.4 Noise Monitoring Parameters, Frequency and Duration

Time Period	Duration, min	Parameters
0700 – 1800 hrs on normal weekdays	L_{eq} (30 min)	L_{eq}
Time period other than 0700 – 1900 hrs on normal weekdays	L_{eq} (5 min)	

3.5 Monitoring Methodology

3.5.1 Monitoring Procedure

(a) Façade measurements were made at all monitoring locations.

(b) The battery condition was checked to ensure the correct functioning of the meter.

(c) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

(i) frequency weighting: A
(ii) time weighting: Fast
(iii) time measurement: L_{eq} (30-minutes) were recorded for the period between 0700 and 1900 hours on normal weekdays. For all other time periods, L_{eq} (5-minutes) were recorded.

(d) Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.

(e) Noise monitoring was cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind with gusts exceeding 10 m/s.

3.5.2 Maintenance and Calibration

(a) The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.

(b) The meter and calibrator were sent to the supplier or Soils and Materials Engineering Co. Ltd. to check and calibrate at yearly intervals.

(c) Calibration certificates of the sound level meters and acoustic calibrators are provided in **Appendix C**.

3.6 Results and Observations

3.6.1 Baseline noise monitoring was conducted for consecutively 14 days, from 4 December 2009 to 17 December 2009. The dominant noise sources were from community noise, school activities and nearby traffic emissions. There was no other major activity influencing the measured noise level during the baseline noise monitoring period. No major changes in the environment settings have are identified except that the CWB works have commenced in 2010 which may elevate the noise level. Nonetheless, mitigation measures have been fully implemented on site that the noise level would not be varied substantially; the baseline monitoring results of CWB are considered applicable to represent the baseline conditions of the Project.

3.6.2 The baseline noise monitoring results are summarized in **Table 3.5**. Detailed noise monitoring results are presented in **Appendix D.**

Table 3.5 Summary of Baseline Noise Monitoring Results at M2a

	L_{eq} (30 min), d(B)A	
	Average	**Range**
0700 – 1900 hrs of normal weekdays	73.7	72.7 – 74.5
All days during (1900 – 2300hrs), and general holidays (including Sundays) during the daytime and evening (0700 – 2300hrs)	67.7	64.1 – 69.7
All days during the nighttime (2300 – 0700hrs)	65.3	62.2 – 67.6

3.7 Derivation of Action and Limit Levels

3.7.1 The Action and Limit Levels of noise monitoring have been set in accordance with the derivation criteria specified in the EM&A Manual as shown in **Table 3.6** below.

Table 3.6 Action and Limit Levels for Construction Noise

Time Period	**Action Level**	**Limit Level**
0700 – 1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)*

Notes:

- If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.
- *70 dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

3.8 Event and Action Plan

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level being exceeded	1. Notify ER, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified)
Limit Level being exceeded	1. Inform IEC, ER, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and ER on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)

3.9 Conclusions and Recommendations

3.9.1 Baseline noise monitoring was carried out from 4 December to 17 December 2009 at one monitoring location. The Action Level of construction noise is based on documented complaints received, while the Limit Level is the level at a specific limit according to EIAO-TM. An alternative monitoring location M2a – Caltex Petrol Filling Station was proposed since the owner of the designated monitoring station, M2 – Marco Polo, has rejected in providing access and installation of monitoring equipment.

3.9.2 Noise impact monitoring during construction will be carried out at the same location but subject to actual site conditions in the future. If alternative location is proposed for impact monitoring, it will be chosen based on the criteria stated in EM&A Manual.

4 Water Quality

4.1 Monitoring Requirements

4.1.1 In accordance with the EM&A Manual, baseline water quality levels at 2 locations should be established by conducting baseline monitoring for at least 4 weeks prior to the commencement of dredging works.

4.2 Monitoring Equipment

4.2.1 The brand and model of water quality monitoring equipments is given in **Table 4.1**.

Table 4.1 Water Quality Monitoring Equipment

Equipment	Brand and Model
Dissolved Oxygen Meter	YSI 6820
Water Temperature Meter	
Salinity meter	
pH Meter	
Turbiditimeter	
Water Sampler	Kahlsico Water Sampler
Echo Sampler	Eagle CudaTM 128
Global Positioning System	Magellan SporTrak

4.3 Monitoring Locations

4.3.1 In accordance with the EM&A Manual, the water monitoring stations for baseline water quality monitoring is presented in **Table 4.2** and shown in **Figure 4.1**.

Table 4.2 Baseline Water Quality Monitoring Stations

ID in EM&A Manual	New ID	Description	Easting Coordiates	Northing Coordinates
8	C6	Cooling Water Intake for Excelsior Hotel & World Trade Centre	837009.6	815999.3
9	C7	Cooling Water Intake for Windsor House	837193.7	816150.0

4.4 Monitoring Parameters, Frequency and Duration

4.4.1 The monitoring parameters, frequency and duration of water quality monitoring are summarized in **Table 4.3**.

Table 4.3 Water Quality Monitoring Parameters, Frequency and Duration

Parameter	Frequency and Duration
Turbidity, Suspended Solids, Dissolved Oxygen, pH, Temperature and Salinity	Three days per week, at mid-flood and mid-ebb tides for 4 weeks

4.5 Monitoring Methodology

4.5.1 The water quality monitoring procedures are presented in the following:

- All monitoring equipment were checked and calibrated before use. Responses of sensors and electrodes were also checked with certified standard solutions before each use.
- The interval between 2 sets of monitoring was not less than 36 hours.
- Duplicate in-situ measurements and water sampling were carried out in each sampling event.
- For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides was not less than 0.5m.
- Analysis of suspended solids was carried out in a HOKLAS or other international accredited laboratory. Sufficient water samples were collected at the monitoring stations for carrying out the laboratory analysis. The laboratory analysis was started within 24 hours after collection of the water samples and the analysis followed the standard methods according to **Table 4.4** and as described in American Public Health Association (APHA) Standard Methods for the Examination of Water and Wastewater, 19th edition.

Table 4.4 Analytical Methods to be applied to Marine Water Quality Samples

Determinant	Standard Method
Suspended Solids (mg/L)	APHA 2540 D

- All monitoring equipment were certified by a laboratory accredited under HOKLAS at 3 monthly intervals. Calibration certificates of all monitoring equipment are provided in **Appendix E**.

4.6 Results and Observations

4.6.1 The baseline water quality monitoring for all locations were carried out 3 days per week for 4 weeks between 21 October 2009 and 16 November 2009. The baseline monitoring data and laboratory results are presented in **Appendix F** and **Appendix G** respectively.

4.6.2 The weather conditions during the monitoring period were mainly sunny and cloudy except for a few showers observed on 12 and 16 November 2009. No

major pollution source and extreme weather, which might affect the results, were observed during the baseline monitoring period.

4.6.3 The baseline water quality monitoring results are summarised in **Table 4.5.** No major changes in the environment settings have are identified except that the CWB works have commenced in 2010 which may generate water quality impact. Nonetheless, mitigation measures have been fully implemented on site that the water quality has not been varied; the baseline monitoring results of CWB are considered applicable to represent the baseline conditions of the Project.

Table 4.5 Summary of baseline Water Quality Monitoring Results

Location		**Parameters**				
		Salinity (ppt)	**Dissolved Oxygen (mg/L)**	**pH**	**Turbidity (NTU)**	**Suspended Solids (mg/L)**
C6	Avg	32.69	3.60	6.85	5.31	8.21
	Min	31.91	2.63	5.90	3.20	4.00
	Max	33.38	5.64	8.19	8.90	12.00
C7	Avg	32.86	3.84	6.86	4.78	7.71
	Min	31.79	2.82	5.94	2.60	4.00
	Max	33.59	5.15	8.23	8.20	13.00

4.6.4 The QA/QC results for laboratory analysis of suspended solids are presented in **Appendix G**.

4.7 Derivation of Action and Limit Levels

4.7.1 The water quality assessment criteria, namely Action and Limit levels are shown in **Table 4.6**.

Table 4.6 Derivation in Action and Limit Levels for Water Quality

Parameters	**Action**	**Limit**
Cooling Water Intake		
SS in mg/L	95 percentile of baseline data	99 percentile of baseline data
Turbidity in NTU	95 percentile of baseline data	99 percentile of baseline data
DO in mg/L	5 percentile of baseline data	1 percentile of baseline data

4.7.2 According to approved EM&A Manual Section 2.35, where necessary, EPD routine marine water quality monitoring at the relevant station(s), dry and wet seasons inclusive, could also be used to establish the baseline water quality. The variation percentage between two seasons is then applied to the baseline monitoring data (Oct-Nov 2009) for dry season to derive the action and limit

levels for impact monitoring in the wet season. Details of establishing Action and Limit levels are shown in **Appendix H**.

4.7.3 The derived Action and Limit levels are presented in **Table 4.7**.

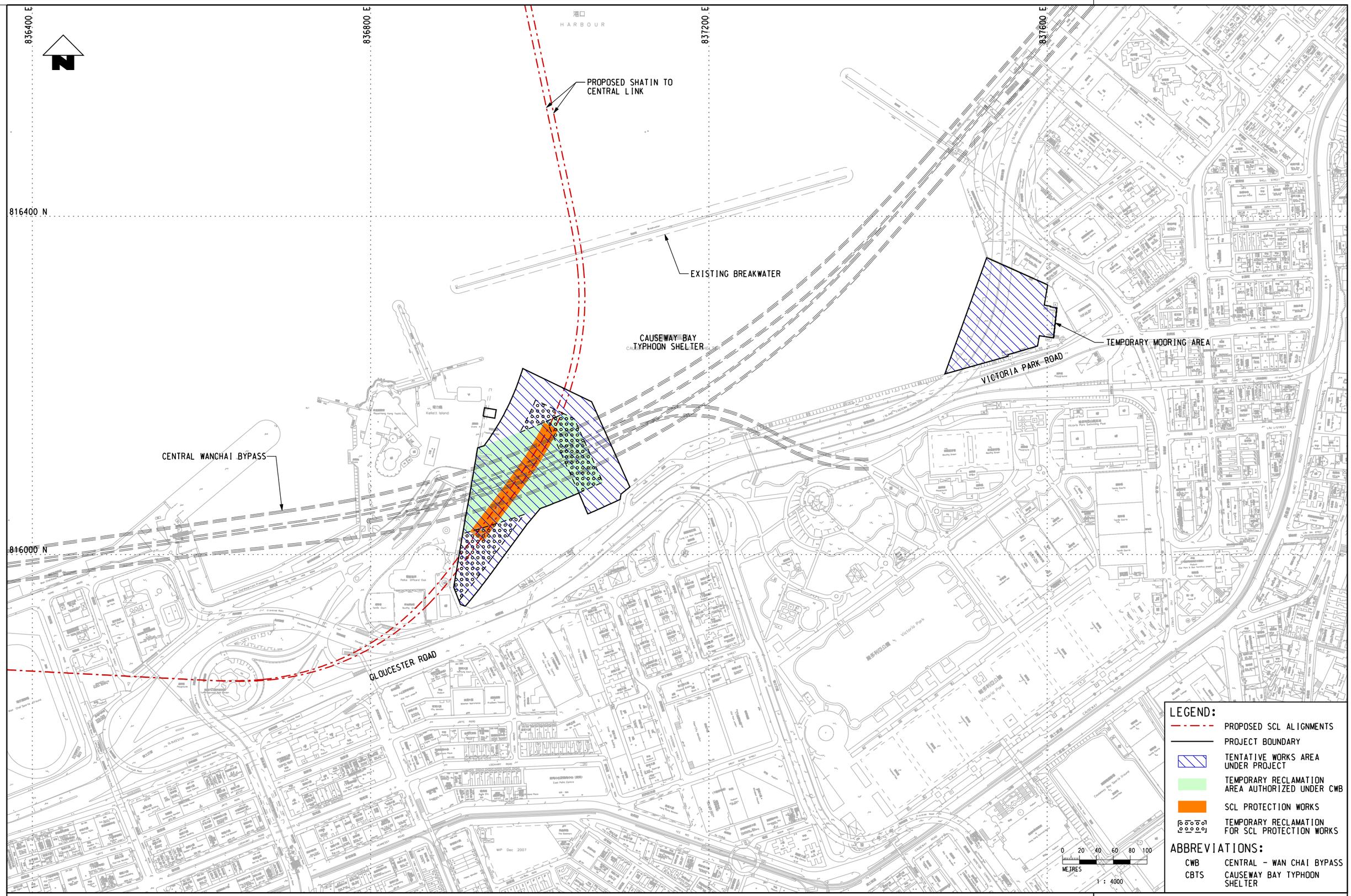
Table 4.7 Derived Action and Limit Levels for Water Quality

Parameters	Dry Season		Wet Season	
	Action	Limit	Action	Limit
Cooling Water Intake				
SS in mg/L	15.00	22.13	18.42	27.52
Turbidity in NTU	9.10	10.25	11.35	12.71
DO in mg/L	3.36	2.73	3.02	2.44

4.8 Conclusions and Recommendations

4.8.1 Baseline water quality monitoring was carried out between 21 October 2009 and 16 November 2009 for cooling water intakes C6 and C7. Action and Limit Levels were derived based on the baseline monitoring results and water quality assessment criteria.

Figures



SCL PROTECTION WORKS AT CBTS
FIGURE 1.1 PROJECT SITE PLAN

MTR
Shatin to Central Link
沙田至中環綫

CN JOB REF.	: J11-1218
DRAWING NO.	: 1218C01
ISSUE NO.	: 00
SCALE	: 1:4000 @A3
DATE	: 06OCT2011
CADD FILENAME	: 1218C01A.DGN
REVISION	: A

FULL SIZE A1

UserWorkspace C:\Program Files\Bentley\V8i\Workspace\users\CPPD.ucf, UserRef C:\Program Files\Bentley\V8i\Workspace\projects\MTR_CADD.pcf
FILENAME: X:\EP\SCL\jf\active\20111011-1218\working\001issue\1218c01a.dgn
PLOT DRV: X:\CADD_Library\MicroStation\Workspace\plotdrv\PDF_Color_150dpi.080923.pit
PRINTED BY: cd50658 06/10/2011 10:58:47 AM
MODELNAME: Default

836000 E
836500 E
837000 E
837500 E
838000 E
816500 N
816000 N
CMA3 (ROYAL HONG KONG YACHT CLUB)
CAUSEWAY BAY TYPHOON SHELTER
GLOUCESTER ROAD
VICTORIA HARBOUR
HARBOUR

LEGEND:
- PROJECT BOUNDARY
- 500m STUDY BOUNDARY
- PROPOSED SCL ALIGNMENTS
- TEMPORARY RECLAMATION AREA AUTHORIZED UNDER CWB
- TEMPORARY RECLAMATION FOR SCL PROTECTION WORKS
- CMA3 DUST MONITORING LOCATION

ABBREVIATIONS:
- CWB CENTRAL - WAN CHAI BYPASS
- CBTS CAUSEWAY BAY TYPHOON SHELTER

0 30 60 90 120 150
METRES
1 : 6000

SCL PROTECTION WORKS AT CBTS
FIGURE 2.1 LOCATION OF AIR QUALITY MONITORING STATION

MTR
Shatin to Central Link
沙田至中環綫

CN JOB REF.	: J11-1218
DRAWING NO.	: 1218C02
ISSUE NO.	: 00
SCALE	: 1:6000 @A3
DATE	: 06OCT2011
CADD FILENAME	: 1218C02A.DGN
REVISION	: A

FULL SIZE A1

UserWorkspace C:\Program Files\Bentley\V8i\Workspace\users\CPPD.ucf, UserRef C:\Program Files\Bentley\V8i\Workspace\projects\MTR.CADD.pcf
FILENAME: X:\EP\SCL\Jr\active\2011dl-1218\working\001sue\1218c02a.dgn
PLOT DRV: X:\CADD_Library\MicroStation\Workspace\plotdrv\PDF_Color_150dpi_080923.plt
PRINTED BY: cd50658 06/10/2011 11:04:06 AM
MODELNAME: Default

NOISE MONITORING STATION	DESCRIPTION	LAND USE
M2a	CALTEX PETROL FILLING STATION	PETROL FILLING STATION

836400 E
836800 E
837200 E
837600 E
816400 N
816000 N
815600 N
N
維多利亞港
VICTORIA HARBOUR
銅鑼灣避風塘
CAUSEWAY BAY TYPHOON SHELTER
Kellett Island
HING FAT STREET
GLOUCESTER ROAD
M2a
WIP Dec 2002
0 20 40 60 80 100
METRES
1 : 4000

LEGEND:

- PROJECT BOUNDARY
- 300m STUDY BOUNDARY
- PROPOSED SCL ALIGNMENTS
- TENTATIVE WORKS AREA UNDER PROJECT
- TEMPORARY RECLAMATION AREA AUTHORIZED UNDER CWB
- TEMPORARY RECLAMATION FOR SCL PROTECTION WORKS
- M2a AIRBORNE NOISE MONITORING STATION

ABBREVIATIONS:

CWB	CENTRAL - WAN CHAI BYPASS
CBTS	CAUSEWAY BAY TYPHOON SHELTER

UserWorkspace C:\Program Files\Bentley\V8\Workspace\users\CPPD.ucf, UserRef C:\Program Files\Bentley\V8\Workspace\projects\MTR_CADD.pcf
FILENAME: X:\EP\SCL\Jr\active\2011dl-1218\working\001issue\1218c03a.dgn
PLOT DRV: X:\CADD_Library\MicroStation\Workspace\plotdrv\PDF_Color_150dpi_080923.plt
PRINTED BY: cd50658 06/10/2011 11:06:03 AM
MODELNAME: Default

SCL PROTECTION WORKS AT CBTS
FIGURE 3.1 LOCATION OF NOISE MONITORING STATION

MTR
Shatin to Central Link
沙田至中環綫

CN JOB REF.	: J11-1218
DRAWING NO.	: 1218C03
ISSUE NO.	: 00
SCALE	: 1:4000 @A3
DATE	: 06OCT2011
CADD FILENAME	: 1218C03A.DGN
REVISION	: A

FULL SIZE A1

836000 E

837000 E

838000 E

817000 N

816000 N

VICTORIA HARBOUR

C6 EXCELSIOR HOTEL & WORLD TRADE CENTRE/NO. 27-63 PATERSON STREET

C7 WINDSOR HOUSE

0 40 80 120 160 200
METRES

1 : 8000

LEGEND:

- FUTURE SENSITIVE RECEIVER (AFTER WDI & CWB COMMISSIONED)
- EXISTING SENSITIVE RECEIVER
- RECLAMATION LIMIT FOR WDI & CWB

COOLING WATER INTAKE

SCL PROTECTION WORKS AT CBTS
FIGURE 4.1 LOCATION OF WATER MONITORING STATIONS

MTR
Shatin to Central Link
沙田至中環綫

CN JOB REF.	: J11-1218
DRAWING NO.	: 1218C04
ISSUE NO.	: 00
SCALE	: 1:8000 @A3
DATE	: 06OCT2011
CADD FILENAME	: 1218C04A.DGN
REVISION	: A

FULL SIZE A1

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FILENAME: X:\EP\SCL\jr\active\20ll-all-128\working\00issue\1218c04a.dgn
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PRINTED BY: cd50658 06/10/2011 11:00:59 AM
MODELNAME: Default

Appendix A
Calibration Certificates of
Air Quality Monitoring Equipment

TSP High Volume Sampler
Field Calibration Report

Station	Yacht Club - CMA3	Next Due Date:	11-Feb-10
Cal. Date:	11-Nov-09	Serial No.	9469
Equipment No.:	A-001-47T		

Ambient Condition			
Temperature, Ta (K)	300.5	Pressure, Pa (mmHg)	759.5

Orifice Transfer Standard Information					
Serial No:	1559	Slope, mc	1.97702	Intercept, bc	-0.0007
Last Calibration Date:	18-May-09	$mc \times Qstd + bc = [DH \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	18-May-10	$Qstd = \{[DH \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler

Resistance Plate No.	Orfice			HVS Flow Recorder	
	DH (orifice), in. of water	$[DH \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (m^3/min) X - axis	Flow Recorder Reading (CFM)	Continuous Flow Recorder Reading IC (CFM) Y-axis
18	9.7	3.10	1.57	56.0	55.75
13	7.4	2.71	1.37	50.0	49.78
10	6.2	2.48	1.25	44.0	43.80
7	4.0	1.99	1.01	34.0	33.85
5	2.4	1.54	0.78	22.0	21.90

By Linear Regression of Y on X

Slope , mw = 43.2566 Intercept, bw = -10.7267

Correlation Coefficient* = 0.9920

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 1.30m^3/min

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = IC \times [(Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $IC = (mw \times Qstd + bw) \times [(760 / Pa) \times (Ta / 298)]^{1/2}$ = 45.71

Remarks:

EQUIPMENT CALIBRATION RECORD

Type:	***Laser Dust Monitor***
Manufacturer/Brand:	***SIBATA***
Model No.:	***LD-3***
Equipment No.:	***A.005.07a***
Sensitivity Adjustment Scale Setting:	***557 CPM***

Standard Equipment

Equipment: *Rupprecht & Patashnick TEOM®*

Model No.: *Series 1400AB*
Serial No: Control: *140AB219899803*
Sensor: *1200C143659803* K_o: *12500*
Last Calibration Date*: *5 June 2009*

*Remarks: Recommended interval for hardware calibration is 1 year

Calibration Result

Sensitivity Adjustment Scale Setting (Before Calibration): *557* CPM
Sensitivity Adjustment Scale Setting (After Calibration): *557* CPM

Hour	Date (dd-mm-yy)	Time	Ambient Condition		Concentration[1] (mg/m^3) **Y-axis**	Total Count[2]	Count/ Minute[3] **X-axis**
			Temp (°C)	R.H. (%)			
1	*06-06-09*	*09:00 - 10:00*	*30.2*	*76*	*0.04175*	*1392*	*23.20*
2	*06-06-09*	*10:00 - 11:00*	*30.6*	*76*	*0.03983*	*1330*	*22.17*
3	*06-06-09*	*11:00 - 12:00*	*31.0*	*75*	*0.04025*	*1339*	*22.31*
4	*06-06-09*	*13:00 - 14:00*	*31.2*	*76*	*0.04271*	*1426*	*23.77*

Note: 1. Monitoring data was measured by Rupprecht & Patashnick TEOM®
2. Total Count was logged by Laser Dust Monitor
3. Count/minute was calculated by (Total Count/60)

By Linear Regression of Y or X
Slope (K-factor): *0.0018*
Correlation coefficient: *0.9965*

Validity of Calibration Record: *5 June 2010*

Remarks:

Appendix B
Baseline Air Quality Monitoring Data

24-hour TSP Monitoring Results at Station CMA3 - Yacht Club

Date	Flow Rate (m^3/min.)		Av. flow	Total vol.	Filter Weight (g)		Particulate	Elapse Time		Sampling	Conc.
	Initial	Final	(m^3/min)	(m^3)	Initial	Final	weight(g)	Initial	Final	Time(hrs.)	($\mu g/m^3$)
4-Dec-09	1.313	1.313	1.313	1890.7	3.6238	3.8571	0.2333	25087.84	25111.84	24.00	123
5-Dec-09	1.313	1.313	1.313	1890.7	3.5973	3.7873	0.1900	25101.84	25125.84	24.00	101
6-Dec-09	1.313	1.313	1.313	1887.8	3.8750	4.0694	0.1944	16437.00	16461.00	24.00	103
7-Dec-09	1.313	1.313	1.313	1890.7	3.4958	3.5723	0.0765	25149.84	25173.84	24.00	41
8-Dec-09	1.313	1.313	1.313	1890.7	3.4100	3.4608	0.0508	25173.84	25197.84	24.00	27
9-Dec-09	1.313	1.313	1.313	1890.7	3.5056	3.5843	0.0787	25197.84	25221.84	24.00	42
10-Dec-09	1.313	1.313	1.313	1890.7	3.5086	3.6598	0.1512	25221.84	25245.84	24.00	80
11-Dec-09	1.313	1.313	1.313	1890.7	3.5068	3.5814	0.0746	25245.84	25269.84	24.00	40
12-Dec-09	1.313	1.313	1.313	1890.7	3.5327	3.5854	0.0527	25269.84	25293.84	24.00	28
13-Dec-09	1.313	1.313	1.313	1890.7	3.5241	3.7461	0.2220	25293.84	25317.84	24.00	117
14-Dec-09	1.313	1.313	1.313	1890.7	3.8221	3.9202	0.0981	25317.84	25341.84	24.00	52
15-Dec-09	1.313	1.313	1.313	1890.7	3.5226	3.5963	0.0737	25341.84	25365.84	24.00	39
16-Dec-09	1.313	1.313	1.313	1890.7	3.5221	3.6099	0.0878	25365.84	25389.84	24.00	46
17-Dec-09	1.310	1.313	1.312	1890.7	3.4292	3.5163	0.0871	25389.84	25413.84	24.00	46
										Average	63.1
										Min	27.0
										Max	123.0

1-hour TSP Monitoring Results at Station CMA3
Yach Club

Date	Start Time (hh:mm)	1st Hour Conc. ($\mu g/m^3$)	2nd Hour Conc. ($\mu g/m^3$)	3rd Hour Conc. ($\mu g/m^3$)
4-Dec-09	9:30	104.0	99.6	109.7
5-Dec-09	14:25	113.5	114.0	114.2
6-Dec-09	10:00	127.1	118.9	102.3
7-Dec-09	9:00	70.7	94.7	78.5
8-Dec-09	17:05	80.5	59.5	53.5
9-Dec-09	9:05	71.3	82.5	75.0
10-Dec-09	13:05	113.2	117.6	121.2
11-Dec-09	9:30	82.1	82.8	83.2
12-Dec-09	9:35	76.6	72.2	88.1
13-Dec-09	10:50	121.9	117.6	124.4
14-Dec-09	9:05	135.2	142.0	134.4
15-Dec-09	10:15	76.3	80.3	75.0
16-Dec-09	9:30	81.2	82.4	83.2
17-Dec-09	9:55	65.0	67.2	69.5
			Average	94.3
			Min	53.5
			Max	142.0

Appendix C
Calibration Certificate of Sound Level Meters and Acoustic Calibrator

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. Tel : (852) 2873 6860
香港黃竹坑道37號利達中心地下、9樓、12樓、13樓及20樓 Fax : (852) 2555 7533
E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 026

CERTIFICATE OF CALIBRATION

Certificate No.: 09CA0710 04-01 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	,	Microphone
Manufacturer:	B & K	,	B & K
Type/Model No.:	2238	,	4188
Serial/Equipment No.:	2255677 / N009.02	,	2250420
Adaptors used:	-	,	-

Item submitted by

Customer Name:
Address of Customer: -
Request No.: -
Date of request: 10-Jul-2009

Date of test: 11-Jul-2009

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	12-Jan-2010	CIGISMEC
Signal generator	DS 360	33873	22-Jun-2010	CEPREI
Signal generator	DS 360	61227	22-Jun-2010	CEPREI

Ambient conditions

Temperature: (23 ± 1) °C
Relative humidity: (55 ± 10) %
Air pressure: (1000 ± 10) hPa

Test specifications

1. The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
2. The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.
3. The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory: Huang Jian-Min/Feng Jun Qi Date: 14-Jul-2009 Company Chop:

SOILS & MATERIALS ENGINEERING CO., LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. Tel : (852) 2873 6860
香港黃竹坑道37號利達中心地下、9樓、12樓、13樓及20樓 Fax : (852) 2555 7533
E-mail: snaec@cigismec.com Website: www.cigismec.com

HOKLAS 025

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 09CA0710 04-01 Page 2 of 2

1, Electrical Tests

The electrical tests were perfomed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Uncertainty (dB) / Coverage Factor	
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	2.1
	Lin	Pass	1.6	2.2
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100μs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor $1/10^3$ at 4kHz	Pass	0.3	
	1 ms burst duty factor $1/10^4$ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Uncertainty (dB) / Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3
	Weighting A at 8000 Hz	Pass	0.5

3, Response to associated sound calibrator

N/A

The uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95 %. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: C.Y. Fung Checked by:
Date: 11-Jul-2009 Date: 14-Jul-2009

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. Tel : (852) 2873 6860
香港黃竹坑道37號利臣中心地下、9樓、12樓、13樓及20樓 Fax : (852) 2555 7533
E-mail: sme@cigismec.com Website: www.cigismec.com

CERTIFICATE OF CALIBRATION

Certificate No.: 09CA0311 02-02 Page: 1 of 2

Item tested

Description: Acoustical Calibrator (Class 1)
Manufacturer: B&K
Type/Model No.: BK4231
Serial/Equipment No.: 1850426 / N.004.02
Adaptors used: -

Item submitted by

Customer:
Address of Customer: -
Request No.: -
Date of request: 11-Mar-2009

Date of test: 13-Mar-2009

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2412857	29-Jun-2009	SCL
Preamplifier	B&K 2673	2239857	02-Dec-2009	CEPREI
Measuring amplifier	B&K 2610	2346941	03-Dec-2009	CEPREI
Signal generator	DS 360	61227	18-Jul-2009	CEPREI
Digital multi-meter	34401A	US36087050	03-Dec-2009	CIGISMEC
Audio analyzer	8903B	GB41300350	27-Nov-2009	CEPREI
Universal counter	53132A	MY40003662	11-Jul-2009	CEPREI

Ambient conditions

Temperature: 23 ± 1 °C
Relative humidity: 65 ± 10 %
Air pressure: 1000 ± 15 hPa

Test specifications

1. The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
2. The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
3. The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

Approved Signatory: Hyang Jian Min/Feng Jun Qi Date: 17-Mar-2009 Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
香港黃竹坑道37號利達中心地下、9樓、12樓、13樓及20樓
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel : (852) 2873 6869
Fax : (852) 2555 7533

CERTIFICATE OF CALIBRATION

(Continuation Page)

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

(Output level in dB re 20 μPa)

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Uncertainty dB
1000	94.00	94.10	0.1

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz **STF = 0.002 dB**

Estimated uncertainty 0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz **Actual Frequency = 999.8 Hz**

Estimated uncertainty 0.1 Hz Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz **TND = 0.5%**

Estimated uncertainty 0.7%

The uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95 %. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: C.Y. Fung
Date: 13-Mar-2009

Checked by:
Date: 17-Mar-2009

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

Appendix D
Baseline Noise Monitoring Results

Location : M2a - Caltex Petrol Filling Station
Day time 07:00-19:00 hrs Normal Weekdays

Date	Noise Level for 30-min, dB(A)		
	Leq	L10	L90
4-Dec-09	72.7	74.5	70.1
5-Dec-09	73.6	75.5	70.4
6-Dec-09*	N/A	N/A	N/A
7-Dec-09	73.8	75.7	71.0
8-Dec-09	74.5	75.9	71.9
9-Dec-09	73.4	74.7	70.9
10-Dec-09	74.1	75.5	71.5
11-Dec-09	73.9	75.4	71.1
12-Dec-09	74.3	76.0	71.5
13-Dec-09*	N/A	N/A	N/A
14-Dec-09	73.0	74.7	71.0
15-Dec-09	74.5	75.7	71.7
16-Dec-09	73.2	74.7	71.0
17-Dec-09	73.8	75.0	71.2

	Leq 30-min dB(A)
Average	73.7
Max	74.5
Min	72.7

Remarks
* Public holiday

Location : M2a - Caltex Petrol Filling Station
All days during evening (19:00 to 23:00 hours), and
general holidays (including Sundays) during the daytime and evening (07:00 to 23:00 hours)

Date	Noise Level for 5-min, dB(A)		
	Leq	L10	L90
4-Dec-09	69.1	70.1	66.6
5-Dec-09	66.2	69.3	59.4
6-Dec-09*	68.4	70.0	66.1
7-Dec-09	64.1	67.3	52.6
8-Dec-09	69.0	73.1	57.8
9-Dec-09	67.2	70.2	59.1
10-Dec-09	66.8	69.3	58.1
11-Dec-09	68.1	70.8	60.4
12-Dec-09	68.0	70.3	62.1
13-Dec-09*	69.7	70.9	67.3
14-Dec-09	65.0	68.3	53.1
15-Dec-09	68.7	72.3	56.7
16-Dec-09	68.6	71.3	60.2
17-Dec-09	68.3	70.8	59.8

	Leq 5-min dB(A)
Average	67.7
Max	69.7
Min	64.1

Remarks
* Public holiday

Location : M2a - Caltex Petrol Filling Station
All days during the nighttime (23:00 to 07:00 hours)

Date	Noise Level for 5-min, dB(A)		
	Leq	L10	L90
4-Dec-09	67.6	68.6	65.1
5-Dec-09	65.5	68.5	58.8
6-Dec-09*	67.0	68.5	64.7
7-Dec-09	62.7	65.9	51.5
8-Dec-09	65.3	69.2	54.7
9-Dec-09	65.1	68.0	57.2
10-Dec-09	65.3	67.8	56.9
11-Dec-09	65.2	67.8	57.9
12-Dec-09	65.1	67.3	59.5
13-Dec-09*	66.8	67.9	64.4
14-Dec-09	62.2	65.4	50.9
15-Dec-09	65.2	68.5	53.8
16-Dec-09	65.1	67.6	57.1
17-Dec-09	65.4	67.8	57.2

	Leq 5-min dB(A)
Average	65.3
Max	67.6
Min	62.2

Remarks
* Public holiday

Appendix E
Calibration Certificate for Water Quality Monitoring Equipment

CERTIFICATE OF ANALYSIS

Batch: HK0917039
Date of Issue: 25/08/2009
Client:
Client Reference:

Calibration of Tubidimeter

Item : YSI SONDE Environmental Monitoring System

Model No. : 6820-C-M

Serial No. : 0001030 D

Equipment No. : W.026.09

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2130B

Date of Calibration : 20 August. 2009

Testing Results :

Expected Reading	Recording Reading
0.0 NTU	0.0 NTU
4.0 NTU	4.0 NTU
10.0 NTU	9.8 NTU
20.0 NTU	20.1 NTU
50.0 NTU	49.7 NTU
100 NTU	100 NTU
Allowing Deviation	±10%

Mr.Chan Kwok Fai Godfrey
(Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0917039
Date of Issue: 25/08/2009
Client:
Client Reference:

Calibration of Conductivity System

Item : YSI SONDE Environmental Monitoring System

Model No. : 6820-C-M

Serial No. : 0001030 D

Equipment No. : W.026.09

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2510B

Date of Calibration : 20 August, 2009

Testing Results :

Expected Reading	Recording Reading
6667 uS/cm 12890 uS/cm 58670 uS/cm	6650 uS/cm 12910 uS/cm 58680 uS/cm
Allowing Deviation	±10%

Mr Chan Kwok Fai, Godfrey
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0917039
Date of Issue: 25/08/2009
Client:
Client Reference:

Calibration of Salinity System

Item : YSI SONDE Environmental Monitoring System

Model No. : 6820-C-M

Serial No. : 0001080 D

Equipment No. : W.026.09

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2520 A and B

Date of Calibration : 20 August, 2009

Testing Results :

Expected Reading	Recording Reading
10.0 g/L 20.0 g/L 30.0 g/L	10.0 g/L 20.1 g/L 30.0 g/L
Allowing Deviation	±10%

Mr Chan Kwok Fai, Godfrey
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0917039
Date of Issue: 25/08/2009
Client:
Client Reference:

Calibration of Thermometer

Item : YSI SONDE Environmental Monitoring System

Model No. : 6820-C-M

Serial No. : 0001030 D

Equipment No. : W.026.09

Calibration Method : In-house Method

Date of Calibration : 20 August, 2009

Testing Results :

Reference Temperature (^{0}C)	Recorded Temperature (^{0}C)
28.0 ^{0}C 32.1 ^{0}C	27.9 ^{0}C 32.1 ^{0}C
Allowing Deviation	±2.0^{0}C

Mr.Chan Kwok Fai, Godfrey
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0917039
Date of Issue: 25/08/2009
Client:
Client Reference:

Calibration of DO System

Item : YSI SONDE Environmental Monitoring System

Model No. : 6820-C-M

Serial No. : 0001030 D

Equipment No. : W.026.09

Calibration Method : This meter was calibrated in accordance with standard method APHA (18th Ed.) 4500-O C & G

Date of Calibration : 20 August, 2009

Testing Results :

Expected Reading	Recording Reading
7.53 mg/L 9.03 mg/L 10.8 mg/L	7.58 mg/L 9.07 mg/L 10.9 mg/L
Allowing Deviation	±0.2 mg/L

Mr Chan Kwok Fai Godfrey
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0917039
Date of issue: 25/08/2009
Client:
Client Reference:

Calibration of pH System

Item : YSI SONDE Environmental Monitoring System

Model No. : 6820-C-M

Serial No. : 0001080 D

Equipment No. : W.026.09

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 4500-H+B

Date of Calibration : 20 August, 2009

Testing Results :

Expected Reading	Recording Reading
4.00	4.02
7.00	7.01
10.0	9.98
Allowing Deviation	± 0.2

Mr Chan Kwok Fai Godfrey
Laboratory Manager - Hong Kong

Appendix F
Water Quality Monitoring Data

Baseline Water Water Quality Monitoring Results

Water Quality Monitoring Results at C6 - Mid-Ebb Tide

Date	Sampling Time	Depth (m)		Temperature (°C)		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		pH		Turbidity(NTU)		Suspended Solids (mg/L)	
				Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	14:22	Middle	1.9	27.0 27.0	27.0	32.5 32.6	32.6	56.10 56.30	56.20	3.74 3.71	3.73	7.72 7.77	7.75	5.5 5.2	5.35	7 8	7.5
23-Oct-09	15:34	Middle	1.9	27.3 27.3	27.3	32.8 32.8	32.8	55.70 50.70	53.20	3.68 3.35	3.52	7.73 7.73	7.73	5.6 5.6	5.60	10 8	9.0
27-Oct-09	7:52	Middle	1.9	26.5 26.6	26.6	33.0 33.0	33.0	64.30 57.70	61.00	4.29 3.85	4.07	6.70 6.71	6.71	6.2 6.3	6.25	7 7	7.0
29-Oct-09	9:16	Middle	2.1	26.5 26.5	26.5	32.5 32.5	32.5	46.10 44.50	45.30	3.08 2.98	3.03	6.24 6.25	6.25	4.8 4.8	4.80	9 8	8.5
31-Oct-09	11:45	Middle	1.9	26.5 26.5	26.5	32.5 32.6	32.6	67.00 51.30	59.15	4.49 3.43	3.96	6.73 6.74	6.74	5.8 6.1	5.95	12 10	11.0
02-Nov-09	11:33	Middle	2.5	26.3 26.3	26.3	33.2 33.4	33.3	66.60 64.00	65.30	4.46 4.28	4.37	6.74 6.76	6.75	3.8 3.9	3.85	10 8	9.0
04-Nov-09	12:29	Middle	1.6	25.3 25.3	25.3	33.3 33.3	33.3	65.70 62.90	64.30	4.47 4.28	4.38	6.07 6.09	6.08	5.4 5.0	5.20	6 6	6.0
06-Nov-09	14:01	Middle	1.8	25.5 25.5	25.5	33.0 33.1	33.0	56.10 55.40	55.75	3.80 3.76	3.78	6.70 6.71	6.71	4.0 4.0	4.00	8 8	8.0
10-Nov-09	6:51	Middle	1.7	25.5 25.5	25.5	32.9 32.9	32.9	42.80 41.20	42.00	2.92 2.82	2.87	6.65 6.65	6.65	5.0 4.8	4.90	9 7	8.0
12-Nov-09	9:06	Middle	1.9	25.5 25.6	25.6	33.1 33.1	33.1	41.40 40.90	41.15	2.81 2.77	2.79	5.99 6.00	6.00	4.3 4.3	4.30	7 6	6.5
14-Nov-09	11:02	Middle	1.8	24.9 24.9	24.9	32.8 32.8	32.8	56.70 55.40	56.05	3.89 3.80	3.85	7.14 7.18	7.16	5.3 5.2	5.25	10 8	9.0
16-Nov-09	11:50	Middle	2.1	24.3 24.3	24.3	31.9 32.0	32.0	80.80 74.70	77.75	5.64 5.21	5.43	8.19 8.18	8.19	8.9 8.6	8.75	10 8	9.0

Baseline Water Water Quality Monitoring Results

Water Quality Monitoring Results at C6 - Mid-Flood Tide

Date	Sampling Time	Depth (m)		Temperature (°C)		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		pH		Turbidity(NTU)		Suspended Solids (mg/L)	
				Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	10:41	Middle	2.3	26.9 27.0	26.9	32.4 32.4	32.4	53.60 51.70	52.65	3.51 3.44	3.48	7.82 7.79	7.81	5.4 5.4	5.40	6 7	6.5
23-Oct-09	10:55	Middle	2.1	27.0 27.0	27.0	32.6 32.6	32.6	42.60 39.70	41.15	2.83 2.63	2.73	7.72 7.73	7.73	5.8 5.7	5.75	10 8	9.0
27-Oct-09	15:39	Middle	2.1	26.9 26.9	26.9	32.6 32.6	32.6	53.60 49.50	51.55	3.56 3.29	3.43	6.63 6.63	6.63	7.4 7.3	7.35	10 11	10.5
29-Oct-09	15:53	Middle	2.2	27.0 27.0	27.0	32.2 32.2	32.2	56.00 49.50	52.75	3.73 3.29	3.51	6.17 6.21	6.19	6.3 5.7	6.00	10 9	9.5
31-Oct-09	16:46	Middle	2.0	26.9 26.9	26.9	32.2 32.2	32.2	60.50 58.80	59.65	4.03 3.92	3.98	6.69 6.69	6.69	4.1 4.0	4.05	8 6	7.0
02-Nov-09	6:59	Middle	2.6	26.5 26.5	26.5	32.9 32.7	32.8	61.30 57.20	59.25	3.85 3.76	3.81	6.64 6.69	6.67	5.6 5.8	5.70	8 10	9.0
04-Nov-09	8:04	Middle	1.8	25.0 25.0	25.0	33.1 33.1	33.1	56.20 54.70	55.45	3.85 3.74	3.80	5.90 5.92	5.91	4.8 4.5	4.65	4 6	5.0
06-Nov-09	10:04	Middle	1.9	25.1 25.1	25.1	33.1 33.1	33.1	50.60 48.90	49.75	3.46 3.34	3.40	6.62 6.63	6.63	3.2 3.3	3.25	10 9	9.5
10-Nov-09	13:32	Middle	2.1	25.8 25.7	25.7	32.8 32.8	32.8	52.70 46.20	49.45	3.57 3.13	3.35	6.67 6.70	6.69	5.3 5.1	5.20	7 7	7.0
12-Nov-09	14:31	Middle	2.1	25.7 25.7	25.7	32.9 32.9	32.9	40.90 39.90	40.40	2.76 2.70	2.73	5.95 5.96	5.96	3.6 3.7	3.65	10 12	11.0
14-Nov-09	15:25	Middle	2.3	24.8 24.8	24.8	32.0 32.0	32.0	45.70 46.20	45.95	3.16 3.19	3.18	7.22 7.26	7.24	4.5 4.3	4.40	8 7	7.5
16-Nov-09	7:10	Middle	2.2	24.3 24.3	24.3	32.1 32.1	32.1	45.20 45.90	45.55	3.15 3.20	3.18	7.65 7.64	7.65	8.0 7.7	7.85	6 8	7.0

Baseline Water Water Quality Monitoring Results

Water Quality Monitoring Results at C7 - Mid-Ebb Tide

Date	Sampling Time	Depth (m)		Temperature (°C)		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		pH		Turbidity(NTU)		Suspended Solids (mg/L)	
				Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	14:18	Middle	2.2	27.0 27.0	27.0	32.6 32.7	32.7	55.50 55.00	55.25	3.67 3.65	3.66	7.76 7.77	7.77	4.8 4.5	4.65	5 6	5.5
23-Oct-09	15:37	Middle	1.8	27.4 27.4	27.4	32.8 32.8	32.8	57.50 53.50	55.50	3.79 3.52	3.66	7.72 7.72	7.72	3.8 4.0	3.90	8 6	7.0
27-Oct-09	7:56	Middle	2.3	26.7 26.7	26.7	33.5 33.6	33.6	55.50 55.90	55.70	3.69 3.71	3.70	6.82 6.83	6.83	5.6 5.6	5.60	5 5	5.0
29-Oct-09	9:22	Middle	2.3	26.6 26.6	26.6	32.6 32.7	32.6	53.50 52.80	53.15	3.58 3.53	3.56	6.28 6.28	6.28	4.3 4.3	4.30	8 7	7.5
31-Oct-09	11:49	Middle	2.0	26.5 26.5	26.5	32.6 32.6	32.6	61.10 57.90	59.50	4.09 3.88	3.99	6.85 6.89	6.87	4.0 3.7	3.85	6 5	5.5
02-Nov-09	11:27	Middle	2.6	26.2 26.2	26.2	33.3 33.2	33.3	71.60 67.90	69.75	4.80 4.56	4.68	6.74 6.75	6.75	2.9 2.6	2.75	9 8	8.5
04-Nov-09	12:25	Middle	2.1	25.2 25.3	25.2	33.6 33.5	33.5	72.30 68.40	70.35	4.92 4.65	4.79	6.05 6.05	6.05	2.8 2.9	2.85	10 8	9.0
06-Nov-09	13:56	Middle	2.0	25.5 25.4	25.5	33.1 33.2	33.2	58.60 58.30	58.45	3.98 3.96	3.97	6.70 6.70	6.70	3.4 3.3	3.35	9 7	8.0
10-Nov-09	6:54	Middle	1.9	25.4 25.4	25.4	33.1 33.2	33.2	50.20 49.50	49.85	3.42 3.37	3.40	6.59 6.65	6.62	4.8 4.3	4.55	7 7	7.0
12-Nov-09	9:12	Middle	2.0	25.5 25.6	25.6	32.9 32.9	32.9	44.40 43.90	44.15	3.01 2.98	3.00	5.98 5.99	5.99	2.7 2.6	2.65	7 4	5.5
14-Nov-09	11:07	Middle	2.4	24.8 24.8	24.8	32.5 32.5	32.5	57.10 56.90	57.00	3.94 3.92	3.93	7.26 7.29	7.28	3.6 3.6	3.60	5 6	5.5
16-Nov-09	11:46	Middle	1.9	24.2 24.3	24.2	31.8 31.8	31.8	73.60 73.30	73.45	5.15 5.12	5.14	8.21 8.23	8.22	8.2 7.9	8.05	8 6	7.0

Baseline Water Water Quality Monitoring Results

Water Quality Monitoring Results at C7 - Mid-Flood Tide

Date	Sampling Time	Depth (m)		Temperature (°C)		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		pH		Turbidity(NTU)		Suspended Solids (mg/L)	
				Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	10:51	Middle	2.4	26.9 26.9	26.9	32.7 32.7	32.7	61.20 58.80	60.00	4.07 3.91	3.99	7.82 7.82	7.82	5.8 5.5	5.65	6 7	6.5
23-Oct-09	11:01	Middle	2.7	27.0 27.0	27.0	32.9 33.0	33.0	52.90 50.90	51.90	3.51 3.38	3.45	7.86 7.87	7.87	6.8 6.5	6.65	11 13	12.0
27-Oct-09	15:35	Middle	2.4	26.9 26.9	26.9	32.8 32.9	32.8	56.60 50.50	53.55	3.76 3.35	3.56	6.62 6.63	6.63	5.5 5.5	5.50	10 8	9.0
29-Oct-09	15:49	Middle	2.5	26.8 26.8	26.8	32.7 32.6	32.7	63.50 61.50	62.50	4.23 4.09	4.16	6.21 6.24	6.23	7.7 7.3	7.50	12 11	11.5
31-Oct-09	16:42	Middle	2.4	26.7 26.7	26.7	32.5 32.6	32.6	64.00 62.80	63.40	4.27 4.19	4.23	6.65 6.66	6.66	4.8 4.6	4.70	6 8	7.0
02-Nov-09	7:05	Middle	2.7	26.4 26.4	26.4	32.9 32.9	32.9	64.60 53.80	59.20	4.32 3.60	3.96	6.73 6.75	6.74	4.7 4.6	4.65	9 9	9.0
04-Nov-09	8:08	Middle	2.2	25.2 25.2	25.2	33.5 33.5	33.5	57.10 56.10	56.60	3.89 3.82	3.86	6.03 6.05	6.04	4.9 5.0	4.95	8 8	8.0
06-Nov-09	10:08	Middle	2.5	25.2 25.2	25.2	33.6 33.6	33.6	57.10 55.60	56.35	3.89 3.78	3.84	6.67 6.67	6.67	4.5 4.4	4.45	9 9	9.0
10-Nov-09	13:28	Middle	2.1	25.6 25.7	25.6	32.9 32.9	32.9	60.20 58.20	59.20	4.07 3.93	4.00	6.67 6.68	6.68	4.8 4.7	4.75	8 6	7.0
12-Nov-09	14:26	Middle	2.1	25.7 25.7	25.7	33.1 33.1	33.1	42.40 41.70	42.05	2.87 2.82	2.85	5.94 5.95	5.95	3.7 3.8	3.75	8 10	9.0
14-Nov-09	15:21	Middle	2.5	24.7 24.7	24.7	32.6 32.6	32.6	44.70 45.10	44.90	3.09 3.12	3.11	7.27 7.30	7.29	3.9 4.2	4.05	7 7	7.0
16-Nov-09	7:15	Middle	2.8	24.3 24.3	24.3	32.0 31.9	32.0	56.90 52.40	54.65	3.97 3.65	3.81	7.06 7.08	7.07	8.2 7.9	8.05	9 9	9.0

Appendix G

Water Quality Laboratory Results

(Relevant Laboratory Results Highlighted in Yellow)

CERTIFICATE OF ANALYSIS

Client	: CHUNG SHUN BORING ENG CO LTD	Laboratory	: ALS Technichem HK Pty Ltd	Page	: 1 of 5
Contact	: ----	Contact	: Chan Kwok Fai, Godfrey	Work Order	: HK0922129
Address	: ----	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: ----	E-mail	: Godfrey.Chan@alsenviro.com		
Telephone	: ----	Telephone	: +852 2610 1044		
Facsimile	: ----	Facsimile	: +852 2610 2021		
Project	: BASELINE MONITORING - WQM	Quote number	: ----	Date received	: 21-OCT-2009
Order number	: ----			Date of issue	: 29-OCT-2009
C-O-C number	: ----			No. of samples	- Received : 84
Site	: ----				- Analysed : 84

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922129 supersedes any previous reports with this reference. The completion date of analysis is 27-OCT-2009. 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 HK0922129 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[21-OCT-2009]	HK0922129-001		**11**				
WSD7 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-002		**12**				
WSD9 MID-FLOOD	[21-OCT-2009]	HK0922129-003		**11**				
WSD9 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-004		**10**				
WSD10 MID-FLOOD	[21-OCT-2009]	HK0922129-005		**9**				
WSD10 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-006		**8**				
WSD15 MID-FLOOD	[21-OCT-2009]	HK0922129-007		**7**				
WSD15 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-008		**8**				
WSD17 MID-FLOOD	[21-OCT-2009]	HK0922129-009		**10**				
WSD17 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-010		**10**				
WSD19 MID-FLOOD	[21-OCT-2009]	HK0922129-011		**9**				
WSD19 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-012		**10**				
WSD20 MID-FLOOD	[21-OCT-2009]	HK0922129-013		**11**				
WSD20 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-014		**12**				
C8 MID-FLOOD	[21-OCT-2009]	HK0922129-015		**12**				
C8 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-016		**10**				
C9 MID-FLOOD	[21-OCT-2009]	HK0922129-017		**11**				
C9 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-018		**11**				
C1 MID-FLOOD	[21-OCT-2009]	HK0922129-019		**8**				
C1 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-020		**8**				
C2 MID-FLOOD	[21-OCT-2009]	HK0922129-021		**9**				
C2 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-022		**8**				
C3 MID-FLOOD	[21-OCT-2009]	HK0922129-023		**9**				
C3 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-024		**10**				
C4 MID-FLOOD	[21-OCT-2009]	HK0922129-025		**11**				
C4 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-026		**12**				
C5 MID-FLOOD	[21-OCT-2009]	HK0922129-027		**14**				
C5 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-028		**15**				
C6 MID-FLOOD	[21-OCT-2009]	HK0922129-029		**6**				
C6 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-030		**7**				
C7 MID-FLOOD	[21-OCT-2009]	HK0922129-031		**6**				
C7 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-032		**7**				
RC1 MID-FLOOD	[21-OCT-2009]	HK0922129-033		**7**				
RC1 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-034		**7**				
RC5 MID-FLOOD	[21-OCT-2009]	HK0922129-035		**15**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**			
			LOR Unit	2 mg/L			
				EA/ED: Physical and Aggregate Properties			
RC5 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-036		**13**			
RC7 MID-FLOOD	[21-OCT-2009]	HK0922129-037		**8**			
RC7 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-038		**8**			
WSD21 MID-FLOOD	[21-OCT-2009]	HK0922129-039		**14**			
WSD21 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-040		**14**			
RW1 MID-FLOOD	[21-OCT-2009]	HK0922129-041		**10**			
RW1 MID-FLOOD DUP	[21-OCT-2009]	HK0922129-042		**8**			
WSD7 MID-EBB	[21-OCT-2009]	HK0922129-043		**9**			
WSD7 MID-EBB DUP	[21-OCT-2009]	HK0922129-044		**8**			
WSD9 MID-EBB	[21-OCT-2009]	HK0922129-045		**7**			
WSD9 MID-EBB DUP	[21-OCT-2009]	HK0922129-046		**7**			
WSD10 MID-EBB	[21-OCT-2009]	HK0922129-047		**8**			
WSD10 MID-EBB DUP	[21-OCT-2009]	HK0922129-048		**7**			
WSD15 MID-EBB	[21-OCT-2009]	HK0922129-049		**6**			
WSD15 MID-EBB DUP	[21-OCT-2009]	HK0922129-050		**7**			
WSD17 MID-EBB	[21-OCT-2009]	HK0922129-051		**16**			
WSD17 MID-EBB DUP	[21-OCT-2009]	HK0922129-052		**15**			
WSD19 MID-EBB	[21-OCT-2009]	HK0922129-053		**14**			
WSD19 MID-EBB DUP	[21-OCT-2009]	HK0922129-054		**12**			
WSD20 MID-EBB	[21-OCT-2009]	HK0922129-055		**9**			
WSD20 MID-EBB DUP	[21-OCT-2009]	HK0922129-056		**11**			
C8 MID-EBB	[21-OCT-2009]	HK0922129-057		**10**			
C8 MID-EBB DUP	[21-OCT-2009]	HK0922129-058		**12**			
C9 MID-EBB	[21-OCT-2009]	HK0922129-059		**20**			
C9 MID-EBB DUP	[21-OCT-2009]	HK0922129-060		**17**			
C1 MID-EBB	[21-OCT-2009]	HK0922129-061		**10**			
C1 MID-EBB DUP	[21-OCT-2009]	HK0922129-062		**11**			
C2 MID-EBB	[21-OCT-2009]	HK0922129-063		**8**			
C2 MID-EBB DUP	[21-OCT-2009]	HK0922129-064		**6**			
C3 MID-EBB	[21-OCT-2009]	HK0922129-065		**8**			
C3 MID-EBB DUP	[21-OCT-2009]	HK0922129-066		**6**			
C4 MID-EBB	[21-OCT-2009]	HK0922129-067		**11**			
C4 MID-EBB DUP	[21-OCT-2009]	HK0922129-068		**12**			
C5 MID-EBB	[21-OCT-2009]	HK0922129-069		**10**			
C5 MID-EBB DUP	[21-OCT-2009]	HK0922129-070		**11**			

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[21-OCT-2009]	HK0922129-071		**7**				
C6 MID-EBB DUP	[21-OCT-2009]	HK0922129-072		**8**				
C7 MID-EBB	[21-OCT-2009]	HK0922129-073		**5**				
C7 MID-EBB DUP	[21-OCT-2009]	HK0922129-074		**6**				
RC1 MID-EBB	[21-OCT-2009]	HK0922129-075		**7**				
RC1 MID-EBB DUP	[21-OCT-2009]	HK0922129-076		**8**				
RC5 MID-EBB	[21-OCT-2009]	HK0922129-077		**8**				
RC5 MID-EBB DUP	[21-OCT-2009]	HK0922129-078		**9**				
RC7 MID-EBB	[21-OCT-2009]	HK0922129-079		**6**				
RC7 MID-EBB DUP	[21-OCT-2009]	HK0922129-080		**5**				
WSD21 MID-EBB	[21-OCT-2009]	HK0922129-081		**9**				
WSD21 MID-EBB DUP	[21-OCT-2009]	HK0922129-082		**10**				
RW1 MID-EBB	[21-OCT-2009]	HK0922129-083		**9**				
RW1 MID-EBB DUP	[21-OCT-2009]	HK0922129-084		**10**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1143404)								
HK0922129-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	11	12	11.4
HK0922129-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1143405)								
HK0922129-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	15.6
HK0922129-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	14.9
EA/ED: Physical and Aggregate Properties (QC Lot: 1143406)								
HK0922129-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	10	0.0
HK0922129-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	16	15	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1143407)								
HK0922129-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	12.1
HK0922129-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	7	6	15.6
EA/ED: Physical and Aggregate Properties (QC Lot: 1143408)								
HK0922129-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1143404)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1143405)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1143406)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1143407)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1143408)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.5	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922108**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **23-OCT-2009**		
Order number	: **----**			*Date of issue*	: **02-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**84**	
Site	: **----**				- *Analysed* :	**84**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922108 supersedes any previous reports with this reference. The completion date of analysis is 28-OCT-2009. 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 HK0922108 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[23-OCT-2009]	HK0922108-001		**10**				
WSD7 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-002		**13**				
WSD9 MID-FLOOD	[23-OCT-2009]	HK0922108-003		**6**				
WSD9 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-004		**6**				
WSD10 MID-FLOOD	[23-OCT-2009]	HK0922108-005		**8**				
WSD10 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-006		**6**				
WSD15 MID-FLOOD	[23-OCT-2009]	HK0922108-007		**11**				
WSD15 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-008		**10**				
WSD17 MID-FLOOD	[23-OCT-2009]	HK0922108-009		**9**				
WSD17 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-010		**10**				
WSD19 MID-FLOOD	[23-OCT-2009]	HK0922108-011		**11**				
WSD19 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-012		**11**				
WSD20 MID-FLOOD	[23-OCT-2009]	HK0922108-013		**13**				
WSD20 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-014		**13**				
C8 MID-FLOOD	[23-OCT-2009]	HK0922108-015		**21**				
C8 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-016		**18**				
C9 MID-FLOOD	[23-OCT-2009]	HK0922108-017		**23**				
C9 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-018		**20**				
C1 MID-FLOOD	[23-OCT-2009]	HK0922108-019		**12**				
C1 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-020		**11**				
C2 MID-FLOOD	[23-OCT-2009]	HK0922108-021		**12**				
C2 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-022		**13**				
C3 MID-FLOOD	[23-OCT-2009]	HK0922108-023		**14**				
C3 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-024		**11**				
C4 MID-FLOOD	[23-OCT-2009]	HK0922108-025		**14**				
C4 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-026		**14**				
C5 MID-FLOOD	[23-OCT-2009]	HK0922108-027		**15**				
C5 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-028		**13**				
C6 MID-FLOOD	[23-OCT-2009]	HK0922108-029		**10**				
C6 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-030		**8**				
C7 MID-FLOOD	[23-OCT-2009]	HK0922108-031		**11**				
C7 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-032		**13**				
RC1 MID-FLOOD	[23-OCT-2009]	HK0922108-033		**10**				
RC1 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-034		**10**				
RC5 MID-FLOOD	[23-OCT-2009]	HK0922108-035		**12**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-036		**10**				
RC7 MID-FLOOD	[23-OCT-2009]	HK0922108-037		**11**				
RC7 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-038		**13**				
WSD21 MID-FLOOD	[23-OCT-2009]	HK0922108-039		**14**				
WSD21 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-040		**12**				
RW1 MID-FLOOD	[23-OCT-2009]	HK0922108-041		**14**				
RW1 MID-FLOOD DUP	[23-OCT-2009]	HK0922108-042		**13**				
WSD7 MID-EBB	[23-OCT-2009]	HK0922108-043		**8**				
WSD7 MID-EBB DUP	[23-OCT-2009]	HK0922108-044		**8**				
WSD9 MID-EBB	[23-OCT-2009]	HK0922108-045		**8**				
WSD9 MID-EBB DUP	[23-OCT-2009]	HK0922108-046		**8**				
WSD10 MID-EBB	[23-OCT-2009]	HK0922108-047		**8**				
WSD10 MID-EBB DUP	[23-OCT-2009]	HK0922108-048		**6**				
WSD15 MID-EBB	[23-OCT-2009]	HK0922108-049		**6**				
WSD15 MID-EBB DUP	[23-OCT-2009]	HK0922108-050		**5**				
WSD17 MID-EBB	[23-OCT-2009]	HK0922108-051		**9**				
WSD17 MID-EBB DUP	[23-OCT-2009]	HK0922108-052		**8**				
WSD19 MID-EBB	[23-OCT-2009]	HK0922108-053		**10**				
WSD19 MID-EBB DUP	[23-OCT-2009]	HK0922108-054		**9**				
WSD20 MID-EBB	[23-OCT-2009]	HK0922108-055		**5**				
WSD20 MID-EBB DUP	[23-OCT-2009]	HK0922108-056		**7**				
C8 MID-EBB	[23-OCT-2009]	HK0922108-057		**13**				
C8 MID-EBB DUP	[23-OCT-2009]	HK0922108-058		**12**				
C9 MID-EBB	[23-OCT-2009]	HK0922108-059		**10**				
C9 MID-EBB DUP	[23-OCT-2009]	HK0922108-060		**13**				
C1 MID-EBB	[23-OCT-2009]	HK0922108-061		**6**				
C1 MID-EBB DUP	[23-OCT-2009]	HK0922108-062		**5**				
C2 MID-EBB	[23-OCT-2009]	HK0922108-063		**14**				
C2 MID-EBB DUP	[23-OCT-2009]	HK0922108-064		**15**				
C3 MID-EBB	[23-OCT-2009]	HK0922108-065		**10**				
C3 MID-EBB DUP	[23-OCT-2009]	HK0922108-066		**10**				
C4 MID-EBB	[23-OCT-2009]	HK0922108-067		**9**				
C4 MID-EBB DUP	[23-OCT-2009]	HK0922108-068		**10**				
C5 MID-EBB	[23-OCT-2009]	HK0922108-069		**11**				
C5 MID-EBB DUP	[23-OCT-2009]	HK0922108-070		**13**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[23-OCT-2009]	HK0922108-071		**10**				
C6 MID-EBB DUP	[23-OCT-2009]	HK0922108-072		**8**				
C7 MID-EBB	[23-OCT-2009]	HK0922108-073		**8**				
C7 MID-EBB DUP	[23-OCT-2009]	HK0922108-074		**6**				
RC1 MID-EBB	[23-OCT-2009]	HK0922108-075		**7**				
RC1 MID-EBB DUP	[23-OCT-2009]	HK0922108-076		**6**				
RC5 MID-EBB	[23-OCT-2009]	HK0922108-077		**7**				
RC5 MID-EBB DUP	[23-OCT-2009]	HK0922108-078		**7**				
RC7 MID-EBB	[23-OCT-2009]	HK0922108-079		**13**				
RC7 MID-EBB DUP	[23-OCT-2009]	HK0922108-080		**12**				
WSD21 MID-EBB	[23-OCT-2009]	HK0922108-081		**11**				
WSD21 MID-EBB DUP	[23-OCT-2009]	HK0922108-082		**10**				
RW1 MID-EBB	[23-OCT-2009]	HK0922108-083		**10**				
RW1 MID-EBB DUP	[23-OCT-2009]	HK0922108-084		**12**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1145607)								
HK0922108-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	10.4
HK0922108-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	11	12	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1145608)								
HK0922108-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	14	10.9
HK0922108-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	11	12	9.5
EA/ED: Physical and Aggregate Properties (QC Lot: 1145609)								
HK0922108-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	14	13	9.3
HK0922108-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1145610)								
HK0922108-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	14.9
HK0922108-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1145611)								
HK0922108-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	11	10	9.9

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1145607)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1145608)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1145609)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	90.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1145610)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	109	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1145611)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.0	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922176**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **27-OCT-2009**		
Order number	: **----**			*Date of issue*	: **03-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**84**	
Site	: **----**				- *Analysed* :	**84**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922176 supersedes any previous reports with this reference. The completion date of analysis is 30-OCT-2009. 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 HK0922176 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[27-OCT-2009]	HK0922176-001		**12**				
WSD7 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-002		**13**				
WSD9 MID-FLOOD	[27-OCT-2009]	HK0922176-003		**10**				
WSD9 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-004		**11**				
WSD10 MID-FLOOD	[27-OCT-2009]	HK0922176-005		**9**				
WSD10 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-006		**8**				
WSD15 MID-FLOOD	[27-OCT-2009]	HK0922176-007		**10**				
WSD15 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-008		**10**				
WSD17 MID-FLOOD	[27-OCT-2009]	HK0922176-009		**11**				
WSD17 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-010		**10**				
WSD19 MID-FLOOD	[27-OCT-2009]	HK0922176-011		**12**				
WSD19 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-012		**10**				
WSD20 MID-FLOOD	[27-OCT-2009]	HK0922176-013		**8**				
WSD20 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-014		**8**				
C8 MID-FLOOD	[27-OCT-2009]	HK0922176-015		**15**				
C8 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-016		**13**				
C9 MID-FLOOD	[27-OCT-2009]	HK0922176-017		**23**				
C9 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-018		**23**				
C1 MID-FLOOD	[27-OCT-2009]	HK0922176-019		**13**				
C1 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-020		**12**				
C2 MID-FLOOD	[27-OCT-2009]	HK0922176-021		**8**				
C2 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-022		**10**				
C3 MID-FLOOD	[27-OCT-2009]	HK0922176-023		**9**				
C3 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-024		**7**				
C4 MID-FLOOD	[27-OCT-2009]	HK0922176-025		**11**				
C4 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-026		**9**				
C5 MID-FLOOD	[27-OCT-2009]	HK0922176-027		**11**				
C5 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-028		**12**				
C6 MID-FLOOD	[27-OCT-2009]	HK0922176-029		**10**				
C6 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-030		**11**				
C7 MID-FLOOD	[27-OCT-2009]	HK0922176-031		**10**				
C7 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-032		**8**				
RC1 MID-FLOOD	[27-OCT-2009]	HK0922176-033		**8**				
RC1 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-034		**7**				
RC5 MID-FLOOD	[27-OCT-2009]	HK0922176-035		**11**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-036		**12**				
RC7 MID-FLOOD	[27-OCT-2009]	HK0922176-037		**25**				
RC7 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-038		**22**				
WSD21 MID-FLOOD	[27-OCT-2009]	HK0922176-039		**10**				
WSD21 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-040		**10**				
RW1 MID-FLOOD	[27-OCT-2009]	HK0922176-041		**10**				
RW1 MID-FLOOD DUP	[27-OCT-2009]	HK0922176-042		**12**				
WSD7 MID-EBB	[27-OCT-2009]	HK0922176-043		**10**				
WSD7 MID-EBB DUP	[27-OCT-2009]	HK0922176-044		**9**				
WSD9 MID-EBB	[27-OCT-2009]	HK0922176-045		**6**				
WSD9 MID-EBB DUP	[27-OCT-2009]	HK0922176-046		**4**				
WSD10 MID-EBB	[27-OCT-2009]	HK0922176-047		**9**				
WSD10 MID-EBB DUP	[27-OCT-2009]	HK0922176-048		**7**				
WSD15 MID-EBB	[27-OCT-2009]	HK0922176-049		**7**				
WSD15 MID-EBB DUP	[27-OCT-2009]	HK0922176-050		**8**				
WSD17 MID-EBB	[27-OCT-2009]	HK0922176-051		**8**				
WSD17 MID-EBB DUP	[27-OCT-2009]	HK0922176-052		**7**				
WSD19 MID-EBB	[27-OCT-2009]	HK0922176-053		**7**				
WSD19 MID-EBB DUP	[27-OCT-2009]	HK0922176-054		**6**				
WSD20 MID-EBB	[27-OCT-2009]	HK0922176-055		**7**				
WSD20 MID-EBB DUP	[27-OCT-2009]	HK0922176-056		**8**				
C8 MID-EBB	[27-OCT-2009]	HK0922176-057		**9**				
C8 MID-EBB DUP	[27-OCT-2009]	HK0922176-058		**9**				
C9 MID-EBB	[27-OCT-2009]	HK0922176-059		**10**				
C9 MID-EBB DUP	[27-OCT-2009]	HK0922176-060		**10**				
C1 MID-EBB	[27-OCT-2009]	HK0922176-061		**4**				
C1 MID-EBB DUP	[27-OCT-2009]	HK0922176-062		**5**				
C2 MID-EBB	[27-OCT-2009]	HK0922176-063		**7**				
C2 MID-EBB DUP	[27-OCT-2009]	HK0922176-064		**5**				
C3 MID-EBB	[27-OCT-2009]	HK0922176-065		**6**				
C3 MID-EBB DUP	[27-OCT-2009]	HK0922176-066		**4**				
C4 MID-EBB	[27-OCT-2009]	HK0922176-067		**8**				
C4 MID-EBB DUP	[27-OCT-2009]	HK0922176-068		**8**				
C5 MID-EBB	[27-OCT-2009]	HK0922176-069		**8**				
C5 MID-EBB DUP	[27-OCT-2009]	HK0922176-070		**8**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[27-OCT-2009]	HK0922176-071		**7**				
C6 MID-EBB DUP	[27-OCT-2009]	HK0922176-072		**7**				
C7 MID-EBB	[27-OCT-2009]	HK0922176-073		**5**				
C7 MID-EBB DUP	[27-OCT-2009]	HK0922176-074		**5**				
RC1 MID-EBB	[27-OCT-2009]	HK0922176-075		**6**				
RC1 MID-EBB DUP	[27-OCT-2009]	HK0922176-076		**4**				
RC5 MID-EBB	[27-OCT-2009]	HK0922176-077		**5**				
RC5 MID-EBB DUP	[27-OCT-2009]	HK0922176-078		**6**				
RC7 MID-EBB	[27-OCT-2009]	HK0922176-079		**10**				
RC7 MID-EBB DUP	[27-OCT-2009]	HK0922176-080		**10**				
WSD21 MID-EBB	[27-OCT-2009]	HK0922176-081		**7**				
WSD21 MID-EBB DUP	[27-OCT-2009]	HK0922176-082		**9**				
RW1 MID-EBB	[27-OCT-2009]	HK0922176-083		**9**				
RW1 MID-EBB DUP	[27-OCT-2009]	HK0922176-084		**8**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1147149)								
HK0922176-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	13	0.0
HK0922176-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	10	13.1
EA/ED: Physical and Aggregate Properties (QC Lot: 1147150)								
HK0922176-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	13.0
HK0922176-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	9	11.5
EA/ED: Physical and Aggregate Properties (QC Lot: 1147151)								
HK0922176-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	12.8
HK0922176-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1147152)								
HK0922176-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	4	5	0.0
HK0922176-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	7	6	15.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1147153)								
HK0922176-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1147149)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1147150)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1147151)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1147152)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1147153)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.5	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922328**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **29-OCT-2009**		
Order number	: **----**			*Date of issue*	: **05-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **84**		
Site	: **----**				- *Analysed* : **84**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922328 supersedes any previous reports with this reference. The completion date of analysis is 02-NOV-2009. 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 HK0922328 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[29-OCT-2009]	HK0922328-001		**14**				
WSD7 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-002		**14**				
WSD9 MID-FLOOD	[29-OCT-2009]	HK0922328-003		**8**				
WSD9 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-004		**9**				
WSD10 MID-FLOOD	[29-OCT-2009]	HK0922328-005		**8**				
WSD10 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-006		**7**				
WSD15 MID-FLOOD	[29-OCT-2009]	HK0922328-007		**9**				
WSD15 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-008		**9**				
WSD17 MID-FLOOD	[29-OCT-2009]	HK0922328-009		**7**				
WSD17 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-010		**7**				
WSD19 MID-FLOOD	[29-OCT-2009]	HK0922328-011		**7**				
WSD19 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-012		**8**				
WSD20 MID-FLOOD	[29-OCT-2009]	HK0922328-013		**7**				
WSD20 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-014		**6**				
C8 MID-FLOOD	[29-OCT-2009]	HK0922328-015		**16**				
C8 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-016		**16**				
C9 MID-FLOOD	[29-OCT-2009]	HK0922328-017		**23**				
C9 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-018		**24**				
C1 MID-FLOOD	[29-OCT-2009]	HK0922328-019		**18**				
C1 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-020		**19**				
C2 MID-FLOOD	[29-OCT-2009]	HK0922328-021		**10**				
C2 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-022		**12**				
C3 MID-FLOOD	[29-OCT-2009]	HK0922328-023		**11**				
C3 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-024		**11**				
C4 MID-FLOOD	[29-OCT-2009]	HK0922328-025		**15**				
C4 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-026		**14**				
C5 MID-FLOOD	[29-OCT-2009]	HK0922328-027		**11**				
C5 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-028		**12**				
C6 MID-FLOOD	[29-OCT-2009]	HK0922328-029		**10**				
C6 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-030		**9**				
C7 MID-FLOOD	[29-OCT-2009]	HK0922328-031		**12**				
C7 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-032		**11**				
RC1 MID-FLOOD	[29-OCT-2009]	HK0922328-033		**14**				
RC1 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-034		**12**				
RC5 MID-FLOOD	[29-OCT-2009]	HK0922328-035		**12**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-036		**11**				
RC7 MID-FLOOD	[29-OCT-2009]	HK0922328-037		**9**				
RC7 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-038		**9**				
WSD21 MID-FLOOD	[29-OCT-2009]	HK0922328-039		**13**				
WSD21 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-040		**11**				
RW1 MID-FLOOD	[29-OCT-2009]	HK0922328-041		**12**				
RW1 MID-FLOOD DUP	[29-OCT-2009]	HK0922328-042		**12**				
WSD7 MID-EBB	[29-OCT-2009]	HK0922328-043		**12**				
WSD7 MID-EBB DUP	[29-OCT-2009]	HK0922328-044		**11**				
WSD9 MID-EBB	[29-OCT-2009]	HK0922328-045		**8**				
WSD9 MID-EBB DUP	[29-OCT-2009]	HK0922328-046		**8**				
WSD10 MID-EBB	[29-OCT-2009]	HK0922328-047		**8**				
WSD10 MID-EBB DUP	[29-OCT-2009]	HK0922328-048		**8**				
WSD15 MID-EBB	[29-OCT-2009]	HK0922328-049		**8**				
WSD15 MID-EBB DUP	[29-OCT-2009]	HK0922328-050		**9**				
WSD17 MID-EBB	[29-OCT-2009]	HK0922328-051		**8**				
WSD17 MID-EBB DUP	[29-OCT-2009]	HK0922328-052		**9**				
WSD19 MID-EBB	[29-OCT-2009]	HK0922328-053		**8**				
WSD19 MID-EBB DUP	[29-OCT-2009]	HK0922328-054		**10**				
WSD20 MID-EBB	[29-OCT-2009]	HK0922328-055		**9**				
WSD20 MID-EBB DUP	[29-OCT-2009]	HK0922328-056		**8**				
C8 MID-EBB	[29-OCT-2009]	HK0922328-057		**12**				
C8 MID-EBB DUP	[29-OCT-2009]	HK0922328-058		**12**				
C9 MID-EBB	[29-OCT-2009]	HK0922328-059		**13**				
C9 MID-EBB DUP	[29-OCT-2009]	HK0922328-060		**13**				
C1 MID-EBB	[29-OCT-2009]	HK0922328-061		**9**				
C1 MID-EBB DUP	[29-OCT-2009]	HK0922328-062		**10**				
C2 MID-EBB	[29-OCT-2009]	HK0922328-063		**10**				
C2 MID-EBB DUP	[29-OCT-2009]	HK0922328-064		**8**				
C3 MID-EBB	[29-OCT-2009]	HK0922328-065		**11**				
C3 MID-EBB DUP	[29-OCT-2009]	HK0922328-066		**10**				
C4 MID-EBB	[29-OCT-2009]	HK0922328-067		**7**				
C4 MID-EBB DUP	[29-OCT-2009]	HK0922328-068		**6**				
C5 MID-EBB	[29-OCT-2009]	HK0922328-069		**9**				
C5 MID-EBB DUP	[29-OCT-2009]	HK0922328-070		**11**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[29-OCT-2009]	HK0922328-071		**9**				
C6 MID-EBB DUP	[29-OCT-2009]	HK0922328-072		**8**				
C7 MID-EBB	[29-OCT-2009]	HK0922328-073		**8**				
C7 MID-EBB DUP	[29-OCT-2009]	HK0922328-074		**7**				
RC1 MID-EBB	[29-OCT-2009]	HK0922328-075		**9**				
RC1 MID-EBB DUP	[29-OCT-2009]	HK0922328-076		**10**				
RC5 MID-EBB	[29-OCT-2009]	HK0922328-077		**10**				
RC5 MID-EBB DUP	[29-OCT-2009]	HK0922328-078		**9**				
RC7 MID-EBB	[29-OCT-2009]	HK0922328-079		**10**				
RC7 MID-EBB DUP	[29-OCT-2009]	HK0922328-080		**8**				
WSD21 MID-EBB	[29-OCT-2009]	HK0922328-081		**8**				
WSD21 MID-EBB DUP	[29-OCT-2009]	HK0922328-082		**10**				
RW1 MID-EBB	[29-OCT-2009]	HK0922328-083		**9**				
RW1 MID-EBB DUP	[29-OCT-2009]	HK0922328-084		**9**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1149302)								
HK0922328-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	14	16	9.7
HK0922328-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	7	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1149303)								
HK0922328-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	0.0
HK0922328-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	12	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1149304)								
HK0922328-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	12	0.0
HK0922328-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1149305)								
HK0922328-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	11.2
HK0922328-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1149306)								
HK0922328-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1149302)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1149303)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1149304)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	112	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1149305)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1149306)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	114	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922329**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **31-OCT-2009**		
Order number	: **----**			*Date of issue*	: **06-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **84**		
Site	: **----**				- *Analysed* : **84**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922329 supersedes any previous reports with this reference. The completion date of analysis is 04-NOV-2009. 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 HK0922329 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[31-OCT-2009]	HK0922329-001		**13**				
WSD7 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-002		**11**				
WSD9 MID-FLOOD	[31-OCT-2009]	HK0922329-003		**8**				
WSD9 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-004		**6**				
WSD10 MID-FLOOD	[31-OCT-2009]	HK0922329-005		**7**				
WSD10 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-006		**8**				
WSD15 MID-FLOOD	[31-OCT-2009]	HK0922329-007		**8**				
WSD15 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-008		**8**				
WSD17 MID-FLOOD	[31-OCT-2009]	HK0922329-009		**12**				
WSD17 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-010		**10**				
WSD19 MID-FLOOD	[31-OCT-2009]	HK0922329-011		**11**				
WSD19 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-012		**13**				
WSD20 MID-FLOOD	[31-OCT-2009]	HK0922329-013		**8**				
WSD20 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-014		**8**				
C8 MID-FLOOD	[31-OCT-2009]	HK0922329-015		**14**				
C8 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-016		**13**				
C9 MID-FLOOD	[31-OCT-2009]	HK0922329-017		**19**				
C9 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-018		**18**				
C1 MID-FLOOD	[31-OCT-2009]	HK0922329-019		**11**				
C1 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-020		**10**				
C2 MID-FLOOD	[31-OCT-2009]	HK0922329-021		**10**				
C2 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-022		**10**				
C3 MID-FLOOD	[31-OCT-2009]	HK0922329-023		**15**				
C3 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-024		**15**				
C4 MID-FLOOD	[31-OCT-2009]	HK0922329-025		**10**				
C4 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-026		**9**				
C5 MID-FLOOD	[31-OCT-2009]	HK0922329-027		**9**				
C5 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-028		**10**				
C6 MID-FLOOD	[31-OCT-2009]	HK0922329-029		**8**				
C6 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-030		**6**				
C7 MID-FLOOD	[31-OCT-2009]	HK0922329-031		**6**				
C7 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-032		**8**				
RC1 MID-FLOOD	[31-OCT-2009]	HK0922329-033		**9**				
RC1 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-034		**10**				
RC5 MID-FLOOD	[31-OCT-2009]	HK0922329-035		**8**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-036		**7**				
RC7 MID-FLOOD	[31-OCT-2009]	HK0922329-037		**7**				
RC7 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-038		**7**				
WSD21 MID-FLOOD	[31-OCT-2009]	HK0922329-039		**11**				
WSD21 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-040		**9**				
RW1 MID-FLOOD	[31-OCT-2009]	HK0922329-041		**9**				
RW1 MID-FLOOD DUP	[31-OCT-2009]	HK0922329-042		**9**				
WSD7 MID-EBB	[31-OCT-2009]	HK0922329-043		**10**				
WSD7 MID-EBB DUP	[31-OCT-2009]	HK0922329-044		**8**				
WSD9 MID-EBB	[31-OCT-2009]	HK0922329-045		**8**				
WSD9 MID-EBB DUP	[31-OCT-2009]	HK0922329-046		**6**				
WSD10 MID-EBB	[31-OCT-2009]	HK0922329-047		**9**				
WSD10 MID-EBB DUP	[31-OCT-2009]	HK0922329-048		**11**				
WSD15 MID-EBB	[31-OCT-2009]	HK0922329-049		**7**				
WSD15 MID-EBB DUP	[31-OCT-2009]	HK0922329-050		**5**				
WSD17 MID-EBB	[31-OCT-2009]	HK0922329-051		**9**				
WSD17 MID-EBB DUP	[31-OCT-2009]	HK0922329-052		**10**				
WSD19 MID-EBB	[31-OCT-2009]	HK0922329-053		**9**				
WSD19 MID-EBB DUP	[31-OCT-2009]	HK0922329-054		**9**				
WSD20 MID-EBB	[31-OCT-2009]	HK0922329-055		**11**				
WSD20 MID-EBB DUP	[31-OCT-2009]	HK0922329-056		**11**				
C8 MID-EBB	[31-OCT-2009]	HK0922329-057		**12**				
C8 MID-EBB DUP	[31-OCT-2009]	HK0922329-058		**10**				
C9 MID-EBB	[31-OCT-2009]	HK0922329-059		**13**				
C9 MID-EBB DUP	[31-OCT-2009]	HK0922329-060		**14**				
C1 MID-EBB	[31-OCT-2009]	HK0922329-061		**10**				
C1 MID-EBB DUP	[31-OCT-2009]	HK0922329-062		**9**				
C2 MID-EBB	[31-OCT-2009]	HK0922329-063		**9**				
C2 MID-EBB DUP	[31-OCT-2009]	HK0922329-064		**8**				
C3 MID-EBB	[31-OCT-2009]	HK0922329-065		**11**				
C3 MID-EBB DUP	[31-OCT-2009]	HK0922329-066		**9**				
C4 MID-EBB	[31-OCT-2009]	HK0922329-067		**10**				
C4 MID-EBB DUP	[31-OCT-2009]	HK0922329-068		**10**				
C5 MID-EBB	[31-OCT-2009]	HK0922329-069		**12**				
C5 MID-EBB DUP	[31-OCT-2009]	HK0922329-070		**10**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[31-OCT-2009]	HK0922329-071		**12**				
C6 MID-EBB DUP	[31-OCT-2009]	HK0922329-072		**10**				
C7 MID-EBB	[31-OCT-2009]	HK0922329-073		**6**				
C7 MID-EBB DUP	[31-OCT-2009]	HK0922329-074		**5**				
RC1 MID-EBB	[31-OCT-2009]	HK0922329-075		**10**				
RC1 MID-EBB DUP	[31-OCT-2009]	HK0922329-076		**9**				
RC5 MID-EBB	[31-OCT-2009]	HK0922329-077		**8**				
RC5 MID-EBB DUP	[31-OCT-2009]	HK0922329-078		**9**				
RC7 MID-EBB	[31-OCT-2009]	HK0922329-079		**10**				
RC7 MID-EBB DUP	[31-OCT-2009]	HK0922329-080		**10**				
WSD21 MID-EBB	[31-OCT-2009]	HK0922329-081		**11**				
WSD21 MID-EBB DUP	[31-OCT-2009]	HK0922329-082		**10**				
RW1 MID-EBB	[31-OCT-2009]	HK0922329-083		**10**				
RW1 MID-EBB DUP	[31-OCT-2009]	HK0922329-084		**10**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1152735)								
HK0922329-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	13	12	0.0
HK0922329-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	11	12	9.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1152736)								
HK0922329-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	0.0
HK0922329-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	15.3
EA/ED: Physical and Aggregate Properties (QC Lot: 1152737)								
HK0922329-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	12.9
HK0922329-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	10.9
EA/ED: Physical and Aggregate Properties (QC Lot: 1152738)								
HK0922329-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	0.0
HK0922329-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	12	11	8.7
EA/ED: Physical and Aggregate Properties (QC Lot: 1152739)								
HK0922329-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	11	10	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1152735)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152736)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152737)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152738)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152739)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	111	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922873**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **02-NOV-2009**		
Order number	: **----**			*Date of issue*	: **09-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**84**	
Site	: **----**				- *Analysed* :	**84**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922873 supersedes any previous reports with this reference. The completion date of analysis is 04-NOV-2009. 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 HK0922873 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[02-NOV-2009]	HK0922873-001		**13**				
WSD7 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-002		**12**				
WSD9 MID-FLOOD	[02-NOV-2009]	HK0922873-003		**10**				
WSD9 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-004		**9**				
WSD10 MID-FLOOD	[02-NOV-2009]	HK0922873-005		**11**				
WSD10 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-006		**9**				
WSD15 MID-FLOOD	[02-NOV-2009]	HK0922873-007		**9**				
WSD15 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-008		**8**				
WSD17 MID-FLOOD	[02-NOV-2009]	HK0922873-009		**8**				
WSD17 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-010		**9**				
WSD19 MID-FLOOD	[02-NOV-2009]	HK0922873-011		**11**				
WSD19 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-012		**9**				
WSD20 MID-FLOOD	[02-NOV-2009]	HK0922873-013		**9**				
WSD20 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-014		**11**				
C8 MID-FLOOD	[02-NOV-2009]	HK0922873-015		**10**				
C8 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-016		**10**				
C9 MID-FLOOD	[02-NOV-2009]	HK0922873-017		**10**				
C9 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-018		**11**				
C1 MID-FLOOD	[02-NOV-2009]	HK0922873-019		**9**				
C1 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-020		**9**				
C2 MID-FLOOD	[02-NOV-2009]	HK0922873-021		**8**				
C2 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-022		**8**				
C3 MID-FLOOD	[02-NOV-2009]	HK0922873-023		**8**				
C3 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-024		**9**				
C4 MID-FLOOD	[02-NOV-2009]	HK0922873-025		**7**				
C4 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-026		**7**				
C5 MID-FLOOD	[02-NOV-2009]	HK0922873-027		**5**				
C5 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-028		**6**				
C6 MID-FLOOD	[02-NOV-2009]	HK0922873-029		**8**				
C6 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-030		**10**				
C7 MID-FLOOD	[02-NOV-2009]	HK0922873-031		**9**				
C7 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-032		**9**				
RC1 MID-FLOOD	[02-NOV-2009]	HK0922873-033		**8**				
RC1 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-034		**7**				
RC5 MID-FLOOD	[02-NOV-2009]	HK0922873-035		**9**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-036		**7**				
RC7 MID-FLOOD	[02-NOV-2009]	HK0922873-037		**7**				
RC7 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-038		**6**				
WSD21 MID-FLOOD	[02-NOV-2009]	HK0922873-039		**8**				
WSD21 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-040		**7**				
RW1 MID-FLOOD	[02-NOV-2009]	HK0922873-041		**9**				
RW1 MID-FLOOD DUP	[02-NOV-2009]	HK0922873-042		**9**				
WSD7 MID-EBB	[02-NOV-2009]	HK0922873-043		**12**				
WSD7 MID-EBB DUP	[02-NOV-2009]	HK0922873-044		**11**				
WSD9 MID-EBB	[02-NOV-2009]	HK0922873-045		**7**				
WSD9 MID-EBB DUP	[02-NOV-2009]	HK0922873-046		**9**				
WSD10 MID-EBB	[02-NOV-2009]	HK0922873-047		**6**				
WSD10 MID-EBB DUP	[02-NOV-2009]	HK0922873-048		**7**				
WSD15 MID-EBB	[02-NOV-2009]	HK0922873-049		**12**				
WSD15 MID-EBB DUP	[02-NOV-2009]	HK0922873-050		**10**				
WSD17 MID-EBB	[02-NOV-2009]	HK0922873-051		**12**				
WSD17 MID-EBB DUP	[02-NOV-2009]	HK0922873-052		**12**				
WSD19 MID-EBB	[02-NOV-2009]	HK0922873-053		**9**				
WSD19 MID-EBB DUP	[02-NOV-2009]	HK0922873-054		**8**				
WSD20 MID-EBB	[02-NOV-2009]	HK0922873-055		**8**				
WSD20 MID-EBB DUP	[02-NOV-2009]	HK0922873-056		**7**				
C8 MID-EBB	[02-NOV-2009]	HK0922873-057		**12**				
C8 MID-EBB DUP	[02-NOV-2009]	HK0922873-058		**14**				
C9 MID-EBB	[02-NOV-2009]	HK0922873-059		**13**				
C9 MID-EBB DUP	[02-NOV-2009]	HK0922873-060		**11**				
C1 MID-EBB	[02-NOV-2009]	HK0922873-061		**11**				
C1 MID-EBB DUP	[02-NOV-2009]	HK0922873-062		**9**				
C2 MID-EBB	[02-NOV-2009]	HK0922873-063		**10**				
C2 MID-EBB DUP	[02-NOV-2009]	HK0922873-064		**10**				
C3 MID-EBB	[02-NOV-2009]	HK0922873-065		**12**				
C3 MID-EBB DUP	[02-NOV-2009]	HK0922873-066		**14**				
C4 MID-EBB	[02-NOV-2009]	HK0922873-067		**13**				
C4 MID-EBB DUP	[02-NOV-2009]	HK0922873-068		**12**				
C5 MID-EBB	[02-NOV-2009]	HK0922873-069		**12**				
C5 MID-EBB DUP	[02-NOV-2009]	HK0922873-070		**13**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[02-NOV-2009]	HK0922873-071		**10**				
C6 MID-EBB DUP	[02-NOV-2009]	HK0922873-072		**8**				
C7 MID-EBB	[02-NOV-2009]	HK0922873-073		**9**				
C7 MID-EBB DUP	[02-NOV-2009]	HK0922873-074		**8**				
RC1 MID-EBB	[02-NOV-2009]	HK0922873-075		**10**				
RC1 MID-EBB DUP	[02-NOV-2009]	HK0922873-076		**12**				
RC5 MID-EBB	[02-NOV-2009]	HK0922873-077		**9**				
RC5 MID-EBB DUP	[02-NOV-2009]	HK0922873-078		**9**				
RC7 MID-EBB	[02-NOV-2009]	HK0922873-079		**8**				
RC7 MID-EBB DUP	[02-NOV-2009]	HK0922873-080		**7**				
WSD21 MID-EBB	[02-NOV-2009]	HK0922873-081		**10**				
WSD21 MID-EBB DUP	[02-NOV-2009]	HK0922873-082		**11**				
RW1 MID-EBB	[02-NOV-2009]	HK0922873-083		**8**				
RW1 MID-EBB DUP	[02-NOV-2009]	HK0922873-084		**9**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1152740)								
HK0922873-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	13	12	0.0
HK0922873-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	11	11	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1152741)								
HK0922873-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	0.0
HK0922873-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	11.4
EA/ED: Physical and Aggregate Properties (QC Lot: 1152742)								
HK0922873-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	9	0.0
HK0922873-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	12	14	8.7
EA/ED: Physical and Aggregate Properties (QC Lot: 1152743)								
HK0922873-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	11	11	0.0
HK0922873-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	12	11.6
EA/ED: Physical and Aggregate Properties (QC Lot: 1152744)								
HK0922873-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	10	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1152740)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152741)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	112	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152742)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152743)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1152744)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	111	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: CHUNG SHUN BORING ENG CO LTD	Laboratory	: ALS Technichem HK Pty Ltd	Page	: 1 of 5
Contact	: ----	Contact	: Chan Kwok Fai, Godfrey	Work Order	: HK0922875
Address	: ----	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: ----	E-mail	: Godfrey.Chan@alsenviro.com		
Telephone	: ----	Telephone	: +852 2610 1044		
Facsimile	: ----	Facsimile	: +852 2610 2021		
Project	: BASELINE MONITORING - WQM	Quote number	: HK/1192a/2009**	Date received	: 04-NOV-2009
Order number	: ----			Date of issue	: 11-NOV-2009
C-O-C number	: ----			No. of samples	- Received : 84
Site	: ----				- Analysed : 84

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922875 supersedes any previous reports with this reference. The completion date of analysis is 09-NOV-2009. 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 HK0922875 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[04-NOV-2009]	HK0922875-001		**12**				
WSD7 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-002		**14**				
WSD9 MID-FLOOD	[04-NOV-2009]	HK0922875-003		**9**				
WSD9 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-004		**8**				
WSD10 MID-FLOOD	[04-NOV-2009]	HK0922875-005		**8**				
WSD10 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-006		**10**				
WSD15 MID-FLOOD	[04-NOV-2009]	HK0922875-007		**10**				
WSD15 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-008		**12**				
WSD17 MID-FLOOD	[04-NOV-2009]	HK0922875-009		**9**				
WSD17 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-010		**8**				
WSD19 MID-FLOOD	[04-NOV-2009]	HK0922875-011		**8**				
WSD19 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-012		**9**				
WSD20 MID-FLOOD	[04-NOV-2009]	HK0922875-013		**10**				
WSD20 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-014		**13**				
C8 MID-FLOOD	[04-NOV-2009]	HK0922875-015		**13**				
C8 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-016		**12**				
C9 MID-FLOOD	[04-NOV-2009]	HK0922875-017		**14**				
C9 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-018		**14**				
C1 MID-FLOOD	[04-NOV-2009]	HK0922875-019		**10**				
C1 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-020		**13**				
C2 MID-FLOOD	[04-NOV-2009]	HK0922875-021		**9**				
C2 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-022		**10**				
C3 MID-FLOOD	[04-NOV-2009]	HK0922875-023		**10**				
C3 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-024		**10**				
C4 MID-FLOOD	[04-NOV-2009]	HK0922875-025		**9**				
C4 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-026		**10**				
C5 MID-FLOOD	[04-NOV-2009]	HK0922875-027		**10**				
C5 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-028		**11**				
C6 MID-FLOOD	[04-NOV-2009]	HK0922875-029		**4**				
C6 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-030		**6**				
C7 MID-FLOOD	[04-NOV-2009]	HK0922875-031		**8**				
C7 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-032		**8**				
RC1 MID-FLOOD	[04-NOV-2009]	HK0922875-033		**8**				
RC1 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-034		**8**				
RC5 MID-FLOOD	[04-NOV-2009]	HK0922875-035		**10**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-036		**10**				
RC7 MID-FLOOD	[04-NOV-2009]	HK0922875-037		**8**				
RC7 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-038		**7**				
WSD21 MID-FLOOD	[04-NOV-2009]	HK0922875-039		**13**				
WSD21 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-040		**12**				
RW1 MID-FLOOD	[04-NOV-2009]	HK0922875-041		**9**				
RW1 MID-FLOOD DUP	[04-NOV-2009]	HK0922875-042		**11**				
WSD7 MID-EBB	[04-NOV-2009]	HK0922875-043		**7**				
WSD7 MID-EBB DUP	[04-NOV-2009]	HK0922875-044		**9**				
WSD9 MID-EBB	[04-NOV-2009]	HK0922875-045		**7**				
WSD9 MID-EBB DUP	[04-NOV-2009]	HK0922875-046		**6**				
WSD10 MID-EBB	[04-NOV-2009]	HK0922875-047		**6**				
WSD10 MID-EBB DUP	[04-NOV-2009]	HK0922875-048		**8**				
WSD15 MID-EBB	[04-NOV-2009]	HK0922875-049		**11**				
WSD15 MID-EBB DUP	[04-NOV-2009]	HK0922875-050		**14**				
WSD17 MID-EBB	[04-NOV-2009]	HK0922875-051		**5**				
WSD17 MID-EBB DUP	[04-NOV-2009]	HK0922875-052		**7**				
WSD19 MID-EBB	[04-NOV-2009]	HK0922875-053		**9**				
WSD19 MID-EBB DUP	[04-NOV-2009]	HK0922875-054		**8**				
WSD20 MID-EBB	[04-NOV-2009]	HK0922875-055		**7**				
WSD20 MID-EBB DUP	[04-NOV-2009]	HK0922875-056		**9**				
C8 MID-EBB	[04-NOV-2009]	HK0922875-057		**12**				
C8 MID-EBB DUP	[04-NOV-2009]	HK0922875-058		**13**				
C9 MID-EBB	[04-NOV-2009]	HK0922875-059		**14**				
C9 MID-EBB DUP	[04-NOV-2009]	HK0922875-060		**13**				
C1 MID-EBB	[04-NOV-2009]	HK0922875-061		**6**				
C1 MID-EBB DUP	[04-NOV-2009]	HK0922875-062		**8**				
C2 MID-EBB	[04-NOV-2009]	HK0922875-063		**8**				
C2 MID-EBB DUP	[04-NOV-2009]	HK0922875-064		**9**				
C3 MID-EBB	[04-NOV-2009]	HK0922875-065		**8**				
C3 MID-EBB DUP	[04-NOV-2009]	HK0922875-066		**9**				
C4 MID-EBB	[04-NOV-2009]	HK0922875-067		**13**				
C4 MID-EBB DUP	[04-NOV-2009]	HK0922875-068		**14**				
C5 MID-EBB	[04-NOV-2009]	HK0922875-069		**11**				
C5 MID-EBB DUP	[04-NOV-2009]	HK0922875-070		**14**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[04-NOV-2009]	HK0922875-071		**6**				
C6 MID-EBB DUP	[04-NOV-2009]	HK0922875-072		**6**				
C7 MID-EBB	[04-NOV-2009]	HK0922875-073		**10**				
C7 MID-EBB DUP	[04-NOV-2009]	HK0922875-074		**8**				
RC1 MID-EBB	[04-NOV-2009]	HK0922875-075		**6**				
RC1 MID-EBB DUP	[04-NOV-2009]	HK0922875-076		**7**				
RC5 MID-EBB	[04-NOV-2009]	HK0922875-077		**10**				
RC5 MID-EBB DUP	[04-NOV-2009]	HK0922875-078		**10**				
RC7 MID-EBB	[04-NOV-2009]	HK0922875-079		**9**				
RC7 MID-EBB DUP	[04-NOV-2009]	HK0922875-080		**10**				
WSD21 MID-EBB	[04-NOV-2009]	HK0922875-081		**10**				
WSD21 MID-EBB DUP	[04-NOV-2009]	HK0922875-082		**11**				
RW1 MID-EBB	[04-NOV-2009]	HK0922875-083		**10**				
RW1 MID-EBB DUP	[04-NOV-2009]	HK0922875-084		**9**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1155944)								
HK0922875-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	12	0.0
HK0922875-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1155945)								
HK0922875-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	11	11.5
HK0922875-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1155946)								
HK0922875-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	0.0
HK0922875-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	5	6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1155947)								
HK0922875-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
HK0922875-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	14.8
EA/ED: Physical and Aggregate Properties (QC Lot: 1155948)								
HK0922875-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	10	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1155944)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1155945)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1155946)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1155947)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1155948)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	88.5	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922876**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **06-NOV-2009**		
Order number	: **----**			*Date of issue*	: **13-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**84**	
Site	: **----**				- *Analysed* :	**84**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922876 supersedes any previous reports with this reference. The completion date of analysis is 10-NOV-2009. 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 HK0922876 : **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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[06-NOV-2009]	HK0922876-001		**18**				
WSD7 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-002		**19**				
WSD9 MID-FLOOD	[06-NOV-2009]	HK0922876-003		**8**				
WSD9 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-004		**8**				
WSD10 MID-FLOOD	[06-NOV-2009]	HK0922876-005		**7**				
WSD10 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-006		**9**				
WSD15 MID-FLOOD	[06-NOV-2009]	HK0922876-007		**8**				
WSD15 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-008		**10**				
WSD17 MID-FLOOD	[06-NOV-2009]	HK0922876-009		**9**				
WSD17 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-010		**11**				
WSD19 MID-FLOOD	[06-NOV-2009]	HK0922876-011		**8**				
WSD19 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-012		**10**				
WSD20 MID-FLOOD	[06-NOV-2009]	HK0922876-013		**11**				
WSD20 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-014		**12**				
C8 MID-FLOOD	[06-NOV-2009]	HK0922876-015		**19**				
C8 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-016		**16**				
C9 MID-FLOOD	[06-NOV-2009]	HK0922876-017		**12**				
C9 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-018		**12**				
C1 MID-FLOOD	[06-NOV-2009]	HK0922876-019		**13**				
C1 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-020		**11**				
C2 MID-FLOOD	[06-NOV-2009]	HK0922876-021		**9**				
C2 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-022		**8**				
C3 MID-FLOOD	[06-NOV-2009]	HK0922876-023		**14**				
C3 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-024		**12**				
C4 MID-FLOOD	[06-NOV-2009]	HK0922876-025		**14**				
C4 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-026		**13**				
C5 MID-FLOOD	[06-NOV-2009]	HK0922876-027		**16**				
C5 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-028		**14**				
C6 MID-FLOOD	[06-NOV-2009]	HK0922876-029		**10**				
C6 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-030		**9**				
C7 MID-FLOOD	[06-NOV-2009]	HK0922876-031		**9**				
C7 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-032		**9**				
RC1 MID-FLOOD	[06-NOV-2009]	HK0922876-033		**16**				
RC1 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-034		**15**				
RC5 MID-FLOOD	[06-NOV-2009]	HK0922876-035		**12**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-036		**11**				
RC7 MID-FLOOD	[06-NOV-2009]	HK0922876-037		**9**				
RC7 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-038		**9**				
WSD21 MID-FLOOD	[06-NOV-2009]	HK0922876-039		**10**				
WSD21 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-040		**9**				
RW1 MID-FLOOD	[06-NOV-2009]	HK0922876-041		**12**				
RW1 MID-FLOOD DUP	[06-NOV-2009]	HK0922876-042		**12**				
WSD7 MID-EBB	[06-NOV-2009]	HK0922876-043		**11**				
WSD7 MID-EBB DUP	[06-NOV-2009]	HK0922876-044		**9**				
WSD9 MID-EBB	[06-NOV-2009]	HK0922876-045		**6**				
WSD9 MID-EBB DUP	[06-NOV-2009]	HK0922876-046		**7**				
WSD10 MID-EBB	[06-NOV-2009]	HK0922876-047		**7**				
WSD10 MID-EBB DUP	[06-NOV-2009]	HK0922876-048		**6**				
WSD15 MID-EBB	[06-NOV-2009]	HK0922876-049		**11**				
WSD15 MID-EBB DUP	[06-NOV-2009]	HK0922876-050		**9**				
WSD17 MID-EBB	[06-NOV-2009]	HK0922876-051		**10**				
WSD17 MID-EBB DUP	[06-NOV-2009]	HK0922876-052		**8**				
WSD19 MID-EBB	[06-NOV-2009]	HK0922876-053		**10**				
WSD19 MID-EBB DUP	[06-NOV-2009]	HK0922876-054		**8**				
WSD20 MID-EBB	[06-NOV-2009]	HK0922876-055		**8**				
WSD20 MID-EBB DUP	[06-NOV-2009]	HK0922876-056		**10**				
C8 MID-EBB	[06-NOV-2009]	HK0922876-057		**9**				
C8 MID-EBB DUP	[06-NOV-2009]	HK0922876-058		**11**				
C9 MID-EBB	[06-NOV-2009]	HK0922876-059		**12**				
C9 MID-EBB DUP	[06-NOV-2009]	HK0922876-060		**14**				
C1 MID-EBB	[06-NOV-2009]	HK0922876-061		**6**				
C1 MID-EBB DUP	[06-NOV-2009]	HK0922876-062		**6**				
C2 MID-EBB	[06-NOV-2009]	HK0922876-063		**7**				
C2 MID-EBB DUP	[06-NOV-2009]	HK0922876-064		**9**				
C3 MID-EBB	[06-NOV-2009]	HK0922876-065		**7**				
C3 MID-EBB DUP	[06-NOV-2009]	HK0922876-066		**6**				
C4 MID-EBB	[06-NOV-2009]	HK0922876-067		**9**				
C4 MID-EBB DUP	[06-NOV-2009]	HK0922876-068		**10**				
C5 MID-EBB	[06-NOV-2009]	HK0922876-069		**11**				
C5 MID-EBB DUP	[06-NOV-2009]	HK0922876-070		**12**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[06-NOV-2009]	HK0922876-071		8				
C6 MID-EBB DUP	[06-NOV-2009]	HK0922876-072		8				
C7 MID-EBB	[06-NOV-2009]	HK0922876-073		9				
C7 MID-EBB DUP	[06-NOV-2009]	HK0922876-074		7				
RC1 MID-EBB	[06-NOV-2009]	HK0922876-075		8				
RC1 MID-EBB DUP	[06-NOV-2009]	HK0922876-076		9				
RC5 MID-EBB	[06-NOV-2009]	HK0922876-077		8				
RC5 MID-EBB DUP	[06-NOV-2009]	HK0922876-078		9				
RC7 MID-EBB	[06-NOV-2009]	HK0922876-079		9				
RC7 MID-EBB DUP	[06-NOV-2009]	HK0922876-080		9				
WSD21 MID-EBB	[06-NOV-2009]	HK0922876-081		9				
WSD21 MID-EBB DUP	[06-NOV-2009]	HK0922876-082		8				
RW1 MID-EBB	[06-NOV-2009]	HK0922876-083		11				
RW1 MID-EBB DUP	[06-NOV-2009]	HK0922876-084		9				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1156264)								
HK0922876-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	18	18	0.0
HK0922876-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1156265)								
HK0922876-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	13.3
HK0922876-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	12.6
EA/ED: Physical and Aggregate Properties (QC Lot: 1156266)								
HK0922876-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	14	12.6
HK0922876-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	8	13.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1156267)								
HK0922876-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	0.0
HK0922876-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	10	14.4
EA/ED: Physical and Aggregate Properties (QC Lot: 1156268)								
HK0922876-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1156264)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	90.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1156265)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	111	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1156266)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1156267)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	105	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1156268)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.0	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: CHUNG SHUN BORING ENG CO LTD	Laboratory	: ALS Technichem HK Pty Ltd	Page	: 1 of 5
Contact	: ----	Contact	: Chan Kwok Fai, Godfrey	Work Order	: HK0922877
Address	: ----	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: ----	E-mail	: Godfrey.Chan@alsenviro.com		
Telephone	: ----	Telephone	: +852 2610 1044		
Facsimile	: ----	Facsimile	: +852 2610 2021		
Project	: BASELINE MONITORING - WQM	Quote number	: HK/1192a/2009**	Date received	: 10-NOV-2009
Order number	: ----			Date of issue	: 17-NOV-2009
C-O-C number	: ----			No. of samples	- Received : 84
Site	: ----				- Analysed : 84

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922877 supersedes any previous reports with this reference. The completion date of analysis is 13-NOV-2009. 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 HK0922877 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[10-NOV-2009]	HK0922877-001		**12**				
WSD7 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-002		**14**				
WSD9 MID-FLOOD	[10-NOV-2009]	HK0922877-003		**10**				
WSD9 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-004		**12**				
WSD10 MID-FLOOD	[10-NOV-2009]	HK0922877-005		**13**				
WSD10 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-006		**12**				
WSD15 MID-FLOOD	[10-NOV-2009]	HK0922877-007		**6**				
WSD15 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-008		**7**				
WSD17 MID-FLOOD	[10-NOV-2009]	HK0922877-009		**13**				
WSD17 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-010		**12**				
WSD19 MID-FLOOD	[10-NOV-2009]	HK0922877-011		**14**				
WSD19 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-012		**15**				
WSD20 MID-FLOOD	[10-NOV-2009]	HK0922877-013		**7**				
WSD20 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-014		**9**				
C8 MID-FLOOD	[10-NOV-2009]	HK0922877-015		**14**				
C8 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-016		**11**				
C9 MID-FLOOD	[10-NOV-2009]	HK0922877-017		**13**				
C9 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-018		**13**				
C1 MID-FLOOD	[10-NOV-2009]	HK0922877-019		**9**				
C1 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-020		**8**				
C2 MID-FLOOD	[10-NOV-2009]	HK0922877-021		**11**				
C2 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-022		**10**				
C3 MID-FLOOD	[10-NOV-2009]	HK0922877-023		**12**				
C3 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-024		**11**				
C4 MID-FLOOD	[10-NOV-2009]	HK0922877-025		**10**				
C4 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-026		**11**				
C5 MID-FLOOD	[10-NOV-2009]	HK0922877-027		**10**				
C5 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-028		**10**				
C6 MID-FLOOD	[10-NOV-2009]	HK0922877-029		**7**				
C6 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-030		**7**				
C7 MID-FLOOD	[10-NOV-2009]	HK0922877-031		**8**				
C7 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-032		**6**				
RC1 MID-FLOOD	[10-NOV-2009]	HK0922877-033		**9**				
RC1 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-034		**10**				
RC5 MID-FLOOD	[10-NOV-2009]	HK0922877-035		**8**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-036		**8**				
RC7 MID-FLOOD	[10-NOV-2009]	HK0922877-037		**6**				
RC7 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-038		**7**				
WSD21 MID-FLOOD	[10-NOV-2009]	HK0922877-039		**10**				
WSD21 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-040		**11**				
RW1 MID-FLOOD	[10-NOV-2009]	HK0922877-041		**10**				
RW1 MID-FLOOD DUP	[10-NOV-2009]	HK0922877-042		**12**				
WSD7 MID-EBB	[10-NOV-2009]	HK0922877-043		**8**				
WSD7 MID-EBB DUP	[10-NOV-2009]	HK0922877-044		**10**				
WSD9 MID-EBB	[10-NOV-2009]	HK0922877-045		**9**				
WSD9 MID-EBB DUP	[10-NOV-2009]	HK0922877-046		**9**				
WSD10 MID-EBB	[10-NOV-2009]	HK0922877-047		**8**				
WSD10 MID-EBB DUP	[10-NOV-2009]	HK0922877-048		**6**				
WSD15 MID-EBB	[10-NOV-2009]	HK0922877-049		**6**				
WSD15 MID-EBB DUP	[10-NOV-2009]	HK0922877-050		**8**				
WSD17 MID-EBB	[10-NOV-2009]	HK0922877-051		**9**				
WSD17 MID-EBB DUP	[10-NOV-2009]	HK0922877-052		**8**				
WSD19 MID-EBB	[10-NOV-2009]	HK0922877-053		**5**				
WSD19 MID-EBB DUP	[10-NOV-2009]	HK0922877-054		**6**				
WSD20 MID-EBB	[10-NOV-2009]	HK0922877-055		**7**				
WSD20 MID-EBB DUP	[10-NOV-2009]	HK0922877-056		**7**				
C8 MID-EBB	[10-NOV-2009]	HK0922877-057		**10**				
C8 MID-EBB DUP	[10-NOV-2009]	HK0922877-058		**9**				
C9 MID-EBB	[10-NOV-2009]	HK0922877-059		**8**				
C9 MID-EBB DUP	[10-NOV-2009]	HK0922877-060		**8**				
C1 MID-EBB	[10-NOV-2009]	HK0922877-061		**8**				
C1 MID-EBB DUP	[10-NOV-2009]	HK0922877-062		**8**				
C2 MID-EBB	[10-NOV-2009]	HK0922877-063		**5**				
C2 MID-EBB DUP	[10-NOV-2009]	HK0922877-064		**5**				
C3 MID-EBB	[10-NOV-2009]	HK0922877-065		**6**				
C3 MID-EBB DUP	[10-NOV-2009]	HK0922877-066		**6**				
C4 MID-EBB	[10-NOV-2009]	HK0922877-067		**6**				
C4 MID-EBB DUP	[10-NOV-2009]	HK0922877-068		**7**				
C5 MID-EBB	[10-NOV-2009]	HK0922877-069		**8**				
C5 MID-EBB DUP	[10-NOV-2009]	HK0922877-070		**8**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[10-NOV-2009]	HK0922877-071		**9**				
C6 MID-EBB DUP	[10-NOV-2009]	HK0922877-072		**7**				
C7 MID-EBB	[10-NOV-2009]	HK0922877-073		**7**				
C7 MID-EBB DUP	[10-NOV-2009]	HK0922877-074		**7**				
RC1 MID-EBB	[10-NOV-2009]	HK0922877-075		**7**				
RC1 MID-EBB DUP	[10-NOV-2009]	HK0922877-076		**7**				
RC5 MID-EBB	[10-NOV-2009]	HK0922877-077		**8**				
RC5 MID-EBB DUP	[10-NOV-2009]	HK0922877-078		**7**				
RC7 MID-EBB	[10-NOV-2009]	HK0922877-079		**8**				
RC7 MID-EBB DUP	[10-NOV-2009]	HK0922877-080		**8**				
WSD21 MID-EBB	[10-NOV-2009]	HK0922877-081		**8**				
WSD21 MID-EBB DUP	[10-NOV-2009]	HK0922877-082		**8**				
RW1 MID-EBB	[10-NOV-2009]	HK0922877-083		**9**				
RW1 MID-EBB DUP	[10-NOV-2009]	HK0922877-084		**7**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1159693)								
HK0922877-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	11	0.0
HK0922877-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	14	14	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1159694)								
HK0922877-022	C2 MID-FLOOD DUP	EA025: Suspended Solids (SS)	----	2	mg/L	10	10	10.0
HK0922877-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1159695)								
HK0922877-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	8	12.7
HK0922877-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	12.6
EA/ED: Physical and Aggregate Properties (QC Lot: 1159696)								
HK0922877-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	12.4
HK0922877-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	13.1
EA/ED: Physical and Aggregate Properties (QC Lot: 1159697)								
HK0922877-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1159693)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	87.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1159694)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	110	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1159695)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1159696)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	110	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1159697)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.0	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: CHUNG SHUN BORING ENG CO LTD	Laboratory	: ALS Technichem HK Pty Ltd	Page	: 1 of 5
Contact	: ----	Contact	: Chan Kwok Fai, Godfrey	Work Order	: HK0922878
Address	: ----	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: ----	E-mail	: Godfrey.Chan@alsenviro.com		
Telephone	: ----	Telephone	: +852 2610 1044		
Facsimile	: ----	Facsimile	: +852 2610 2021		
Project	: BASELINE MONITORING - WQM	Quote number	: HK/1192a/2009**	Date received	: 12-NOV-2009
Order number	: ----			Date of issue	: 19-NOV-2009
C-O-C number	: ----			No. of samples	- Received : 84
Site	: ----				- Analysed : 84

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922878 supersedes any previous reports with this reference. The completion date of analysis is 13-NOV-2009. 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 HK0922878 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[12-NOV-2009]	HK0922878-001		**11**				
WSD7 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-002		**11**				
WSD9 MID-FLOOD	[12-NOV-2009]	HK0922878-003		**7**				
WSD9 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-004		**9**				
WSD10 MID-FLOOD	[12-NOV-2009]	HK0922878-005		**5**				
WSD10 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-006		**4**				
WSD15 MID-FLOOD	[12-NOV-2009]	HK0922878-007		**8**				
WSD15 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-008		**7**				
WSD17 MID-FLOOD	[12-NOV-2009]	HK0922878-009		**14**				
WSD17 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-010		**13**				
WSD19 MID-FLOOD	[12-NOV-2009]	HK0922878-011		**12**				
WSD19 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-012		**11**				
WSD20 MID-FLOOD	[12-NOV-2009]	HK0922878-013		**6**				
WSD20 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-014		**7**				
C8 MID-FLOOD	[12-NOV-2009]	HK0922878-015		**24**				
C8 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-016		**20**				
C9 MID-FLOOD	[12-NOV-2009]	HK0922878-017		**18**				
C9 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-018		**19**				
C1 MID-FLOOD	[12-NOV-2009]	HK0922878-019		**10**				
C1 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-020		**10**				
C2 MID-FLOOD	[12-NOV-2009]	HK0922878-021		**10**				
C2 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-022		**10**				
C3 MID-FLOOD	[12-NOV-2009]	HK0922878-023		**10**				
C3 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-024		**10**				
C4 MID-FLOOD	[12-NOV-2009]	HK0922878-025		**11**				
C4 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-026		**11**				
C5 MID-FLOOD	[12-NOV-2009]	HK0922878-027		**10**				
C5 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-028		**9**				
C6 MID-FLOOD	[12-NOV-2009]	HK0922878-029		**10**				
C6 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-030		**12**				
C7 MID-FLOOD	[12-NOV-2009]	HK0922878-031		**8**				
C7 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-032		**10**				
RC1 MID-FLOOD	[12-NOV-2009]	HK0922878-033		**6**				
RC1 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-034		**8**				
RC5 MID-FLOOD	[12-NOV-2009]	HK0922878-035		**10**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-036		**9**				
RC7 MID-FLOOD	[12-NOV-2009]	HK0922878-037		**6**				
RC7 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-038		**7**				
WSD21 MID-FLOOD	[12-NOV-2009]	HK0922878-039		**10**				
WSD21 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-040		**9**				
RW1 MID-FLOOD	[12-NOV-2009]	HK0922878-041		**9**				
RW1 MID-FLOOD DUP	[12-NOV-2009]	HK0922878-042		**9**				
WSD7 MID-EBB	[12-NOV-2009]	HK0922878-043		**8**				
WSD7 MID-EBB DUP	[12-NOV-2009]	HK0922878-044		**7**				
WSD9 MID-EBB	[12-NOV-2009]	HK0922878-045		**6**				
WSD9 MID-EBB DUP	[12-NOV-2009]	HK0922878-046		**5**				
WSD10 MID-EBB	[12-NOV-2009]	HK0922878-047		**5**				
WSD10 MID-EBB DUP	[12-NOV-2009]	HK0922878-048		**6**				
WSD15 MID-EBB	[12-NOV-2009]	HK0922878-049		**10**				
WSD15 MID-EBB DUP	[12-NOV-2009]	HK0922878-050		**8**				
WSD17 MID-EBB	[12-NOV-2009]	HK0922878-051		**9**				
WSD17 MID-EBB DUP	[12-NOV-2009]	HK0922878-052		**9**				
WSD19 MID-EBB	[12-NOV-2009]	HK0922878-053		**9**				
WSD19 MID-EBB DUP	[12-NOV-2009]	HK0922878-054		**10**				
WSD20 MID-EBB	[12-NOV-2009]	HK0922878-055		**5**				
WSD20 MID-EBB DUP	[12-NOV-2009]	HK0922878-056		**6**				
C8 MID-EBB	[12-NOV-2009]	HK0922878-057		**8**				
C8 MID-EBB DUP	[12-NOV-2009]	HK0922878-058		**9**				
C9 MID-EBB	[12-NOV-2009]	HK0922878-059		**12**				
C9 MID-EBB DUP	[12-NOV-2009]	HK0922878-060		**13**				
C1 MID-EBB	[12-NOV-2009]	HK0922878-061		**6**				
C1 MID-EBB DUP	[12-NOV-2009]	HK0922878-062		**8**				
C2 MID-EBB	[12-NOV-2009]	HK0922878-063		**7**				
C2 MID-EBB DUP	[12-NOV-2009]	HK0922878-064		**7**				
C3 MID-EBB	[12-NOV-2009]	HK0922878-065		**7**				
C3 MID-EBB DUP	[12-NOV-2009]	HK0922878-066		**8**				
C4 MID-EBB	[12-NOV-2009]	HK0922878-067		**8**				
C4 MID-EBB DUP	[12-NOV-2009]	HK0922878-068		**10**				
C5 MID-EBB	[12-NOV-2009]	HK0922878-069		**16**				
C5 MID-EBB DUP	[12-NOV-2009]	HK0922878-070		**14**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[12-NOV-2009]	HK0922878-071		**7**				
C6 MID-EBB DUP	[12-NOV-2009]	HK0922878-072		**6**				
C7 MID-EBB	[12-NOV-2009]	HK0922878-073		**7**				
C7 MID-EBB DUP	[12-NOV-2009]	HK0922878-074		**4**				
RC1 MID-EBB	[12-NOV-2009]	HK0922878-075		**9**				
RC1 MID-EBB DUP	[12-NOV-2009]	HK0922878-076		**8**				
RC5 MID-EBB	[12-NOV-2009]	HK0922878-077		**11**				
RC5 MID-EBB DUP	[12-NOV-2009]	HK0922878-078		**10**				
RC7 MID-EBB	[12-NOV-2009]	HK0922878-079		**9**				
RC7 MID-EBB DUP	[12-NOV-2009]	HK0922878-080		**7**				
WSD21 MID-EBB	[12-NOV-2009]	HK0922878-081		**11**				
WSD21 MID-EBB DUP	[12-NOV-2009]	HK0922878-082		**10**				
RW1 MID-EBB	[12-NOV-2009]	HK0922878-083		**10**				
RW1 MID-EBB DUP	[12-NOV-2009]	HK0922878-084		**11**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1162684)								
HK0922878-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	11	10	0.0
HK0922878-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	13	10.4
EA/ED: Physical and Aggregate Properties (QC Lot: 1162685)								
HK0922878-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	10.1
HK0922878-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1162686)								
HK0922878-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	11.2
HK0922878-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	12.2
EA/ED: Physical and Aggregate Properties (QC Lot: 1162687)								
HK0922878-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	0.0
HK0922878-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	7	6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1162688)								
HK0922878-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	11	12	8.9

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1162684)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	112	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1162685)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	111	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1162686)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	103	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1162687)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	103	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1162688)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	114	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922879**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **14-NOV-2009**		
Order number	: **----**			*Date of issue*	: **20-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**84**	
Site	: **----**				- *Analysed* :	**84**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922879 supersedes any previous reports with this reference. The completion date of analysis is 17-NOV-2009. 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 HK0922879 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[14-NOV-2009]	HK0922879-001		**9**				
WSD7 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-002		**7**				
WSD9 MID-FLOOD	[14-NOV-2009]	HK0922879-003		**7**				
WSD9 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-004		**5**				
WSD10 MID-FLOOD	[14-NOV-2009]	HK0922879-005		**10**				
WSD10 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-006		**9**				
WSD15 MID-FLOOD	[14-NOV-2009]	HK0922879-007		**9**				
WSD15 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-008		**8**				
WSD17 MID-FLOOD	[14-NOV-2009]	HK0922879-009		**8**				
WSD17 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-010		**8**				
WSD19 MID-FLOOD	[14-NOV-2009]	HK0922879-011		**12**				
WSD19 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-012		**11**				
WSD20 MID-FLOOD	[14-NOV-2009]	HK0922879-013		**10**				
WSD20 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-014		**10**				
C8 MID-FLOOD	[14-NOV-2009]	HK0922879-015		**14**				
C8 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-016		**15**				
C9 MID-FLOOD	[14-NOV-2009]	HK0922879-017		**16**				
C9 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-018		**14**				
C1 MID-FLOOD	[14-NOV-2009]	HK0922879-019		**6**				
C1 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-020		**8**				
C2 MID-FLOOD	[14-NOV-2009]	HK0922879-021		**9**				
C2 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-022		**11**				
C3 MID-FLOOD	[14-NOV-2009]	HK0922879-023		**12**				
C3 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-024		**10**				
C4 MID-FLOOD	[14-NOV-2009]	HK0922879-025		**12**				
C4 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-026		**14**				
C5 MID-FLOOD	[14-NOV-2009]	HK0922879-027		**16**				
C5 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-028		**13**				
C6 MID-FLOOD	[14-NOV-2009]	HK0922879-029		**8**				
C6 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-030		**7**				
C7 MID-FLOOD	[14-NOV-2009]	HK0922879-031		**7**				
C7 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-032		**7**				
RC1 MID-FLOOD	[14-NOV-2009]	HK0922879-033		**11**				
RC1 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-034		**14**				
RC5 MID-FLOOD	[14-NOV-2009]	HK0922879-035		**8**				

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-036		**10**				
RC7 MID-FLOOD	[14-NOV-2009]	HK0922879-037		**10**				
RC7 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-038		**10**				
WSD21 MID-FLOOD	[14-NOV-2009]	HK0922879-039		**11**				
WSD21 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-040		**10**				
RW1 MID-FLOOD	[14-NOV-2009]	HK0922879-041		**7**				
RW1 MID-FLOOD DUP	[14-NOV-2009]	HK0922879-042		**8**				
WSD7 MID-EBB	[14-NOV-2009]	HK0922879-043		**6**				
WSD7 MID-EBB DUP	[14-NOV-2009]	HK0922879-044		**6**				
WSD9 MID-EBB	[14-NOV-2009]	HK0922879-045		**7**				
WSD9 MID-EBB DUP	[14-NOV-2009]	HK0922879-046		**6**				
WSD10 MID-EBB	[14-NOV-2009]	HK0922879-047		**8**				
WSD10 MID-EBB DUP	[14-NOV-2009]	HK0922879-048		**7**				
WSD15 MID-EBB	[14-NOV-2009]	HK0922879-049		**8**				
WSD15 MID-EBB DUP	[14-NOV-2009]	HK0922879-050		**8**				
WSD17 MID-EBB	[14-NOV-2009]	HK0922879-051		**8**				
WSD17 MID-EBB DUP	[14-NOV-2009]	HK0922879-052		**9**				
WSD19 MID-EBB	[14-NOV-2009]	HK0922879-053		**9**				
WSD19 MID-EBB DUP	[14-NOV-2009]	HK0922879-054		**7**				
WSD20 MID-EBB	[14-NOV-2009]	HK0922879-055		**7**				
WSD20 MID-EBB DUP	[14-NOV-2009]	HK0922879-056		**7**				
C8 MID-EBB	[14-NOV-2009]	HK0922879-057		**10**				
C8 MID-EBB DUP	[14-NOV-2009]	HK0922879-058		**10**				
C9 MID-EBB	[14-NOV-2009]	HK0922879-059		**14**				
C9 MID-EBB DUP	[14-NOV-2009]	HK0922879-060		**12**				
C1 MID-EBB	[14-NOV-2009]	HK0922879-061		**9**				
C1 MID-EBB DUP	[14-NOV-2009]	HK0922879-062		**11**				
C2 MID-EBB	[14-NOV-2009]	HK0922879-063		**10**				
C2 MID-EBB DUP	[14-NOV-2009]	HK0922879-064		**9**				
C3 MID-EBB	[14-NOV-2009]	HK0922879-065		**9**				
C3 MID-EBB DUP	[14-NOV-2009]	HK0922879-066		**10**				
C4 MID-EBB	[14-NOV-2009]	HK0922879-067		**11**				
C4 MID-EBB DUP	[14-NOV-2009]	HK0922879-068		**13**				
C5 MID-EBB	[14-NOV-2009]	HK0922879-069		**11**				
C5 MID-EBB DUP	[14-NOV-2009]	HK0922879-070		**10**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[14-NOV-2009]	HK0922879-071		**10**				
C6 MID-EBB DUP	[14-NOV-2009]	HK0922879-072		**8**				
C7 MID-EBB	[14-NOV-2009]	HK0922879-073		**5**				
C7 MID-EBB DUP	[14-NOV-2009]	HK0922879-074		**6**				
RC1 MID-EBB	[14-NOV-2009]	HK0922879-075		**8**				
RC1 MID-EBB DUP	[14-NOV-2009]	HK0922879-076		**6**				
RC5 MID-EBB	[14-NOV-2009]	HK0922879-077		**10**				
RC5 MID-EBB DUP	[14-NOV-2009]	HK0922879-078		**9**				
RC7 MID-EBB	[14-NOV-2009]	HK0922879-079		**10**				
RC7 MID-EBB DUP	[14-NOV-2009]	HK0922879-080		**8**				
WSD21 MID-EBB	[14-NOV-2009]	HK0922879-081		**10**				
WSD21 MID-EBB DUP	[14-NOV-2009]	HK0922879-082		**12**				
RW1 MID-EBB	[14-NOV-2009]	HK0922879-083		**11**				
RW1 MID-EBB DUP	[14-NOV-2009]	HK0922879-084		**10**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1165987)								
HK0922879-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	0.0
HK0922879-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	12	13	9.8
EA/ED: Physical and Aggregate Properties (QC Lot: 1165988)								
HK0922879-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	10.3
HK0922879-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	7	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1165989)								
HK0922879-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	7	8	0.0
HK0922879-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1165990)								
HK0922879-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	9	9	0.0
HK0922879-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	9	10.6
EA/ED: Physical and Aggregate Properties (QC Lot: 1165991)								
HK0922879-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	10.6

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1165987)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	87.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1165988)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1165989)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	87.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1165990)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	112	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1165991)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.0	----	85	115	----	----

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

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

CERTIFICATE OF ANALYSIS

Client	: **CHUNG SHUN BORING ENG CO LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 5**		
Contact	: **----**	*Contact*	: **Chan Kwok Fai, Godfrey**	*Work Order*	: **HK0922881**		
Address	: **----**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **----**	*E-mail*	: **Godfrey.Chan@alsenviro.com**				
Telephone	: **----**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **----**	*Facsimile*	: **+852 2610 2021**				
Project	: **BASELINE MONITORING - WQM**	*Quote number*	: **HK/1192a/2009****	*Date received*	: **16-NOV-2009**		
Order number	: **----**			*Date of issue*	: **23-NOV-2009**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**84**	
Site	: **----**				- *Analysed* :	**84**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0922881 supersedes any previous reports with this reference. The completion date of analysis is 20-NOV-2009. 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 HK0922881 : **Sample(s) were picked up from client by ALS Technichem (HK) staff 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**

Analytical Results

Sub-Matrix: **WATER**

Client sample ID	Client sampling date / time	Laboratory sample ID	Compound	EA025: Suspended Solids (SS)				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
WSD7 MID-FLOOD	[16-NOV-2009]	HK0922881-001		**8**				
WSD7 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-002		**10**				
WSD9 MID-FLOOD	[16-NOV-2009]	HK0922881-003		**6**				
WSD9 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-004		**7**				
WSD10 MID-FLOOD	[16-NOV-2009]	HK0922881-005		**4**				
WSD10 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-006		**5**				
WSD15 MID-FLOOD	[16-NOV-2009]	HK0922881-007		**6**				
WSD15 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-008		**8**				
WSD17 MID-FLOOD	[16-NOV-2009]	HK0922881-009		**6**				
WSD17 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-010		**6**				
WSD19 MID-FLOOD	[16-NOV-2009]	HK0922881-011		**6**				
WSD19 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-012		**6**				
WSD20 MID-FLOOD	[16-NOV-2009]	HK0922881-013		**6**				
WSD20 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-014		**8**				
C8 MID-FLOOD	[16-NOV-2009]	HK0922881-015		**7**				
C8 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-016		**5**				
C9 MID-FLOOD	[16-NOV-2009]	HK0922881-017		**6**				
C9 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-018		**6**				
C1 MID-FLOOD	[16-NOV-2009]	HK0922881-019		**5**				
C1 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-020		**6**				
C2 MID-FLOOD	[16-NOV-2009]	HK0922881-021		**8**				
C2 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-022		**6**				
C3 MID-FLOOD	[16-NOV-2009]	HK0922881-023		**6**				
C3 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-024		**7**				
C4 MID-FLOOD	[16-NOV-2009]	HK0922881-025		**12**				
C4 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-026		**10**				
C5 MID-FLOOD	[16-NOV-2009]	HK0922881-027		**6**				
C5 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-028		**6**				
C6 MID-FLOOD	[16-NOV-2009]	HK0922881-029		**6**				
C6 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-030		**8**				
C7 MID-FLOOD	[16-NOV-2009]	HK0922881-031		**9**				
C7 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-032		**9**				
RC1 MID-FLOOD	[16-NOV-2009]	HK0922881-033		**5**				
RC1 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-034		**7**				
RC5 MID-FLOOD	[16-NOV-2009]	HK0922881-035		**6**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
RC5 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-036		**7**				
RC7 MID-FLOOD	[16-NOV-2009]	HK0922881-037		**7**				
RC7 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-038		**6**				
WSD21 MID-FLOOD	[16-NOV-2009]	HK0922881-039		**6**				
WSD21 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-040		**4**				
RW1 MID-FLOOD	[16-NOV-2009]	HK0922881-041		**6**				
RW1 MID-FLOOD DUP	[16-NOV-2009]	HK0922881-042		**7**				
WSD7 MID-EBB	[16-NOV-2009]	HK0922881-043		**7**				
WSD7 MID-EBB DUP	[16-NOV-2009]	HK0922881-044		**6**				
WSD9 MID-EBB	[16-NOV-2009]	HK0922881-045		**8**				
WSD9 MID-EBB DUP	[16-NOV-2009]	HK0922881-046		**8**				
WSD10 MID-EBB	[16-NOV-2009]	HK0922881-047		**4**				
WSD10 MID-EBB DUP	[16-NOV-2009]	HK0922881-048		**6**				
WSD15 MID-EBB	[16-NOV-2009]	HK0922881-049		**6**				
WSD15 MID-EBB DUP	[16-NOV-2009]	HK0922881-050		**8**				
WSD17 MID-EBB	[16-NOV-2009]	HK0922881-051		**11**				
WSD17 MID-EBB DUP	[16-NOV-2009]	HK0922881-052		**8**				
WSD19 MID-EBB	[16-NOV-2009]	HK0922881-053		**4**				
WSD19 MID-EBB DUP	[16-NOV-2009]	HK0922881-054		**4**				
WSD20 MID-EBB	[16-NOV-2009]	HK0922881-055		**8**				
WSD20 MID-EBB DUP	[16-NOV-2009]	HK0922881-056		**9**				
C8 MID-EBB	[16-NOV-2009]	HK0922881-057		**8**				
C8 MID-EBB DUP	[16-NOV-2009]	HK0922881-058		**9**				
C9 MID-EBB	[16-NOV-2009]	HK0922881-059		**7**				
C9 MID-EBB DUP	[16-NOV-2009]	HK0922881-060		**7**				
C1 MID-EBB	[16-NOV-2009]	HK0922881-061		**6**				
C1 MID-EBB DUP	[16-NOV-2009]	HK0922881-062		**7**				
C2 MID-EBB	[16-NOV-2009]	HK0922881-063		**8**				
C2 MID-EBB DUP	[16-NOV-2009]	HK0922881-064		**7**				
C3 MID-EBB	[16-NOV-2009]	HK0922881-065		**7**				
C3 MID-EBB DUP	[16-NOV-2009]	HK0922881-066		**6**				
C4 MID-EBB	[16-NOV-2009]	HK0922881-067		**8**				
C4 MID-EBB DUP	[16-NOV-2009]	HK0922881-068		**9**				
C5 MID-EBB	[16-NOV-2009]	HK0922881-069		**7**				
C5 MID-EBB DUP	[16-NOV-2009]	HK0922881-070		**8**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	2 mg/L				
				EA/ED: Physical and Aggregate Properties				
C6 MID-EBB	[16-NOV-2009]	HK0922881-071		**10**				
C6 MID-EBB DUP	[16-NOV-2009]	HK0922881-072		**8**				
C7 MID-EBB	[16-NOV-2009]	HK0922881-073		**8**				
C7 MID-EBB DUP	[16-NOV-2009]	HK0922881-074		**6**				
RC1 MID-EBB	[16-NOV-2009]	HK0922881-075		**6**				
RC1 MID-EBB DUP	[16-NOV-2009]	HK0922881-076		**7**				
RC5 MID-EBB	[16-NOV-2009]	HK0922881-077		**9**				
RC5 MID-EBB DUP	[16-NOV-2009]	HK0922881-078		**9**				
RC7 MID-EBB	[16-NOV-2009]	HK0922881-079		**7**				
RC7 MID-EBB DUP	[16-NOV-2009]	HK0922881-080		**7**				
WSD21 MID-EBB	[16-NOV-2009]	HK0922881-081		**8**				
WSD21 MID-EBB DUP	[16-NOV-2009]	HK0922881-082		**8**				
RW1 MID-EBB	[16-NOV-2009]	HK0922881-083		**10**				
RW1 MID-EBB DUP	[16-NOV-2009]	HK0922881-084		**8**				

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1168159)								
HK0922881-001	WSD7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
HK0922881-011	WSD19 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1168160)								
HK0922881-021	C2 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	8	6	0.0
HK0922881-031	C7 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	9	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1168161)								
HK0922881-041	RW1 MID-FLOOD	EA025: Suspended Solids (SS)	----	2	mg/L	6	8	0.0
HK0922881-051	WSD17 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	11	9	12.7
EA/ED: Physical and Aggregate Properties (QC Lot: 1168162)								
HK0922881-061	C1 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	0.0
HK0922881-071	C6 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	10	9	12.5
EA/ED: Physical and Aggregate Properties (QC Lot: 1168163)								
HK0922881-081	WSD21 MID-EBB	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	12.5

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 1168159)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1168160)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1168161)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	113	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1168162)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 1168163)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.0	----	85	115	----	----

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

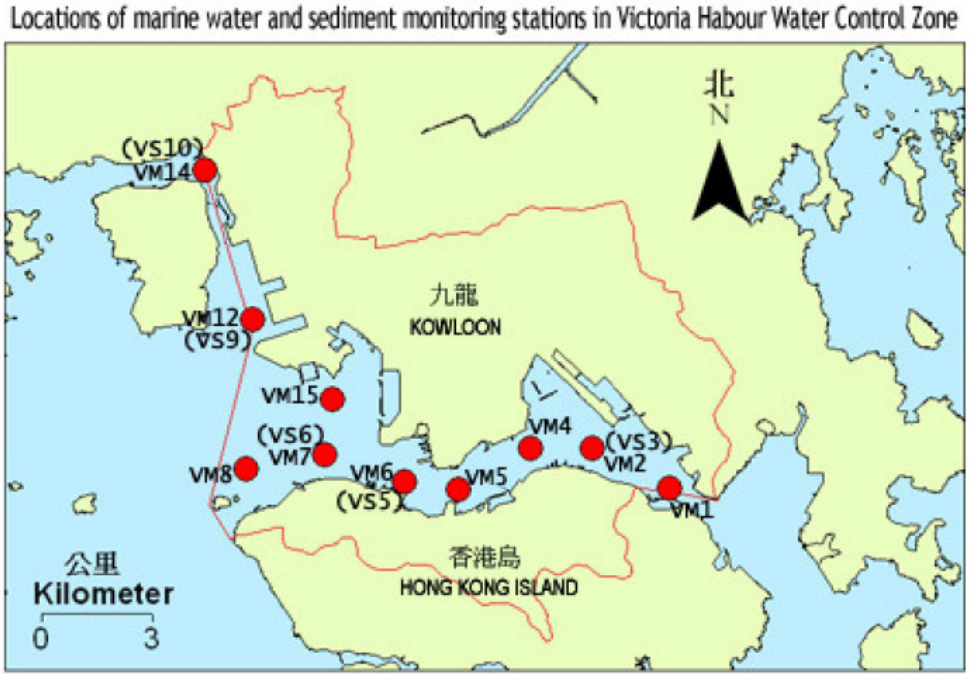
- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

Appendix H

Establishment of Seasonal Water Quality Action and Limit Levels (Relevant Results Highlighted in Yellow)

Appendix D Establishment of Seasonal Action and Limit Levels – Calculation using the Marine Water Quality Data Obtained at the Closest EPD Routine Monitoring Stations

- According to the location of the EPD routine monitoring stations in the diagram below, the closet monitoring station will be used for comparison purpose.



- Overlaying with ***Fig. 3.1***, the correlation of the baseline monitoring stations and the EPD monitoring stations will be:
  - WSD15 co-relates with VM1;
  - WSD10, WSD 17 co-relates with VM2;
  - WSD9, C8, C9 co-relates with VM4
  - WSD21, C1- C7 co-relates with VM5
  - WSD19 co-relates with VM6;
  - WSD7 co-relates with VM7;
  - WSD20 co-relates with VM8
- The monthly DO, Turbidity and SS patterns derived from the EPD monitoring data for 2006 to 2008 are used to compare the baseline monitoring data collected at the intake points to take account the seasonal fluctuation in the background level. The background conditions are presented in the wet season (Apr-Sep) and dry season (Oct-Mar).
- For the baseline data taken during the dry season, the derivation of the wet season shall be adjusted with dry season Action and Limit Levels multiplied with mean variation percentage of 2006 - 2008 to account for the seasonal fluctuation.

EPD Marine Water Monitoring Data at Victoria Harbour (2006-2008)

Water Control Zone	Station	Dates	Sample No	Depth	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Suspended Solids (mg/L)
Victoria Harbour	VM1	3/1/2006	1	Middle Water	7.6	9.8	2.4
Victoria Harbour	VM1	2/2/2006	1	Middle Water	6.8	12.9	2.2
Victoria Harbour	VM1	13/3/2006	1	Middle Water	7.1	8.5	2.7
Victoria Harbour	VM1	20/4/2006	1	Middle Water	7.6	9.3	3.3
Victoria Harbour	VM1	18/5/2006	1	Middle Water	5.4	13.1	19
Victoria Harbour	VM1	1/6/2006	1	Middle Water	5.3	6.8	5.6
Victoria Harbour	VM1	3/7/2006	1	Middle Water	4.4	10.6	3.5
Victoria Harbour	VM1	4/8/2006	1	Middle Water	5.6	17.6	4.4
Victoria Harbour	VM1	4/9/2006	1	Middle Water	2.7	17.9	6.9
Victoria Harbour	VM1	5/10/2006	1	Middle Water	4.9	13.6	3.6
Victoria Harbour	VM1	2/11/2006	1	Middle Water	6.6	13.9	4.1
Victoria Harbour	VM1	4/12/2006	1	Middle Water	6.6	13.4	6.8
Victoria Harbour	VM2	3/1/2006	1	Middle Water	7.2	9.8	3.6
Victoria Harbour	VM2	2/2/2006	1	Middle Water	6.5	12.5	4.4
Victoria Harbour	VM2	13/3/2006	1	Middle Water	6.8	8.9	3.5
Victoria Harbour	VM2	20/4/2006	1	Middle Water	6.9	8.6	1.8
Victoria Harbour	VM2	18/5/2006	1	Middle Water	5.5	10.3	12
Victoria Harbour	VM2	1/6/2006	1	Middle Water	4.9	4.2	3.9
Victoria Harbour	VM2	3/7/2006	1	Middle Water	5.2	8.5	0.8
Victoria Harbour	VM2	4/8/2006	1	Middle Water	5.8	14.9	5.6
Victoria Harbour	VM2	4/9/2006	1	Middle Water	3.6	12.2	2
Victoria Harbour	VM2	5/10/2006	1	Middle Water	4.3	12.9	3.5
Victoria Harbour	VM2	2/11/2006	1	Middle Water	6.1	14.8	4.7
Victoria Harbour	VM2	4/12/2006	1	Middle Water	6.6	12.4	2.5
Victoria Harbour	VM4	3/1/2006	1	Middle Water	7.3	10.3	4.4
Victoria Harbour	VM4	2/2/2006	1	Middle Water	6.7	12.6	4.4
Victoria Harbour	VM4	13/3/2006	1	Middle Water	6.8	8.4	2.9
Victoria Harbour	VM4	20/4/2006	1	Middle Water	6.8	10	3
Victoria Harbour	VM4	18/5/2006	1	Middle Water	5.3	10	12
Victoria Harbour	VM4	1/6/2006	1	Middle Water	4.9	4.8	2
Victoria Harbour	VM4	3/7/2006	1	Middle Water	5.7	8.5	1.7
Victoria Harbour	VM4	4/8/2006	1	Middle Water	5.5	12.6	4.4
Victoria Harbour	VM4	4/9/2006	1	Middle Water	4.6	12.1	3.2
Victoria Harbour	VM4	5/10/2006	1	Middle Water	4.1	18.1	7.4
Victoria Harbour	VM4	2/11/2006	1	Middle Water	5.9	14.1	4.8
Victoria Harbour	VM4	4/12/2006	1	Middle Water	6.1	12.9	3.9
Victoria Harbour	VM5	3/1/2006	1	Middle Water	7	10.8	5.3
Victoria Harbour	VM5	2/2/2006	1	Middle Water	6.5	14	3.5
Victoria Harbour	VM5	13/3/2006	1	Middle Water	6.2	9.3	2.7
Victoria Harbour	VM5	20/4/2006	1	Middle Water	5.6	9.4	3.2
Victoria Harbour	VM5	18/5/2006	1	Middle Water	4.8	8.5	9.6
Victoria Harbour	VM5	1/6/2006	1	Middle Water	4.9	4.9	3.9
Victoria Harbour	VM5	3/7/2006	1	Middle Water	4.9	10.7	3
Victoria Harbour	VM5	4/8/2006	1	Middle Water	5.6	13.4	4.7
Victoria Harbour	VM5	4/9/2006	1	Middle Water	5.1	12.2	3
Victoria Harbour	VM5	5/10/2006	1	Middle Water	4.3	17.5	5.6
Victoria Harbour	VM5	2/11/2006	1	Middle Water	5.7	13.6	3.9
Victoria Harbour	VM5	4/12/2006	1	Middle Water	5.8	12.7	3.6
Victoria Harbour	VM6	3/1/2006	1	Middle Water	6.8	10.5	4.3
Victoria Harbour	VM6	2/2/2006	1	Middle Water	6.6	13.9	7
Victoria Harbour	VM6	13/3/2006	1	Middle Water	6.4	9.6	3.2
Victoria Harbour	VM6	20/4/2006	1	Middle Water	5.9	10.1	3.5
Victoria Harbour	VM6	18/5/2006	1	Middle Water	4.8	7.7	9.7
Victoria Harbour	VM6	1/6/2006	1	Middle Water	5.1	5	4.1
Victoria Harbour	VM6	3/7/2006	1	Middle Water	6.2	8.9	1.6
Victoria Harbour	VM6	4/8/2006	1	Middle Water	5.5	13.2	4.4
Victoria Harbour	VM6	4/9/2006	1	Middle Water	4.6	12.6	2
Victoria Harbour	VM6	5/10/2006	1	Middle Water	4.4	14.1	5
Victoria Harbour	VM6	2/11/2006	1	Middle Water	5.7	13.1	3.2
Victoria Harbour	VM6	4/12/2006	1	Middle Water	5.5	13.1	4.4
Victoria Harbour	VM7	11/1/2006	1	Middle Water	6.9	9.6	2.5
Victoria Harbour	VM7	16/2/2006	1	Middle Water	6.9	10	6.5
Victoria Harbour	VM7	16/3/2006	1	Middle Water	6.1	10.3	3.8
Victoria Harbour	VM7	21/4/2006	1	Middle Water	6.9	10.5	4.6
Victoria Harbour	VM7	26/5/2006	1	Middle Water	5.1	5.9	20
Victoria Harbour	VM7	12/6/2006	1	Middle Water	4.9	5.2	3
Victoria Harbour	VM7	6/7/2006	1	Middle Water	7.7	9.6	1.4
Victoria Harbour	VM7	11/8/2006	1	Middle Water	5.4	12.7	2.6
Victoria Harbour	VM7	6/9/2006	1	Middle Water	4.4	11.5	1.6
Victoria Harbour	VM7	12/10/2006	1	Middle Water	4.1	20.4	6.8
Victoria Harbour	VM7	3/11/2006	1	Middle Water	5.3	16	5.2
Victoria Harbour	VM7	6/12/2006	1	Middle Water	5.6	12.3	4
Victoria Harbour	VM8	11/1/2006	1	Middle Water	7.5	9.6	3.2
Victoria Harbour	VM8	16/2/2006	1	Middle Water	7.7	11.2	17
Victoria Harbour	VM8	16/3/2006	1	Middle Water	6.9	9.8	4.6
Victoria Harbour	VM8	21/4/2006	1	Middle Water	7.5	10.6	4.8

EPD Marine Water Monitoring Data at Victoria Harbour (2006-2008)

Water Control Zone	Station	Dates	Sample No	Depth	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Suspended Solids (mg/L)
Victoria Harbour	VM8	26/5/2006	1	Middle Water	5.3	5.2	18
Victoria Harbour	VM8	12/6/2006	1	Middle Water	4.9	6.2	1.3
Victoria Harbour	VM8	6/7/2006	1	Middle Water	7.4	8.8	2
Victoria Harbour	VM8	11/8/2006	1	Middle Water	5	12	2
Victoria Harbour	VM8	6/9/2006	1	Middle Water	4.4	11.8	2.1
Victoria Harbour	VM8	12/10/2006	1	Middle Water	5.3	18.8	7.5
Victoria Harbour	VM8	3/11/2006	1	Middle Water	5.5	14.5	5.3
Victoria Harbour	VM8	6/12/2006	1	Middle Water	6.2	17.5	9.2
Victoria Harbour	VM1	15/1/2007	1	Middle Water	7.7	10.5	3.3
Victoria Harbour	VM1	1/2/2007	1	Middle Water	7.6	8.4	2
Victoria Harbour	VM1	7/3/2007	1	Middle Water	6.6	10.3	2
Victoria Harbour	VM1	12/4/2007	1	Middle Water	6	9.5	3.4
Victoria Harbour	VM1	3/5/2007	1	Middle Water	5.1	9.5	4.1
Victoria Harbour	VM1	22/6/2007	1	Middle Water	4.2	12.9	5.6
Victoria Harbour	VM1	23/7/2007	1	Middle Water	3.7	35	4.4
Victoria Harbour	VM1	23/8/2007	1	Middle Water	2.9	12.1	5.4
Victoria Harbour	VM1	17/9/2007	1	Middle Water	4.5	14.8	8.5
Victoria Harbour	VM1	10/10/2007	1	Middle Water	4.9	10.8	4
Victoria Harbour	VM1	8/11/2007	1	Middle Water	6	4.2	5.8
Victoria Harbour	VM1	4/12/2007	1	Middle Water	6	7.5	1.6
Victoria Harbour	VM1	3/1/2008	1	Middle Water	6.9	6.6	1.6
Victoria Harbour	VM1	1/2/2008	1	Middle Water	7.2	6.7	1.1
Victoria Harbour	VM1	28/3/2008	1	Middle Water	6.6	10.5	5.7
Victoria Harbour	VM1	23/4/2008	1	Middle Water	6.3	14.4	12
Victoria Harbour	VM1	19/5/2008	1	Middle Water	5.5	7.9	6.6
Victoria Harbour	VM1	11/6/2008	1	Middle Water	4.5	9.1	4.9
Victoria Harbour	VM1	2/7/2008	1	Middle Water	3.7	12.9	3.8
Victoria Harbour	VM1	4/8/2008	1	Middle Water	4.8	9.3	5.4
Victoria Harbour	VM1	19/9/2008	1	Middle Water	2.8	12.3	9.2
Victoria Harbour	VM1	8/10/2008	1	Middle Water	4.5	3.8	6.5
Victoria Harbour	VM1	5/11/2008	1	Middle Water	5.4	3.7	5
Victoria Harbour	VM1	10/12/2008	1	Middle Water	6.1	2.1	3.6
Victoria Harbour	VM2	15/1/2007	1	Middle Water	7.6	10.4	2.6
Victoria Harbour	VM2	1/2/2007	1	Middle Water	7.7	8.4	2
Victoria Harbour	VM2	7/3/2007	1	Middle Water	6.3	11.3	3.3
Victoria Harbour	VM2	12/4/2007	1	Middle Water	5.9	9.1	2.8
Victoria Harbour	VM2	3/5/2007	1	Middle Water	4.7	9.5	3.7
Victoria Harbour	VM2	22/6/2007	1	Middle Water	6.5	11.8	3
Victoria Harbour	VM2	23/7/2007	1	Middle Water	8	24.9	5.2
Victoria Harbour	VM2	23/8/2007	1	Middle Water	3.7	9.4	2.9
Victoria Harbour	VM2	17/9/2007	1	Middle Water	4.5	14.6	5.8
Victoria Harbour	VM2	10/10/2007	1	Middle Water	4.1	10.3	4
Victoria Harbour	VM2	8/11/2007	1	Middle Water	5.7	4.3	4.4
Victoria Harbour	VM2	4/12/2007	1	Middle Water	5.8	7.2	1.8
Victoria Harbour	VM2	3/1/2008	1	Middle Water	6.6	6.5	1.6
Victoria Harbour	VM2	1/2/2008	1	Middle Water	7.1	7	1.6
Victoria Harbour	VM2	28/3/2008	1	Middle Water	6.1	8.9	2.9
Victoria Harbour	VM2	23/4/2008	1	Middle Water	6.1	10.4	4.8
Victoria Harbour	VM2	19/5/2008	1	Middle Water	4.9	6.5	3.8
Victoria Harbour	VM2	11/6/2008	1	Middle Water	5.6	7.6	3.8
Victoria Harbour	VM2	2/7/2008	1	Middle Water	3	11.2	3.6
Victoria Harbour	VM2	4/8/2008	1	Middle Water	6.9	8.1	4.2
Victoria Harbour	VM2	19/9/2008	1	Middle Water	4	8.2	4
Victoria Harbour	VM2	8/10/2008	1	Middle Water	4.3	4.8	4.8
Victoria Harbour	VM2	5/11/2008	1	Middle Water	4.9	4.8	9.2
Victoria Harbour	VM2	10/12/2008	1	Middle Water	5.6	2.5	2.6
Victoria Harbour	VM4	15/1/2007	1	Middle Water	7.3	10.8	2.8
Victoria Harbour	VM4	1/2/2007	1	Middle Water	6.9	9.2	2.3
Victoria Harbour	VM4	7/3/2007	1	Middle Water	5.7	11.2	3.5
Victoria Harbour	VM4	12/4/2007	1	Middle Water	5.6	9.4	2.8
Victoria Harbour	VM4	3/5/2007	1	Middle Water	4.5	9.3	4.6
Victoria Harbour	VM4	22/6/2007	1	Middle Water	5.3	11.8	3.5
Victoria Harbour	VM4	23/7/2007	1	Middle Water	8	21	5.6
Victoria Harbour	VM4	23/8/2007	1	Middle Water	4.6	9.6	2.7
Victoria Harbour	VM4	17/9/2007	1	Middle Water	4.3	14.2	5.9
Victoria Harbour	VM4	10/10/2007	1	Middle Water	4.1	10.6	4.8
Victoria Harbour	VM4	8/11/2007	1	Middle Water	5.6	4.1	3.8
Victoria Harbour	VM4	4/12/2007	1	Middle Water	5.4	7.1	1.7
Victoria Harbour	VM4	3/1/2008	1	Middle Water	6.1	7.4	2.8
Victoria Harbour	VM4	1/2/2008	1	Middle Water	7.1	7.5	2.7
Victoria Harbour	VM4	28/3/2008	1	Middle Water	5.9	9.7	3.4
Victoria Harbour	VM4	23/4/2008	1	Middle Water	5.8	11.9	7.8
Victoria Harbour	VM4	19/5/2008	1	Middle Water	4.7	8.4	11
Victoria Harbour	VM4	11/6/2008	1	Middle Water	5.9	8.2	3.1
Victoria Harbour	VM4	2/7/2008	1	Middle Water	4.2	11	3.5
Victoria Harbour	VM4	4/8/2008	1	Middle Water	7	8.4	4.6

EPD Marine Water Monitoring Data at Victoria Harbour (2006-2008)

Water Control Zone	Station	Dates	Sample No	Depth	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Suspended Solids (mg/L)
Victoria Harbour	VM4	19/9/2008	1	Middle Water	2.8	9.4	5.3
Victoria Harbour	VM4	8/10/2008	1	Middle Water	4.4	4.2	4.7
Victoria Harbour	VM4	5/11/2008	1	Middle Water	4.7	5.9	7.7
Victoria Harbour	VM4	10/12/2008	1	Middle Water	5.3	2.5	2.9
Victoria Harbour	VM5	15/1/2007	1	Middle Water	6.6	10.3	1.7
Victoria Harbour	VM5	1/2/2007	1	Middle Water	6.9	8.9	3.2
Victoria Harbour	VM5	7/3/2007	1	Middle Water	5.6	10.2	2.8
Victoria Harbour	VM5	12/4/2007	1	Middle Water	5	9.3	3.1
Victoria Harbour	VM5	3/5/2007	1	Middle Water	4.1	10.1	5.3
Victoria Harbour	VM5	22/6/2007	1	Middle Water	5.1	12	3.9
Victoria Harbour	VM5	23/7/2007	1	Middle Water	6.1	24.6	6.2
Victoria Harbour	VM5	23/8/2007	1	Middle Water	4.9	9.5	2.8
Victoria Harbour	VM5	17/9/2007	1	Middle Water	3.9	12.1	3.1
Victoria Harbour	VM5	10/10/2007	1	Middle Water	3.9	13.1	8
Victoria Harbour	VM5	8/11/2007	1	Middle Water	5.3	4.1	4.2
Victoria Harbour	VM5	4/12/2007	1	Middle Water	4.2	8	1.7
Victoria Harbour	VM5	3/1/2008	1	Middle Water	5.7	6.8	2.8
Victoria Harbour	VM5	1/2/2008	1	Middle Water	6.8	7.2	2.4
Victoria Harbour	VM5	28/3/2008	1	Middle Water	5.2	9.2	2.7
Victoria Harbour	VM5	23/4/2008	1	Middle Water	5.2	10.4	5
Victoria Harbour	VM5	19/5/2008	1	Middle Water	5.1	7.9	5.8
Victoria Harbour	VM5	11/6/2008	1	Middle Water	5.2	8.2	4.9
Victoria Harbour	VM5	2/7/2008	1	Middle Water	5.1	10	2.4
Victoria Harbour	VM5	4/8/2008	1	Middle Water	6	8.4	5.3
Victoria Harbour	VM5	19/9/2008	1	Middle Water	3.1	12.1	10
Victoria Harbour	VM5	8/10/2008	1	Middle Water	4.4	3.8	4.7
Victoria Harbour	VM5	5/11/2008	1	Middle Water	4.7	5.2	6.6
Victoria Harbour	VM5	10/12/2008	1	Middle Water	5.6	3	4
Victoria Harbour	VM6	15/1/2007	1	Middle Water	7.3	10.3	2.1
Victoria Harbour	VM6	1/2/2007	1	Middle Water	6.8	9.8	4.4
Victoria Harbour	VM6	7/3/2007	1	Middle Water	5.2	10.1	2.4
Victoria Harbour	VM6	12/4/2007	1	Middle Water	5	9.5	3.8
Victoria Harbour	VM6	3/5/2007	1	Middle Water	4.3	10.1	4.2
Victoria Harbour	VM6	22/6/2007	1	Middle Water	5.6	12.6	2.5
Victoria Harbour	VM6	23/7/2007	1	Middle Water	3.2	18.4	3.9
Victoria Harbour	VM6	23/8/2007	1	Middle Water	3.9	11.4	4
Victoria Harbour	VM6	17/9/2007	1	Middle Water	3.7	12.4	4
Victoria Harbour	VM6	10/10/2007	1	Middle Water	4.4	13.4	9.5
Victoria Harbour	VM6	8/11/2007	1	Middle Water	5	4.1	4.8
Victoria Harbour	VM6	4/12/2007	1	Middle Water	4.7	7.5	2.5
Victoria Harbour	VM6	3/1/2008	1	Middle Water	5.6	7	2
Victoria Harbour	VM6	1/2/2008	1	Middle Water	6.6	7.4	3.1
Victoria Harbour	VM6	28/3/2008	1	Middle Water	5.3	9.2	2.4
Victoria Harbour	VM6	23/4/2008	1	Middle Water	5.3	11.4	7
Victoria Harbour	VM6	19/5/2008	1	Middle Water	5.1	7.1	6
Victoria Harbour	VM6	11/6/2008	1	Middle Water	5	9.7	3.5
Victoria Harbour	VM6	2/7/2008	1	Middle Water	4.6	9.9	4.4
Victoria Harbour	VM6	4/8/2008	1	Middle Water	7.4	7.7	4.2
Victoria Harbour	VM6	19/9/2008	1	Middle Water	2.8	10.1	7.4
Victoria Harbour	VM6	8/10/2008	1	Middle Water	4.7	4	14
Victoria Harbour	VM6	5/11/2008	1	Middle Water	4.7	4.6	6.4
Victoria Harbour	VM6	10/12/2008	1	Middle Water	5.6	3.4	5.3
Victoria Harbour	VM7	3/1/2007	1	Middle Water	5.7	12.2	2.4
Victoria Harbour	VM7	6/2/2007	1	Middle Water	7	10.7	5.3
Victoria Harbour	VM7	9/3/2007	1	Middle Water	5.2	10.2	3.2
Victoria Harbour	VM7	13/4/2007	1	Middle Water	4.9	9.3	3.6
Victoria Harbour	VM7	7/5/2007	1	Middle Water	4.9	8.8	1.3
Victoria Harbour	VM7	25/6/2007	1	Middle Water	5.5	9.2	1.3
Victoria Harbour	VM7	18/7/2007	1	Middle Water	5.3	11.4	3
Victoria Harbour	VM7	20/8/2007	1	Middle Water	4.7	12.5	4
Victoria Harbour	VM7	24/9/2007	1	Middle Water	4.7	15.5	10
Victoria Harbour	VM7	11/10/2007	1	Middle Water	3.9	11.2	6
Victoria Harbour	VM7	15/11/2007	1	Middle Water	5.1	4.2	4.6
Victoria Harbour	VM7	11/12/2007	1	Middle Water	5.1	8.6	3.4
Victoria Harbour	VM7	4/1/2008	1	Middle Water	5.6	8.1	4.2
Victoria Harbour	VM7	11/2/2008	1	Middle Water	6.3	8.7	4.6
Victoria Harbour	VM7	5/3/2008	1	Middle Water	7.8	8	2.2
Victoria Harbour	VM7	2/4/2008	1	Middle Water	6.1	10.3	5
Victoria Harbour	VM7	14/5/2008	1	Middle Water	5.5	8	5.9
Victoria Harbour	VM7	2/6/2008	1	Middle Water	4.4	8.1	3.4
Victoria Harbour	VM7	7/7/2008	1	Middle Water	5.1	11.6	2.6
Victoria Harbour	VM7	25/8/2008	1	Middle Water	5.2	7.3	2.9
Victoria Harbour	VM7	22/9/2008	1	Middle Water	3.1	7.7	4.1
Victoria Harbour	VM7	9/10/2008	1	Middle Water	5.3	4.3	5.6
Victoria Harbour	VM7	20/11/2008	1	Middle Water	5.3	4.7	6.5
Victoria Harbour	VM7	6/12/2008	1	Middle Water	6.1	9.8	4.3

EPD Marine Water Monitoring Data at Victoria Harbour (2006-2008)

Water Control Zone	Station	Dates	Sample No	Depth	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Suspended Solids (mg/L)
Victoria Harbour	VM8	3/1/2007	1	Middle Water	5.6	13.5	5
Victoria Harbour	VM8	6/2/2007	1	Middle Water	8.6	11.8	7
Victoria Harbour	VM8	9/3/2007	1	Middle Water	6.4	13.1	7.8
Victoria Harbour	VM8	13/4/2007	1	Middle Water	5.5	9.9	4.5
Victoria Harbour	VM8	7/5/2007	1	Middle Water	5.8	9.8	3.6
Victoria Harbour	VM8	25/6/2007	1	Middle Water	5.2	9.5	2.2
Victoria Harbour	VM8	18/7/2007	1	Middle Water	5	33.9	3.4
Victoria Harbour	VM8	20/8/2007	1	Middle Water	4.4	13	4
Victoria Harbour	VM8	24/9/2007	1	Middle Water	5	14.5	6.6
Victoria Harbour	VM8	11/10/2007	1	Middle Water	4.5	12	6.5
Victoria Harbour	VM8	15/11/2007	1	Middle Water	5.6	4.1	7.6
Victoria Harbour	VM8	11/12/2007	1	Middle Water	5.1	8.7	3.7
Victoria Harbour	VM8	4/1/2008	1	Middle Water	6.2	8.1	3.4
Victoria Harbour	VM8	11/2/2008	1	Middle Water	7.4	12.1	6.6
Victoria Harbour	VM8	5/3/2008	1	Middle Water	7.6	8.8	3
Victoria Harbour	VM8	2/4/2008	1	Middle Water	6.6	13.3	7.4
Victoria Harbour	VM8	14/5/2008	1	Middle Water	5.5	8.4	6.3
Victoria Harbour	VM8	2/6/2008	1	Middle Water	5.1	7.3	3
Victoria Harbour	VM8	7/7/2008	1	Middle Water	5.1	12.2	2.4
Victoria Harbour	VM8	25/8/2008	1	Middle Water	5.1	7.2	3.2
Victoria Harbour	VM8	22/9/2008	1	Middle Water	4	7.3	3.1
Victoria Harbour	VM8	9/10/2008	1	Middle Water	5.3	3.9	4.3
Victoria Harbour	VM8	20/11/2008	1	Middle Water	5.8	4.5	5.4
Victoria Harbour	VM8	6/12/2008	1	Middle Water	6.4	10.3	6.3

EPD Marine Water Monitoring Data (2006-2008) - DO Variation Between Dry and Wet Seasons

Station \ DO (mg/L)		Dry season 2006	Wet season 2006	Variation in avg. DO	Dry season 2007	Wet season 2007	Variation in avg. DO	Dry season 2008	Wet season 2008	Varia-tion in avg. DO	Mean Variation %
VM1 (WSD15)	Avg.	6.60	5.17	-21.7%	6.47	4.40	-32.0%	6.12	4.60	-24.8%	-26.2%
	Min.	4.90	2.70	-	4.90	2.90	-	4.50	2.80	-	-
	Max.	7.60	7.60	-	7.70	6.00	-	7.20	6.30	-	-
VM2 (WSD10, WSD17)	Avg.	6.25	5.32	-14.9%	6.20	5.55	-10.5%	5.77	5.08	-11.8%	-12.4%
	Min.	4.30	3.60	-	4.10	3.70	-	4.30	3.00	-	-
	Max.	7.20	6.90	-	7.70	8.00	-	7.10	6.90	-	-
VM4 (WSD9, C8, C9)	Avg.	6.15	5.47	-11.1%	5.83	5.38	-7.7%	5.58	5.07	-9.3%	-9.4%
	Min.	4.10	4.60	-	4.10	4.30	-	4.40	2.80	-	-
	Max.	7.30	6.80	-	7.30	8.00	-	7.10	7.00	-	-
VM5 (WSD21, C1-C7)	Avg.	5.92	5.15	-13.0%	5.42	4.85	-10.5%	5.40	4.95	-8.3%	-10.6%
	Min.	4.30	4.80	-	3.90	3.90	-	4.40	3.10	-	-
	Max.	7.00	5.60	-	6.90	6.10	-	6.80	6.00	-	-
VM6 (WSD19)	Avg.	5.90	5.35	-9.3%	5.57	4.28	-23.1%	5.42	5.03	-7.1%	-13.2%
	Min.	4.40	4.60	-	4.40	3.20	-	4.70	2.80	-	-
	Max.	6.80	6.20	-	7.30	5.60	-	6.60	7.40	-	-
VM7 (WSD7)	Avg.	5.82	5.73	-1.4%	5.33	5.00	-6.2%	6.07	4.90	-19.2%	-9.0%
	Min.	4.10	4.40	-	3.90	4.70	-	5.30	3.10	-	-
	Max.	6.90	7.70	-	7.00	5.50	-	7.80	6.10	-	-
VM8 (WSD20)	Avg.	6.52	5.75	-11.8%	5.97	5.15	-13.7%	6.45	5.23	-18.9%	-14.8%
	Min.	5.30	4.40	-	4.50	4.40	-	5.30	4.00	-	-
	Max.	7.70	7.50	-	8.60	5.80	-	7.60	6.60	-	-

EPD Marine Water Monitoring Data (2006-2008) - Turbidity Variation Between Dry and Wet Seasons

Station \ Turb (NTU)		Dry season 2006	Wet season 2006	Varia-tion in avg. Tur	Dry season 2007	Wet season 2007	Varia-tion in avg. Tur	Dry season 2008	Wet season 2008	Varia-tion in avg. Tur	Mean Variation %
VM1 (WSD15)	Avg.	12.02	12.55	4.4%	8.62	15.63	81.4%	5.57	10.98	97.3%	61.1%
	Min.	8.50	6.80	-	4.20	9.50	-	2.10	7.90	-	-
	Max.	13.90	17.90	-	10.80	35.00	-	10.50	14.40	-	-
VM2 (WSD10, WSD17)	Avg.	11.88	9.78	-17.7%	8.65	13.22	52.8%	5.75	8.67	50.7%	28.6%
	Min.	8.90	4.20	-	4.30	9.10	-	2.50	6.50	-	-
	Max.	14.80	14.90	-	11.30	24.90	-	8.90	11.20	-	-
VM4 (WSD9, C8, C9)	Avg.	12.73	9.67	-24.1%	8.83	12.55	42.1%	6.20	9.55	54.0%	24.0%
	Min.	8.40	4.80	-	4.10	9.30	-	2.50	8.20	-	-
	Max.	18.10	12.60	-	11.20	21.00	-	9.70	11.90	-	-
VM5 (WSD21, C1-C7)	Avg.	12.98	9.85	-24.1%	9.10	12.93	42.1%	5.87	9.50	61.9%	26.6%
	Min.	9.30	4.90	-	4.10	9.30	-	3.00	7.90	-	-
	Max.	17.50	13.40	-	13.10	24.60	-	9.20	12.10	-	-
VM6 (WSD19)	Avg.	12.38	9.58	-22.6%	9.20	12.40	34.8%	5.93	9.32	57.0%	23.1%
	Min.	9.60	5.00	-	4.10	9.50	-	3.40	7.10	-	-
	Max.	14.10	13.20	-	13.40	18.40	-	9.20	11.40	-	-
VM7 (WSD7)	Avg.	13.10	9.23	-29.5%	9.52	11.12	16.8%	7.27	8.83	21.6%	3.0%
	Min.	9.60	5.20	-	4.20	8.80	-	4.30	7.30	-	-
	Max.	20.40	12.70	-	12.20	15.50	-	9.80	11.60	-	-
VM8 (WSD20)	Avg.	13.57	9.10	-32.9%	10.53	15.10	43.4%	7.95	9.28	16.8%	9.1%
	Min.	9.60	5.20	-	4.10	9.50	-	3.90	7.20	-	-
	Max.	18.80	12.00	-	13.50	33.90	-	12.10	13.30	-	-

EPD Marine Water Monitoring Data (2006-2008) - SS Variation Between Dry and Wet Seasons

Station \ SS (mg/L)		Dry season 2006	Wet season 2006	Varia-tion in avg. SS	Dry season 2007	Wet season 2007	Varia-tion in avg. SS	Dry season 2008	Wet season 2008	Varia-tion in avg. SS	Mean Variation %
VM1 (WSD15)	Avg.	3.63	7.12	95.9%	3.12	5.23	67.9%	3.92	6.98	78.3%	80.7%
	Min.	2.20	3.30	-	1.60	3.40	-	1.10	3.80	-	-
	Max.	6.80	19.00	-	5.80	8.50	-	6.50	12.00	-	-
VM2 (WSD10, WSD17)	Avg.	3.70	4.35	17.6%	3.02	3.90	29.3%	3.78	4.03	6.6%	17.8%
	Min.	2.50	0.80	-	1.80	2.80	-	1.60	3.60	-	-
	Max.	4.70	12.00	-	4.40	5.80	-	9.20	4.80	-	-
VM4 (WSD9, C8, C9)	Avg.	4.63	4.38	-5.4%	3.15	4.18	32.8%	4.03	5.88	45.9%	24.4%
	Min.	2.90	1.70	-	1.70	2.70	-	2.70	3.10	-	-
	Max.	7.40	12.00	-	4.80	5.90	-	7.70	11.00	-	-
VM5 (WSD21, C1-C7)	Avg.	4.10	4.57	11.4%	3.60	4.07	13.0%	3.87	5.57	44.0%	22.8%
	Min.	2.70	3.00	-	1.70	2.80	-	2.40	2.40	-	-
	Max.	5.60	9.60	-	8.00	6.20	-	6.60	10.00	-	-
VM6 (WSD19)	Avg.	4.52	4.22	-6.6%	4.28	3.73	-12.8%	5.53	5.42	-2.1%	-7.2%
	Min.	3.20	1.60	-	2.10	2.50	-	2.00	3.50	-	-
	Max.	7.00	9.70	-	9.50	4.20	-	14.00	7.40	-	-
VM7 (WSD7)	Avg.	4.80	5.53	15.3%	4.15	3.87	-6.8%	4.57	3.98	-12.8%	-1.4%
	Min.	2.50	1.40	-	2.40	1.30	-	2.20	2.60	-	-
	Max.	6.80	20.00	-	6.00	10.00	-	6.50	5.90	-	-
VM8 (WSD20)	Avg.	7.80	5.03	-35.5%	6.27	4.05	-35.4%	4.83	4.23	-12.4%	-27.8%
	Min.	3.20	1.30	-	3.70	2.20	-	3.00	2.40	-	-
	Max.	17.00	18.00	-	7.80	6.60	-	6.60	7.40	-	-

Baseline Turbidity Monitoring Data (Oct - Nov 2009)

Mid-flood	WSD7			WSD9			WSD10			WSD15			WSD17		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	10.2	9.3	9.75	4.6	4.6	4.60	5.0	4.3	4.65	5.7	5.2	5.45	6.2	6.4	6.30
23-Oct-09	4.9	5.8	5.35	3.4	4.1	3.75	3.1	3.2	3.15	6.3	6.4	6.35	5.0	5.5	5.25
27-Oct-09	7.6	7.4	7.50	4.0	4.2	4.10	3.3	3.2	3.25	6.3	5.7	6.00	6.6	6.7	6.65
29-Oct-09	8.0	8.0	8.00	3.8	3.8	3.80	5.0	5.0	5.00	3.0	3.0	3.00	3.6	3.6	3.60
31-Oct-09	6.3	5.4	5.85	2.2	2.0	2.10	4.9	6.1	5.50	5.6	4.2	4.90	5.9	5.9	5.90
2-Nov-09	5.8	5.0	5.40	3.7	3.8	3.75	3.3	2.9	3.10	5.0	4.8	4.90	4.9	4.8	4.85
4-Nov-09	7.1	6.8	6.95	3.8	3.7	3.75	4.7	4.5	4.60	5.1	5.5	5.30	4.8	4.6	4.70
6-Nov-09	8.4	8.1	8.25	3.7	3.6	3.65	3.0	3.0	3.00	3.5	3.4	3.45	4.1	4.5	4.30
10-Nov-09	6.3	6.0	6.15	3.7	3.4	3.55	3.6	3.9	3.75	2.9	2.6	2.75	5.8	6.2	6.00
12-Nov-09	9.8	9.2	9.50	4.4	4.3	4.35	7.1	6.5	6.80	5.6	5.5	5.55	6.0	6.2	6.10
14-Nov-09	1.9	1.8	1.85	2.1	2.4	2.25	4.9	5.1	5.00	2.3	2.2	2.25	6.6	6.1	6.35
16-Nov-09	1.9	1.8	1.85	2.3	2.3	2.30	2.6	2.7	2.65	2.4	2.3	2.35	2.4	2.4	2.40

Mid-ebb	WSD7			WSD9			WSD10			WSD15			WSD17		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	5.5	5.5	5.50	6.3	6.9	6.60	5.2	4.8	5.00	7.3	7.5	7.40	7.8	7.5	7.65
23-Oct-09	6.2	5.7	5.95	4.3	4.8	4.55	4.3	3.9	4.10	3.1	3.0	3.05	5.4	4.4	4.90
27-Oct-09	6.7	6.2	6.45	2.3	2.5	2.40	3.7	3.5	3.60	3.2	3.4	3.30	3.4	3.5	3.45
29-Oct-09	4.3	4.2	4.25	3.3	3.5	3.40	4.9	4.9	4.90	3.3	3.5	3.40	4.6	4.6	4.60
31-Oct-09	3.7	4.1	3.90	3.4	3.7	3.55	6.1	6.4	6.25	3.8	1.9	2.85	3.9	3.5	3.70
2-Nov-09	6.3	5.9	6.10	3.6	3.7	3.65	3.6	3.7	3.65	3.6	3.7	3.65	4.6	3.7	4.15
4-Nov-09	3.2	3.3	3.25	2.9	2.7	2.80	2.7	2.8	2.75	6.1	5.8	5.95	3.5	3.4	3.45
6-Nov-09	3.8	3.7	3.75	3.1	2.9	3.00	3.3	3.1	3.20	5.7	5.6	5.65	4.6	4.4	4.50
10-Nov-09	3.8	3.7	3.75	5.2	5.3	5.25	2.7	2.8	2.75	2.4	2.3	2.35	4.1	4.3	4.20
12-Nov-09	5.1	5.1	5.10	4.4	4.5	4.45	6.1	6.1	6.10	5.5	5.7	5.60	7.3	7.6	7.45
14-Nov-09	2.2	2.0	2.10	2.4	2.4	2.40	4.4	4.0	4.20	1.6	1.4	1.50	2.9	3.1	3.00
16-Nov-09	2.1	2.1	2.10	2.4	2.3	2.35	2.8	2.7	2.75	2.9	2.7	2.80	2.8	2.5	2.65

Baseline Turbidity Monitoring Data (Oct - Nov 2009)

Mid-flood	WSD19			WSD20			WSD21			RW1			C1		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	6.2	5.8	6.00	5.9	6.3	6.10	8.4	8.5	8.45	10.4	10.6	10.50	6.1	6.3	6.20
23-Oct-09	7.0	6.5	6.75	5.5	5.6	5.55	6.6	6.9	6.75	8.2	8.1	8.15	6.0	5.4	5.70
27-Oct-09	6.9	6.6	6.75	3.8	3.5	3.65	7.9	7.6	7.75	7.8	7.7	7.75	5.1	5.2	5.15
29-Oct-09	4.3	4.3	4.30	3.0	2.9	2.95	5.8	6.1	5.95	6.4	6.1	6.25	4.9	4.9	4.90
31-Oct-09	5.6	7.0	6.30	4.0	3.5	3.75	4.9	5.0	4.95	4.7	5.8	5.25	4.1	4.5	4.30
2-Nov-09	5.4	4.4	4.90	5.1	4.6	4.85	5.0	4.5	4.75	4.3	4.0	4.15	6.0	5.8	5.90
4-Nov-09	4.0	4.1	4.05	6.3	6.7	6.50	6.6	6.6	6.60	5.6	5.4	5.50	4.0	3.9	3.95
6-Nov-09	5.2	5.3	5.25	5.5	5.7	5.60	6.3	6.3	6.30	6.5	6.3	6.40	3.6	3.7	3.65
10-Nov-09	7.4	7.8	7.60	4.0	4.3	4.15	6.7	7.0	6.85	4.8	5.3	5.05	4.0	3.8	3.90
12-Nov-09	9.6	9.2	9.40	6.5	6.9	6.70	5.8	5.6	5.70	4.7	4.5	4.60	3.2	3.1	3.15
14-Nov-09	5.1	5.2	5.15	5.5	5.1	5.30	4.8	5.2	5.00	6.1	5.8	5.95	4.0	3.7	3.85
16-Nov-09	1.8	1.6	1.70	1.7	1.7	1.70	8.4	8.9	8.65	7.9	7.9	7.90	8.4	8.9	8.65

Mid-ebb	WSD19			WSD20			WSD21			RW1			C1		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	8.8	8.4	8.60	6.7	6.5	6.60	6.2	6.2	6.20	6.6	6.6	6.60	5.1	5.4	5.25
23-Oct-09	5.3	4.7	5.00	4.2	4.2	4.20	5.5	5.8	5.65	4.9	5.1	5.00	5.5	5.8	5.65
27-Oct-09	3.7	3.3	3.50	3.1	3.2	3.15	6.0	6.0	6.00	5.9	5.9	5.90	8.4	8.3	8.35
29-Oct-09	5.0	4.9	4.95	2.9	2.8	2.85	4.9	5.1	5.00	4.8	4.8	4.80	6.0	6.2	6.10
31-Oct-09	3.8	3.9	3.85	4.7	5.9	5.30	4.5	4.3	4.40	4.6	4.5	4.55	4.9	4.7	4.80
2-Nov-09	4.9	5.4	5.15	3.5	3.5	3.50	4.8	4.7	4.75	3.1	2.9	3.00	4.5	3.8	4.15
4-Nov-09	3.2	3.4	3.30	3.8	3.6	3.70	6.0	5.7	5.85	5.2	5.1	5.15	4.6	4.8	4.70
6-Nov-09	7.0	6.3	6.65	5.3	4.9	5.10	5.5	5.3	5.40	4.2	4.5	4.35	4.8	4.7	4.75
10-Nov-09	4.2	4.4	4.30	3.0	3.2	3.10	4.4	4.5	4.45	3.8	4.2	4.00	4.6	4.5	4.55
12-Nov-09	4.0	4.2	4.10	3.5	3.6	3.55	4.7	4.4	4.55	4.6	4.4	4.50	4.6	4.4	4.50
14-Nov-09	2.1	2.2	2.15	2.4	2.1	2.25	5.1	5.0	5.05	6.4	6.1	6.25	4.4	4.1	4.25
16-Nov-09	2.5	2.6	2.55	1.9	1.9	1.90	8.6	8.5	8.55	9.0	8.9	8.95	9.2	8.8	9.00

Baseline Turbidity Monitoring Data (Oct - Nov 2009)

Mid-flood	C2			C3			C4			C5			C6		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	5.7	5.5	5.60	8.5	7.8	8.15	6.8	7.6	7.20	9.3	9.0	9.15	5.4	5.4	5.40
23-Oct-09	5.5	5.6	5.55	6.1	6.0	6.05	7.2	7.2	7.20	6.7	6.5	6.60	5.8	5.7	5.75
27-Oct-09	7.8	8.1	7.95	7.8	7.5	7.65	7.0	7.0	7.00	7.3	7.2	7.25	7.4	7.3	7.35
29-Oct-09	6.2	6.3	6.25	7.4	6.4	6.90	9.3	8.3	8.80	7.4	7.5	7.45	6.3	5.7	6.00
31-Oct-09	6.6	6.2	6.40	4.7	4.8	4.75	5.1	5.5	5.30	4.7	4.7	4.70	4.1	4.0	4.05
2-Nov-09	3.7	3.6	3.65	3.3	3.2	3.25	3.3	3.2	3.25	3.6	3.2	3.40	5.6	5.8	5.70
4-Nov-09	5.2	4.8	5.00	6.2	6.5	6.35	5.9	5.7	5.80	5.9	5.6	5.75	4.8	4.5	4.65
6-Nov-09	6.2	6.0	6.10	4.7	4.5	4.60	6.4	6.1	6.25	6.4	6.3	6.35	3.2	3.3	3.25
10-Nov-09	5.8	5.9	5.85	5.7	5.9	5.80	6.8	6.5	6.65	6.6	6.9	6.75	5.3	5.1	5.20
12-Nov-09	4.6	4.4	4.50	4.8	4.6	4.70	5.4	5.6	5.50	5.3	5.5	5.40	3.6	3.7	3.65
14-Nov-09	5.9	5.6	5.75	3.8	3.9	3.85	4.6	4.7	4.65	4.9	5.0	4.95	4.5	4.3	4.40
16-Nov-09	9.0	8.6	8.80	8.3	8.2	8.25	9.4	9.1	9.25	9.1	8.6	8.85	8.0	7.7	7.85

Mid-ebb	C2			C3			C4			C5			C6		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	6.1	6.3	6.20	5.2	5.3	5.25	6.8	6.8	6.80	7.7	7.9	7.80	5.5	5.2	5.35
23-Oct-09	6.0	5.4	5.70	7.0	6.6	6.80	5.4	5.4	5.40	5.3	5.5	5.40	5.6	5.6	5.60
27-Oct-09	5.1	5.2	5.15	5.4	5.4	5.40	6.6	6.3	6.45	6.3	6.2	6.25	6.2	6.3	6.25
29-Oct-09	4.9	4.9	4.90	4.7	4.6	4.65	5.0	4.8	4.90	5.1	5.0	5.05	4.8	4.8	4.80
31-Oct-09	4.1	4.5	4.30	3.8	3.9	3.85	4.4	4.0	4.20	4.8	4.7	4.75	5.8	6.1	5.95
2-Nov-09	6.0	5.8	5.90	6.6	6.4	6.50	6.1	5.5	5.80	4.2	4.1	4.15	3.8	3.9	3.85
4-Nov-09	4.0	3.9	3.95	6.2	6.0	6.10	6.6	6.2	6.40	4.9	5.4	5.15	5.4	5.0	5.20
6-Nov-09	3.6	3.7	3.65	4.5	4.4	4.45	4.1	4.3	4.20	7.4	7.7	7.55	4.0	4.0	4.00
10-Nov-09	4.0	3.8	3.90	4.4	4.2	4.30	5.1	4.8	4.95	4.4	4.4	4.40	5.0	4.8	4.90
12-Nov-09	3.2	3.1	3.15	2.8	2.7	2.75	2.8	3.0	2.90	4.9	4.7	4.80	4.3	4.3	4.30
14-Nov-09	4.0	3.7	3.85	4.7	4.9	4.80	4.8	4.7	4.75	6.7	6.4	6.55	5.3	5.2	5.25
16-Nov-09	8.4	8.9	8.65	8.9	8.8	8.85	8.8	9.0	8.90	9.3	9.4	9.35	8.9	8.6	8.75

Baseline Turbidity Monitoring Data (Oct - Nov 2009)

Mid-flood	C7			C8			C9			RC1			RC5		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	5.8	5.5	5.65	8.9	9.0	8.95	8.2	8.1	8.15	5.7	6.0	5.85	6.4	6.4	6.40
23-Oct-09	6.8	6.5	6.65	9.4	10.1	9.75	10.2	10.2	10.20	5.5	5.5	5.50	7.5	7.4	7.45
27-Oct-09	5.5	5.5	5.50	10.0	10.1	10.05	10.9	11.2	11.05	7.9	8.0	7.95	7.6	7.5	7.55
29-Oct-09	7.7	7.3	7.50	8.6	9.0	8.80	10.4	10.8	10.60	6.5	5.8	6.15	6.4	6.1	6.25
31-Oct-09	4.8	4.6	4.70	5.8	6.3	6.05	9.9	9.9	9.90	5.0	5.3	5.15	4.0	3.9	3.95
2-Nov-09	4.7	4.6	4.65	4.8	4.8	4.80	5.1	5.6	5.35	3.4	3.2	3.30	4.2	4.3	4.25
4-Nov-09	4.9	5.0	4.95	6.5	6.4	6.45	7.6	7.8	7.70	4.3	4.7	4.50	6.1	6.6	6.35
6-Nov-09	4.5	4.4	4.45	9.3	9.6	9.45	8.4	8.0	8.20	5.9	5.7	5.80	5.2	5.3	5.25
10-Nov-09	4.8	4.7	4.75	7.3	7.7	7.50	8.4	7.9	8.15	5.0	4.9	4.95	5.2	5.3	5.25
12-Nov-09	3.7	3.8	3.75	6.5	6.6	6.55	7.5	7.1	7.30	4.0	4.1	4.05	6.2	5.9	6.05
14-Nov-09	3.9	4.2	4.05	5.4	5.8	5.60	7.0	6.9	6.95	5.5	5.3	5.40	4.1	4.1	4.10
16-Nov-09	8.2	7.9	8.05	11.3	11.5	11.40	9.3	8.6	8.95	8.3	8.4	8.35	9.3	9.4	9.35

Mid-ebb	C7			C8			C9			RC1			RC5		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.8	4.5	4.65	6.6	6.8	6.70	9.7	9.5	9.60	5.0	4.9	4.95	6.1	6.1	6.10
23-Oct-09	3.8	4.0	3.90	7.0	7.2	7.10	8.6	8.7	8.65	4.7	4.6	4.65	4.2	4.2	4.20
27-Oct-09	5.6	5.6	5.60	7.4	7.4	7.40	8.1	8.0	8.05	5.1	5.3	5.20	5.9	5.9	5.90
29-Oct-09	4.3	4.3	4.30	6.0	6.2	6.10	6.4	6.2	6.30	6.2	6.2	6.20	5.0	4.9	4.95
31-Oct-09	4.0	3.7	3.85	5.3	4.9	5.10	5.6	6.2	5.90	4.4	4.3	4.35	3.9	4.4	4.15
2-Nov-09	2.9	2.6	2.75	6.6	6.0	6.30	6.5	6.5	6.50	4.4	4.3	4.35	4.6	5.6	5.10
4-Nov-09	2.8	2.9	2.85	5.8	5.8	5.80	8.0	7.6	7.80	3.9	4.1	4.00	4.8	4.5	4.65
6-Nov-09	3.4	3.3	3.35	4.5	4.4	4.45	5.2	5.5	5.35	4.3	4.3	4.30	4.9	4.7	4.80
10-Nov-09	4.8	4.3	4.55	5.1	5.1	5.10	5.2	5.2	5.20	4.4	4.3	4.35	3.7	3.8	3.75
12-Nov-09	2.7	2.6	2.65	6.3	6.7	6.50	5.9	5.9	5.90	2.5	2.5	2.50	3.7	4.0	3.85
14-Nov-09	3.6	3.6	3.60	5.6	5.8	5.70	5.8	6.1	5.95	4.3	4.2	4.25	4.5	4.4	4.45
16-Nov-09	8.2	7.9	8.05	9.9	9.9	9.90	8.1	8.5	8.30	9.7	9.4	9.55	8.4	8.4	8.40

Baseline Turbidity Monitoring Data (Oct - Nov 2009)

Mid-flood	RC7		
Date	Value	Value	Average
21-Oct-09	4.9	4.9	4.90
23-Oct-09	4.0	4.1	4.05
27-Oct-09	7.7	7.5	7.60
29-Oct-09	5.5	5.3	5.40
31-Oct-09	4.8	4.8	4.80
2-Nov-09	4.3	4.1	4.20
4-Nov-09	5.0	5.1	5.05
6-Nov-09	5.2	5.4	5.30
10-Nov-09	4.6	4.5	4.55
12-Nov-09	3.4	3.3	3.35
14-Nov-09	3.4	3.1	3.25
16-Nov-09	8.9	8.7	8.80

Mid-ebb	RC7		
Date	Value	Value	Average
21-Oct-09	5.5	5.7	5.60
23-Oct-09	4.4	4.3	4.35
27-Oct-09	9.3	8.0	8.65
29-Oct-09	5.0	4.5	4.75
31-Oct-09	4.3	4.2	4.25
2-Nov-09	4.5	4.2	4.35
4-Nov-09	5.4	4.9	5.15
6-Nov-09	4.9	4.5	4.70
10-Nov-09	6.1	6.8	6.45
12-Nov-09	3.5	3.5	3.50
14-Nov-09	4.2	4.4	4.30
16-Nov-09	8.9	8.9	8.90

Projected Turbidity Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	10.5	10.04	5.7	5.70	6.4	5.98	9.2	8.78	8.0	8.10	6.4	6.18	6.4	6.65	10.6	10.70
	9.6		5.7		5.5		8.4		8.2		6.0		6.9		10.8	
23-Oct-09	5.0	5.51	4.2	4.65	4.0	4.05	10.1	10.23	6.4	6.75	8.6	8.31	6.0	6.05	8.4	8.55
	6.0		5.1		4.1		10.3		7.1		8.0		6.1		8.7	
27-Oct-09	7.8	7.72	5.0	5.08	4.2	4.18	10.1	9.66	8.5	8.55	8.5	8.31	4.1	3.98	10.0	9.81
	7.6		5.2		4.1		9.2		8.6		8.1		3.8		9.6	
29-Oct-09	8.2	8.24	4.7	4.71	6.4	6.43	4.8	4.83	4.6	4.63	5.3	5.29	3.3	3.22	7.3	7.54
	8.2		4.7		6.4		4.8		4.6		5.3		3.2		7.7	
31-Oct-09	6.5	6.02	2.7	2.60	6.3	7.07	9.0	7.89	7.6	7.59	6.9	7.75	4.4	4.09	6.2	6.27
	5.6		2.5		7.8		6.8		7.6		8.6		3.8		6.3	
2-Nov-09	6.0	5.56	4.6	4.65	4.2	3.99	8.1	7.89	6.3	6.24	6.6	6.03	5.6	5.29	6.3	6.02
	5.1		4.7		3.7		7.7		6.2		5.4		5.0		5.7	
4-Nov-09	7.3	7.16	4.7	4.65	6.0	5.92	8.2	8.54	6.2	6.04	4.9	4.98	6.9	7.09	8.4	8.36
	7.0		4.6		5.8		8.9		5.9		5.0		7.3		8.4	
6-Nov-09	8.6	8.49	4.6	4.53	3.9	3.86	5.6	5.56	5.3	5.53	6.4	6.46	6.0	6.11	8.0	7.98
	8.3		4.5		3.9		5.5		5.8		6.5		6.2		8.0	
10-Nov-09	6.5	6.33	4.6	4.40	4.6	4.82	4.7	4.43	7.5	7.72	9.1	9.35	4.4	4.53	8.5	8.67
	6.2		4.2		5.0		4.2		8.0		9.6		4.7		8.9	
12-Nov-09	10.1	9.78	5.5	5.39	9.1	8.75	9.0	8.94	7.7	7.85	11.8	11.57	7.1	7.31	7.3	7.22
	9.5		5.3		8.4		8.9		8.0		11.3		7.5		7.1	
14-Nov-09	2.0	1.90	2.6	2.79	6.3	6.43	3.7	3.62	8.5	8.17	6.3	6.34	6.0	5.78	6.1	6.33
	1.9		3.0		6.6		3.5		7.8		6.4		5.6		6.6	
16-Nov-09	2.0	1.90	2.9	2.85	3.3	3.41	3.9	3.78	3.1	3.09	2.2	2.09	1.9	1.85	10.6	10.95
	1.9		2.9		3.5		3.7		3.1		2.0		1.9		11.3	

Mid-Ebb	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	5.7	5.66	7.8	8.18	6.7	6.43	11.8	11.92	10.0	9.84	10.8	10.58	7.3	7.20	7.9	7.85
	5.7		8.6		6.2		12.1		9.6		10.3		7.1		7.9	
23-Oct-09	6.4	6.13	5.3	5.64	5.5	5.27	5.0	4.91	6.9	6.30	6.5	6.15	4.6	4.58	7.0	7.16
	5.9		6.0		5.0		4.8		5.7		5.8		4.6		7.3	
27-Oct-09	6.9	6.64	2.9	2.98	4.8	4.63	5.2	5.31	4.4	4.44	4.6	4.31	3.4	3.44	7.6	7.60
	6.4		3.1		4.5		5.5		4.5		4.1		3.5		7.6	
29-Oct-09	4.4	4.38	4.1	4.22	6.3	6.30	5.3	5.48	5.9	5.92	6.2	6.09	3.2	3.11	6.2	6.33
	4.3		4.3		6.3		5.6		5.9		6.0		3.1		6.5	
31-Oct-09	3.8	4.02	4.2	4.40	7.8	8.04	6.1	4.59	5.0	4.76	4.7	4.74	5.1	5.78	5.7	5.57
	4.2		4.6		8.2		3.1		4.5		4.8		6.4		5.4	
2-Nov-09	6.5	6.28	4.5	4.53	4.6	4.69	5.8	5.88	5.9	5.34	6.0	6.34	3.8	3.82	6.1	6.02
	6.1		4.6		4.8		6.0		4.8		6.6		3.8		6.0	
4-Nov-09	3.3	3.35	3.6	3.47	3.5	3.54	9.8	9.58	4.5	4.44	3.9	4.06	4.1	4.04	7.6	7.41
	3.4		3.3		3.6		9.3		4.4		4.2		3.9		7.2	
6-Nov-09	3.9	3.86	3.8	3.72	4.2	4.12	9.2	9.10	5.9	5.79	8.6	8.18	5.8	5.56	7.0	6.84
	3.8		3.6		4.0		9.0		5.7		7.8		5.3		6.7	
10-Nov-09	3.9	3.86	6.4	6.51	3.5	3.54	3.9	3.78	5.3	5.40	5.2	5.29	3.3	3.38	5.6	5.64
	3.8		6.6		3.6		3.7		5.5		5.4		3.5		5.7	
12-Nov-09	5.3	5.25	5.5	5.52	7.8	7.85	8.9	9.02	9.4	9.58	4.9	5.05	3.8	3.87	6.0	5.76
	5.3		5.6		7.8		9.2		9.8		5.2		3.9		5.6	
14-Nov-09	2.3	2.16	3.0	2.98	5.7	5.40	2.6	2.42	3.7	3.86	2.6	2.65	2.6	2.45	6.5	6.40
	2.1		3.0		5.1		2.3		4.0		2.7		2.3		6.3	
16-Nov-09	2.2	2.16	3.0	2.91	3.6	3.54	4.7	4.51	3.6	3.41	3.1	3.14	2.1	2.07	10.9	10.83
	2.2		2.9		3.5		4.3		3.2		3.2		2.1		10.8	

Projected Turbidity Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	RW21		C1		C2		C3		C4		C5		C6		C7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	13.2	13.30	7.7	7.85	7.2	7.09	10.8	10.32	8.6	9.12	9.6	9.42	6.8	6.84	7.3	7.16
	13.4		8.0		7.0		9.9		9.6		9.3		6.8		7.0	
23-Oct-09	10.4	10.32	7.6	7.22	7.0	7.03	7.7	7.66	9.1	9.12	8.5	8.36	7.3	7.28	8.6	8.42
	10.3		6.8		7.1		7.6		9.1		8.2		7.2		8.2	
27-Oct-09	9.9	9.81	6.5	6.52	9.9	10.07	9.9	9.69	8.9	8.86	9.2	9.18	9.4	9.31	7.0	6.97
	9.8		6.6		10.3		9.5		8.9		9.1		9.2		7.0	
29-Oct-09	8.1	7.92	6.2	6.21	7.9	7.92	9.4	8.74	11.8	11.14	9.4	9.43	8.0	7.60	9.8	9.50
	7.7		6.2		8.0		8.1		10.5		9.5		7.2		9.2	
31-Oct-09	6.0	6.65	5.2	5.45	8.4	8.11	6.0	6.02	6.5	6.71	6.0	5.95	5.2	5.13	6.1	5.95
	7.3		5.7		7.9		6.1		7.0		6.0		5.1		5.8	
2-Nov-09	5.4	5.26	7.6	7.47	4.7	4.62	4.2	4.12	4.2	4.12	4.6	4.31	7.1	7.22	6.0	5.89
	5.1		7.3		4.6		4.1		4.1		4.1		7.3		5.8	
4-Nov-09	7.1	6.97	5.1	5.00	6.6	6.33	7.9	8.04	7.5	7.35	7.5	7.28	6.1	5.89	6.2	6.27
	6.8		4.9		6.1		8.2		7.2		7.1		5.7		6.3	
6-Nov-09	8.2	8.11	4.6	4.62	7.9	7.73	6.0	5.83	8.1	7.92	8.1	8.04	4.1	4.12	5.7	5.64
	8.0		4.7		7.6		5.7		7.7		8.0		4.2		5.6	
10-Nov-09	6.1	6.40	5.1	4.94	7.3	7.41	7.2	7.35	8.6	8.42	8.4	8.55	6.7	6.59	6.1	6.02
	6.7		4.8		7.5		7.5		8.2		8.7		6.5		6.0	
12-Nov-09	6.0	5.83	4.1	3.99	5.8	5.70	6.1	5.95	6.8	6.97	6.7	6.84	4.6	4.62	4.7	4.75
	5.7		3.9		5.6		5.8		7.1		7.0		4.7		4.8	
14-Nov-09	7.7	7.54	5.1	4.88	7.5	7.28	4.8	4.88	5.8	5.89	6.2	6.27	5.7	5.57	4.9	5.13
	7.3		4.7		7.1		4.9		6.0		6.3		5.4		5.3	
16-Nov-09	10.0	10.00	10.6	10.95	11.4	11.14	10.5	10.45	11.9	11.71	11.5	11.21	10.1	9.94	10.4	10.19
	10.0		11.3		10.9		10.4		11.5		10.9		9.8		10.0	

Mid-Ebb	RW21		C1		C2		C3		C4		C5		C6		C7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	8.4	8.36	6.5	6.65	7.7	7.85	6.6	6.65	8.6	8.61	9.8	9.88	7.0	6.78	6.1	5.89
	8.4		6.8		8.0		6.7		8.6		10.0		6.6		5.7	
23-Oct-09	6.2	6.27	7.0	7.16	7.6	7.22	8.9	8.61	6.8	6.84	6.7	6.84	7.1	7.09	4.8	4.94
	6.3		7.3		6.8		8.4		6.8		7.0		7.1		5.1	
27-Oct-09	7.5	7.47	10.6	10.57	6.5	6.52	6.8	6.84	8.4	8.17	8.0	7.92	7.9	7.92	7.1	7.09
	7.5		10.5		6.6		6.8		8.0		7.9		8.0		7.1	
29-Oct-09	6.1	6.08	7.6	7.73	6.2	6.21	6.0	5.89	6.3	6.21	6.5	6.40	6.1	6.08	5.4	5.45
	6.1		7.9		6.2		5.8		6.1		6.3		6.1		5.4	
31-Oct-09	5.8	5.79	6.2	6.08	5.2	5.45	4.8	4.88	5.6	5.32	6.1	6.02	7.3	7.54	5.1	4.88
	5.8		6.0		5.7		4.9		5.1		6.0		7.7		4.7	
2-Nov-09	3.9	3.86	5.7	5.26	7.6	7.47	8.4	8.23	7.7	7.35	5.3	5.26	4.8	4.88	3.7	3.48
	3.8		4.8		7.3		8.1		7.0		5.2		4.9		3.3	
4-Nov-09	6.6	6.55	5.8	5.95	5.1	5.00	7.9	7.73	8.4	8.11	6.2	6.52	6.8	6.59	3.5	3.61
	6.5		6.1		4.9		7.6		7.9		6.8		6.3		3.7	
6-Nov-09	5.3	5.41	6.1	6.02	4.6	4.62	5.7	5.64	5.2	5.32	9.4	9.56	5.1	5.07	4.3	4.24
	5.5		6.0		4.7		5.6		5.4		9.8		5.1		4.2	
10-Nov-09	4.8	4.94	5.8	5.76	5.1	4.94	5.6	5.45	6.5	6.27	5.6	5.57	6.3	6.21	6.1	5.76
	5.1		5.7		4.8		5.3		6.1		5.6		6.1		5.4	
12-Nov-09	5.8	5.76	5.8	5.70	4.1	3.99	3.5	3.48	3.5	3.67	6.2	6.08	5.4	5.45	3.4	3.36
	5.7		5.6		3.9		3.4		3.8		6.0		5.4		3.3	
14-Nov-09	8.1	8.01	5.6	5.38	5.1	4.88	6.0	6.08	6.1	6.02	8.5	8.29	6.7	6.65	4.6	4.56
	7.9		5.2		4.7		6.2		6.0		8.1		6.6		4.6	
16-Nov-09	11.4	11.37	11.7	11.40	10.6	10.95	11.3	11.21	11.1	11.27	11.8	11.84	11.3	11.08	10.4	10.19
	11.3		11.1		11.3		11.1		11.4		11.9		10.9		10.0	

Projected Turbidity Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	C8		C9		RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	11.0	11.10	10.2	10.11	7.2	7.41	8.1	8.11	6.2	6.21
	11.2		10.0		7.6		8.1		6.2	
23-Oct-09	11.7	12.09	12.6	12.65	7.0	6.97	9.5	9.43	5.1	5.13
	12.5		12.6		7.0		9.4		5.2	
27-Oct-09	12.4	12.46	13.5	13.70	10.0	10.07	9.6	9.56	9.8	9.62
	12.5		13.9		10.1		9.5		9.5	
29-Oct-09	10.7	10.91	12.9	13.14	8.2	7.79	8.1	7.92	7.0	6.84
	11.2		13.4		7.3		7.7		6.7	
31-Oct-09	7.2	7.50	12.3	12.28	6.3	6.52	5.1	5.00	6.1	6.08
	7.8		12.3		6.7		4.9		6.1	
2-Nov-09	6.0	5.95	6.3	6.63	4.3	4.18	5.3	5.38	5.4	5.32
	6.0		6.9		4.1		5.4		5.2	
4-Nov-09	8.1	8.00	9.4	9.55	5.4	5.70	7.7	8.04	6.3	6.40
	7.9		9.7		6.0		8.4		6.5	
6-Nov-09	11.5	11.72	10.4	10.17	7.5	7.35	6.6	6.65	6.6	6.71
	11.9		9.9		7.2		6.7		6.8	
10-Nov-09	9.1	9.30	10.4	10.11	6.3	6.27	6.6	6.65	5.8	5.76
	9.5		9.8		6.2		6.7		5.7	
12-Nov-09	8.1	8.12	9.3	9.05	5.1	5.13	7.9	7.66	4.3	4.24
	8.2		8.8		5.2		7.5		4.2	
14-Nov-09	6.7	6.94	8.7	8.62	7.0	6.84	5.2	5.19	4.3	4.12
	7.2		8.6		6.7		5.2		3.9	
16-Nov-09	14.0	14.14	11.5	11.10	10.5	10.57	11.8	11.84	11.3	11.14
	14.3		10.7		10.6		11.9		11.0	

Mid-Ebb	C8		C9		RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	8.2	8.31	12.0	11.90	6.3	6.27	7.7	7.73	7.0	7.09
	8.4		11.8		6.2		7.7		7.2	
23-Oct-09	8.7	8.80	10.7	10.73	6.0	5.89	5.3	5.32	5.6	5.51
	8.9		10.8		5.8		5.3		5.4	
27-Oct-09	9.2	9.18	10.0	9.98	6.5	6.59	7.5	7.47	11.8	10.95
	9.2		9.9		6.7		7.5		10.1	
29-Oct-09	7.4	7.56	7.9	7.81	7.9	7.85	6.3	6.27	6.3	6.02
	7.7		7.7		7.9		6.2		5.7	
31-Oct-09	6.6	6.32	6.9	7.32	5.6	5.51	4.9	5.26	5.4	5.38
	6.1		7.7		5.4		5.6		5.3	
2-Nov-09	8.2	7.81	8.1	8.06	5.6	5.51	5.8	6.46	5.7	5.51
	7.4		8.1		5.4		7.1		5.3	
4-Nov-09	7.2	7.19	9.9	9.67	4.9	5.07	6.1	5.89	6.8	6.52
	7.2		9.4		5.2		5.7		6.2	
6-Nov-09	5.6	5.52	6.4	6.63	5.4	5.45	6.2	6.08	6.2	5.95
	5.5		6.8		5.4		6.0		5.7	
10-Nov-09	6.3	6.32	6.4	6.45	5.6	5.51	4.7	4.75	7.7	8.17
	6.3		6.4		5.4		4.8		8.6	
12-Nov-09	7.8	8.06	7.3	7.32	3.2	3.17	4.7	4.88	4.4	4.43
	8.3		7.3		3.2		5.1		4.4	
14-Nov-09	6.9	7.07	7.2	7.38	5.4	5.38	5.7	5.64	5.3	5.45
	7.2		7.6		5.3		5.6		5.6	
16-Nov-09	12.3	12.28	10.0	10.29	12.3	12.09	10.6	10.64	11.3	11.27
	12.3		10.5		11.9		10.6		11.3	

Baseline DO Monitoring Data (Oct - Nov 2009)

Mid-flood	WSD7			WSD9			WSD10			WSD15			WSD17		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.40	4.40	4.40	4.70	4.82	4.76	5.14	5.10	5.12	5.14	5.17	5.16	5.38	5.20	5.29
23-Oct-09	4.91	4.38	4.65	4.27	4.40	4.34	4.51	4.47	4.49	4.68	4.60	4.64	4.88	4.86	4.87
27-Oct-09	4.20	4.23	4.22	4.96	4.91	4.94	4.68	4.65	4.67	4.44	4.38	4.41	4.92	4.66	4.79
29-Oct-09	4.76	4.63	4.70	4.90	4.89	4.90	6.07	6.01	6.04	4.48	4.37	4.43	4.60	4.52	4.56
31-Oct-09	4.51	4.62	4.57	5.10	5.04	5.07	4.93	4.86	4.90	4.88	4.79	4.84	4.75	4.80	4.78
2-Nov-09	5.14	5.16	5.15	5.26	5.31	5.29	5.42	5.55	5.49	5.68	5.70	5.69	5.85	5.34	5.60
4-Nov-09	6.23	6.12	6.18	6.44	6.34	6.39	6.48	6.46	6.47	6.59	6.45	6.52	6.53	6.62	6.58
6-Nov-09	5.50	5.43	5.47	5.34	5.30	5.32	5.59	5.58	5.59	5.63	5.65	5.64	5.63	5.61	5.62
10-Nov-09	5.18	5.17	5.18	4.67	4.61	4.64	5.13	5.08	5.11	4.89	4.91	4.90	5.21	5.12	5.17
12-Nov-09	3.38	3.63	3.51	3.32	3.41	3.37	3.49	3.68	3.59	3.30	3.63	3.47	3.91	4.06	3.99
14-Nov-09	6.82	6.76	6.79	8.25	8.33	8.29	7.98	8.32	8.15	8.52	8.62	8.57	8.40	8.43	8.42
16-Nov-09	7.45	7.38	7.42	8.58	8.55	8.57	7.48	7.47	7.48	7.43	7.42	7.43	8.90	8.29	8.60

Mid-ebb	WSD7			WSD9			WSD10			WSD15			WSD17		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.89	4.83	4.86	4.78	4.78	4.78	5.09	5.03	5.06	4.93	4.88	4.91	4.99	4.67	4.83
23-Oct-09	4.07	3.88	3.98	4.44	4.36	4.40	5.56	5.38	5.47	4.65	4.62	4.64	4.33	4.16	4.25
27-Oct-09	4.79	4.57	4.68	4.70	4.64	4.67	4.58	4.66	4.62	4.28	4.23	4.26	5.02	4.72	4.87
29-Oct-09	5.37	5.37	5.37	5.39	5.17	5.28	5.06	4.97	5.02	4.87	4.79	4.83	4.31	4.24	4.28
31-Oct-09	4.50	4.42	4.46	5.22	5.13	5.18	5.83	5.88	5.86	5.14	5.22	5.18	5.07	5.27	5.17
2-Nov-09	5.13	5.06	5.10	5.28	5.21	5.25	5.18	5.14	5.16	4.45	4.32	4.39	4.22	4.29	4.26
4-Nov-09	6.14	6.12	6.13	6.20	6.19	6.20	6.29	6.27	6.28	6.40	6.46	6.43	6.20	6.16	6.18
6-Nov-09	5.31	5.31	5.31	5.66	5.65	5.66	5.79	5.73	5.76	5.75	5.74	5.75	5.55	5.61	5.58
10-Nov-09	6.03	5.97	6.00	5.49	5.38	5.44	4.36	4.29	4.33	4.67	4.64	4.66	5.35	5.41	5.38
12-Nov-09	4.84	4.81	4.83	3.59	3.71	3.65	4.70	4.69	4.70	2.81	3.04	2.93	3.13	3.40	3.27
14-Nov-09	7.12	7.16	7.14	8.57	8.58	8.58	8.57	8.43	8.50	8.54	8.57	8.56	8.45	8.41	8.43
16-Nov-09	7.85	7.72	7.79	8.77	8.76	8.77	6.66	6.61	6.64	6.87	6.80	6.84	7.18	7.09	7.14

Baseline DO Monitoring Data (Oct - Nov 2009)

Mid-flood	WSD19			WSD20			WSD21			RW1			C1		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.36	4.45	4.41	5.31	4.78	5.05	4.49	4.49	4.49	4.74	4.66	4.70	4.75	4.52	4.64
23-Oct-09	3.71	3.60	3.66	4.78	4.58	4.68	3.92	3.86	3.89	4.35	4.35	4.35	4.62	4.48	4.55
27-Oct-09	3.94	3.83	3.89	3.82	3.88	3.85	4.45	4.34	4.40	4.35	4.32	4.34	4.64	4.64	4.64
29-Oct-09	4.99	4.92	4.96	4.59	4.55	4.57	4.66	4.61	4.64	4.75	4.71	4.73	4.84	4.82	4.83
31-Oct-09	4.33	4.31	4.32	4.04	4.11	4.08	4.89	4.87	4.88	5.22	5.20	5.21	4.82	4.81	4.82
2-Nov-09	5.57	5.40	5.49	5.30	5.35	5.33	4.90	4.55	4.73	5.28	4.66	4.97	4.80	4.78	4.79
4-Nov-09	6.38	6.31	6.35	6.48	6.41	6.45	4.82	4.76	4.79	4.79	4.96	4.88	4.53	4.60	4.57
6-Nov-09	5.17	5.11	5.14	5.79	5.78	5.79	4.73	4.67	4.70	4.56	4.55	4.56	4.69	4.61	4.65
10-Nov-09	5.54	5.52	5.53	5.38	5.32	5.35	4.50	4.45	4.48	4.59	4.55	4.57	4.68	4.66	4.67
12-Nov-09	3.30	3.42	3.36	3.18	3.51	3.35	3.93	3.86	3.90	4.11	4.05	4.08	3.69	3.64	3.67
14-Nov-09	8.03	7.74	7.89	7.98	7.99	7.99	3.53	3.48	3.51	4.32	4.13	4.23	4.43	4.47	4.45
16-Nov-09	7.36	7.19	7.28	8.55	8.50	8.53	4.66	4.32	4.49	4.58	4.47	4.53	5.33	5.43	5.38

Mid-ebb	WSD19			WSD20			WSD21			RW1			C1		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.70	4.93	4.82	4.80	4.80	4.80	4.84	4.84	4.84	4.56	4.48	4.52	4.55	4.44	4.50
23-Oct-09	4.04	4.25	4.15	4.52	4.48	4.50	3.67	3.65	3.66	4.93	4.55	4.74	4.38	4.38	4.38
27-Oct-09	4.92	4.99	4.96	4.92	5.05	4.99	4.60	4.41	4.51	4.66	4.46	4.56	4.81	4.64	4.73
29-Oct-09	4.71	4.63	4.67	5.10	5.02	5.06	4.81	4.71	4.76	4.83	4.78	4.81	4.66	4.54	4.60
31-Oct-09	4.07	4.14	4.11	4.69	4.43	4.56	5.22	4.98	5.10	5.06	4.86	4.96	5.20	5.17	5.19
2-Nov-09	4.28	4.43	4.36	4.86	4.94	4.90	4.90	4.79	4.85	5.50	5.62	5.56	4.99	4.82	4.91
4-Nov-09	6.58	6.55	6.57	6.66	6.53	6.60	4.52	4.44	4.48	4.63	4.52	4.58	5.65	5.60	5.63
6-Nov-09	5.78	5.76	5.77	5.93	5.92	5.93	3.96	3.90	3.93	4.01	3.99	4.00	4.79	4.75	4.77
10-Nov-09	5.95	5.93	5.94	5.74	5.67	5.71	4.65	4.55	4.60	4.67	4.62	4.65	4.50	4.38	4.44
12-Nov-09	2.96	3.02	2.99	3.67	3.76	3.72	3.75	3.73	3.74	3.85	3.78	3.82	3.96	3.91	3.94
14-Nov-09	8.39	8.23	8.31	7.91	7.84	7.88	4.62	4.52	4.57	4.63	4.57	4.60	4.55	4.32	4.44
16-Nov-09	8.33	8.20	8.27	8.76	8.70	8.73	6.67	6.49	6.58	6.33	6.22	6.28	4.02	4.05	4.04

Baseline DO Monitoring Data (Oct - Nov 2009)

Mid-flood	C2			C3			C4			C5			C6		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.52	4.46	4.49	4.46	4.39	4.43	4.46	4.29	4.38	4.55	4.48	4.52	3.51	3.44	3.48
23-Oct-09	4.23	3.96	4.10	4.22	4.09	4.16	4.22	4.01	4.12	4.88	4.32	4.60	2.83	2.63	2.73
27-Oct-09	4.39	4.25	4.32	4.42	4.36	4.39	4.55	4.45	4.50	4.46	4.36	4.41	3.56	3.29	3.43
29-Oct-09	4.69	4.60	4.65	4.60	4.61	4.61	4.58	4.51	4.55	4.70	4.60	4.65	3.73	3.29	3.51
31-Oct-09	4.87	4.83	4.85	5.05	5.02	5.04	5.12	4.99	5.06	5.03	4.92	4.98	4.03	3.92	3.98
2-Nov-09	4.69	4.59	4.64	5.07	4.85	4.96	4.71	4.66	4.69	5.31	4.65	4.98	3.85	3.76	3.81
4-Nov-09	5.36	5.01	5.19	5.34	5.31	5.33	5.24	5.20	5.22	4.83	4.73	4.78	3.85	3.74	3.80
6-Nov-09	4.70	4.60	4.65	4.61	4.58	4.60	4.58	4.54	4.56	4.74	4.66	4.70	3.46	3.34	3.40
10-Nov-09	4.53	4.44	4.49	4.44	4.45	4.45	4.42	4.35	4.39	4.54	4.44	4.49	3.57	3.13	3.35
12-Nov-09	3.84	3.78	3.81	3.97	3.95	3.96	3.87	3.81	3.84	3.87	3.81	3.84	2.76	2.70	2.73
14-Nov-09	4.47	4.44	4.46	4.27	4.18	4.23	3.97	3.95	3.96	3.81	3.67	3.74	3.16	3.19	3.18
16-Nov-09	3.99	3.91	3.95	4.32	4.25	4.29	4.34	4.26	4.30	4.43	4.33	4.38	3.15	3.20	3.18

Mid-ebb	C2			C3			C4			C5			C6		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.47	4.47	4.47	4.73	4.64	4.69	4.84	4.83	4.84	4.26	4.26	4.26	3.74	3.71	3.73
23-Oct-09	4.03	3.95	3.99	4.08	4.00	4.04	3.99	3.91	3.95	4.07	3.94	4.01	3.68	3.35	3.52
27-Oct-09	4.75	4.59	4.67	4.53	4.42	4.48	4.58	4.44	4.51	4.31	4.18	4.25	4.29	3.85	4.07
29-Oct-09	5.02	4.97	5.00	4.98	4.84	4.91	4.77	4.76	4.77	4.84	4.79	4.82	3.08	2.98	3.03
31-Oct-09	5.11	5.01	5.06	4.77	4.75	4.76	4.79	4.75	4.77	5.06	4.81	4.94	4.49	3.43	3.96
2-Nov-09	5.16	5.01	5.09	4.74	4.73	4.74	4.84	4.80	4.82	5.19	5.02	5.11	4.46	4.28	4.37
4-Nov-09	5.03	5.01	5.02	4.79	4.79	4.79	4.69	4.61	4.65	4.93	4.58	4.76	4.47	4.28	4.38
6-Nov-09	4.41	4.33	4.37	4.35	4.30	4.33	4.09	4.05	4.07	3.98	3.96	3.97	3.80	3.76	3.78
10-Nov-09	4.86	4.81	4.84	4.82	4.68	4.75	4.61	4.60	4.61	4.68	4.63	4.66	2.92	2.82	2.87
12-Nov-09	3.86	3.83	3.85	4.07	4.00	4.04	3.88	3.83	3.86	3.99	3.92	3.96	2.81	2.77	2.79
14-Nov-09	4.59	4.68	4.64	4.60	4.55	4.58	4.56	4.48	4.52	4.76	4.75	4.76	3.89	3.80	3.85
16-Nov-09	5.75	5.54	5.65	6.22	6.09	6.16	5.58	5.37	5.48	6.11	6.11	6.11	5.64	5.21	5.43

Baseline DO Monitoring Data (Oct - Nov 2009)

Mid-flood	C7			C8			C9			RC1			RC5		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	4.07	3.91	3.99	4.96	4.96	4.96	4.93	4.78	4.86	4.15	4.15	4.15	4.54	4.55	4.55
23-Oct-09	3.51	3.38	3.45	4.19	4.07	4.13	3.83	3.81	3.82	4.18	4.18	4.18	3.94	3.92	3.93
27-Oct-09	3.76	3.35	3.56	3.90	3.63	3.77	4.22	3.46	3.84	4.42	4.30	4.36	4.52	4.48	4.50
29-Oct-09	4.23	4.09	4.16	4.16	4.04	4.10	3.55	3.45	3.50	4.65	4.62	4.64	4.74	4.72	4.73
31-Oct-09	4.27	4.19	4.23	4.63	4.53	4.58	4.05	3.99	4.02	5.00	4.93	4.97	5.28	5.32	5.30
2-Nov-09	4.32	3.60	3.96	4.03	3.90	3.97	4.90	4.45	4.68	4.53	4.49	4.51	4.42	4.34	4.38
4-Nov-09	3.89	3.82	3.86	4.36	4.32	4.34	4.58	4.47	4.53	5.80	5.77	5.79	4.80	4.76	4.78
6-Nov-09	3.89	3.78	3.84	4.43	4.42	4.43	4.66	4.59	4.63	4.52	4.46	4.49	4.76	4.66	4.71
10-Nov-09	4.07	3.93	4.00	4.00	3.88	3.94	3.39	3.29	3.34	4.49	4.46	4.48	4.58	4.56	4.57
12-Nov-09	2.87	2.82	2.85	3.98	3.94	3.96	3.99	3.92	3.96	3.90	3.82	3.86	3.89	3.85	3.87
14-Nov-09	3.09	3.12	3.11	4.65	4.57	4.61	4.51	4.48	4.50	4.77	4.75	4.76	3.96	3.91	3.94
16-Nov-09	3.97	3.65	3.81	6.37	6.33	6.35	6.33	6.13	6.23	3.62	3.68	3.65	4.32	4.35	4.34

Mid-ebb	C7			C8			C9			RC1			RC5		
Date	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average
21-Oct-09	3.67	3.65	3.66	4.96	4.78	4.87	5.01	5.13	5.07	4.51	4.43	4.47	4.73	4.61	4.67
23-Oct-09	3.79	3.52	3.66	4.64	4.54	4.59	5.43	4.50	4.97	3.91	3.86	3.89	4.05	4.05	4.05
27-Oct-09	3.69	3.71	3.70	4.44	4.44	4.44	4.64	4.45	4.55	4.18	4.06	4.12	4.21	4.16	4.19
29-Oct-09	3.58	3.53	3.56	4.41	4.40	4.41	4.78	4.64	4.71	4.74	4.74	4.74	4.83	4.73	4.78
31-Oct-09	4.09	3.88	3.99	4.73	4.71	4.72	4.88	4.75	4.82	4.58	4.60	4.59	4.92	4.76	4.84
2-Nov-09	4.80	4.56	4.68	4.95	4.90	4.93	3.89	4.03	3.96	4.79	4.70	4.75	5.64	5.58	5.61
4-Nov-09	4.92	4.65	4.79	5.76	5.74	5.75	5.69	5.65	5.67	4.71	4.63	4.67	4.61	4.62	4.62
6-Nov-09	3.98	3.96	3.97	5.42	5.36	5.39	5.31	5.21	5.26	4.18	4.16	4.17	4.13	4.04	4.09
10-Nov-09	3.42	3.37	3.40	4.25	4.24	4.25	4.62	4.48	4.55	4.58	4.58	4.58	4.67	4.57	4.62
12-Nov-09	3.01	2.98	3.00	4.11	4.03	4.07	3.94	3.87	3.91	3.98	3.90	3.94	3.79	3.77	3.78
14-Nov-09	3.94	3.92	3.93	4.39	4.47	4.43	4.54	4.58	4.56	4.61	4.59	4.60	4.58	4.63	4.61
16-Nov-09	5.15	5.12	5.14	6.39	6.33	6.36	5.93	5.89	5.91	5.86	5.93	5.90	6.91	6.66	6.79

Baseline DO Monitoring Data (Oct - Nov 2009)

Mid-flood	RC7		
Date	Value	Value	Average
21-Oct-09	3.53	3.53	3.53
23-Oct-09	3.57	3.17	3.37
27-Oct-09	5.06	3.67	4.37
29-Oct-09	4.16	4.02	4.09
31-Oct-09	4.27	4.14	4.21
2-Nov-09	4.04	3.73	3.89
4-Nov-09	3.88	3.66	3.77
6-Nov-09	3.60	3.51	3.56
10-Nov-09	4.00	3.86	3.93
12-Nov-09	1.71	1.67	1.69
14-Nov-09	2.16	2.12	2.14
16-Nov-09	4.32	4.32	4.32

Mid-ebb	RC7		
Date	Value	Value	Average
21-Oct-09	3.69	3.71	3.70
23-Oct-09	4.17	3.81	3.99
27-Oct-09	4.57	4.07	4.32
29-Oct-09	4.09	3.67	3.88
31-Oct-09	4.16	4.00	4.08
2-Nov-09	4.78	4.54	4.66
4-Nov-09	5.04	4.91	4.98
6-Nov-09	3.94	3.88	3.91
10-Nov-09	3.93	3.51	3.72
12-Nov-09	2.73	2.70	2.72
14-Nov-09	3.58	3.62	3.60
16-Nov-09	5.53	5.53	5.53

Projected DO Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	4.01	4.01	4.26	4.31	4.50	4.48	3.80	3.81	4.71	4.63	3.97	4.01	4.53	4.30	4.01	4.01
	4.01		4.37		4.47		3.82		4.55		4.05		4.07		4.01	
23-Oct-09	4.47	4.23	3.87	3.93	3.95	3.93	3.46	3.43	4.27	4.27	3.22	3.17	4.07	3.99	3.51	3.48
	3.99		3.99		3.91		3.40		4.26		3.13		3.90		3.45	
27-Oct-09	3.82	3.84	4.50	4.47	4.10	4.09	3.28	3.26	4.31	4.19	3.42	3.37	3.26	3.28	3.98	3.93
	3.85		4.45		4.07		3.23		4.08		3.33		3.31		3.88	
29-Oct-09	4.33	4.27	4.44	4.44	5.32	5.29	3.31	3.27	4.03	3.99	4.33	4.30	3.91	3.89	4.17	4.14
	4.21		4.43		5.26		3.23		3.96		4.27		3.88		4.12	
31-Oct-09	4.11	4.16	4.62	4.60	4.32	4.29	3.60	3.57	4.16	4.18	3.76	3.75	3.44	3.47	4.37	4.36
	4.21		4.57		4.26		3.54		4.20		3.74		3.50		4.35	
2-Nov-09	4.68	4.69	4.77	4.79	4.75	4.80	4.19	4.20	5.12	4.90	4.84	4.76	4.52	4.54	4.38	4.22
	4.70		4.81		4.86		4.21		4.68		4.69		4.56		4.07	
4-Nov-09	5.67	5.62	5.84	5.79	5.68	5.67	4.87	4.81	5.72	5.76	5.54	5.51	5.52	5.49	4.31	4.28
	5.57		5.75		5.66		4.76		5.80		5.48		5.46		4.26	
6-Nov-09	5.01	4.97	4.84	4.82	4.90	4.89	4.16	4.16	4.93	4.92	4.49	4.46	4.93	4.93	4.23	4.20
	4.94		4.80		4.89		4.17		4.91		4.44		4.93		4.18	
10-Nov-09	4.72	4.71	4.23	4.21	4.49	4.47	3.61	3.62	4.56	4.52	4.81	4.80	4.59	4.56	4.02	4.00
	4.71		4.18		4.45		3.63		4.48		4.79		4.53		3.98	
12-Nov-09	3.08	3.19	3.01	3.05	3.06	3.14	2.44	2.56	3.42	3.49	2.87	2.92	2.71	2.85	3.51	3.48
	3.30		3.09		3.22		2.68		3.56		2.97		2.99		3.45	
14-Nov-09	6.21	6.18	7.48	7.51	6.99	7.14	6.29	6.33	7.36	7.37	6.97	6.85	6.80	6.81	3.16	3.13
	6.15		7.55		7.29		6.37		7.38		6.72		6.81		3.11	
16-Nov-09	6.78	6.75	7.78	7.76	6.55	6.55	5.49	5.48	7.79	7.53	6.39	6.32	7.29	7.27	4.17	4.01
	6.72		7.75		6.54		5.48		7.26		6.24		7.24		3.86	

Mid-Ebb	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	4.45	4.42	4.33	4.33	4.46	4.43	3.64	3.62	4.37	4.23	4.08	4.18	4.09	4.09	4.33	4.33
	4.40		4.33		4.41		3.60		4.09		4.28		4.09		4.33	
23-Oct-09	3.70	3.62	4.02	3.99	4.87	4.79	3.43	3.42	3.79	3.72	3.51	3.60	3.85	3.84	3.28	3.27
	3.53		3.95		4.71		3.41		3.64		3.69		3.82		3.26	
27-Oct-09	4.36	4.26	4.26	4.23	4.01	4.05	3.16	3.14	4.40	4.27	4.27	4.30	4.19	4.25	4.11	4.03
	4.16		4.21		4.08		3.12		4.13		4.33		4.30		3.94	
29-Oct-09	4.89	4.89	4.89	4.79	4.43	4.39	3.60	3.57	3.77	3.74	4.09	4.06	4.35	4.31	4.30	4.26
	4.89		4.69		4.35		3.54		3.71		4.02		4.28		4.21	
31-Oct-09	4.10	4.06	4.73	4.69	5.11	5.13	3.80	3.83	4.44	4.53	3.53	3.57	4.00	3.89	4.67	4.56
	4.02		4.65		5.15		3.85		4.62		3.60		3.78		4.45	
2-Nov-09	4.67	4.64	4.79	4.75	4.54	4.52	3.29	3.24	3.70	3.73	3.72	3.78	4.14	4.18	4.38	4.33
	4.61		4.72		4.50		3.19		3.76		3.85		4.21		4.28	
4-Nov-09	5.59	5.58	5.62	5.62	5.51	5.50	4.73	4.75	5.43	5.41	5.71	5.70	5.68	5.62	4.04	4.01
	5.57		5.61		5.49		4.77		5.39		5.69		5.57		3.97	
6-Nov-09	4.83	4.83	5.13	5.13	5.07	5.04	4.25	4.24	4.86	4.89	5.02	5.01	5.05	5.05	3.54	3.51
	4.83		5.12		5.02		4.24		4.91		5.00		5.05		3.49	
10-Nov-09	5.49	5.46	4.98	4.93	3.82	3.79	3.45	3.44	4.69	4.71	5.17	5.16	4.89	4.86	4.16	4.11
	5.43		4.88		3.76		3.43		4.74		5.15		4.83		4.07	
12-Nov-09	4.41	4.39	3.25	3.31	4.12	4.11	2.07	2.16	2.74	2.86	2.57	2.60	3.13	3.17	3.35	3.34
	4.38		3.36		4.11		2.24		2.98		2.62		3.20		3.34	
14-Nov-09	6.48	6.50	7.77	7.77	7.51	7.44	6.31	6.32	7.40	7.38	7.29	7.22	6.74	6.71	4.13	4.09
	6.52		7.78		7.38		6.33		7.37		7.15		6.68		4.04	
16-Nov-09	7.15	7.09	7.95	7.94	5.83	5.81	5.07	5.05	6.29	6.25	7.23	7.18	7.47	7.44	5.96	5.88
	7.03		7.94		5.79		5.02		6.21		7.12		7.41		5.80	

Projected DO Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	RW21		C1		C2		C3		C4		C5		C6		C7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	4.24	4.20	4.25	4.14	4.04	4.01	3.99	3.96	3.99	3.91	4.14	4.11	3.14	3.11	3.64	3.57
	4.17		4.04		3.99		3.93		3.84		4.08		3.08		3.50	
23-Oct-09	3.89	3.89	4.13	4.07	3.78	3.66	3.77	3.72	3.77	3.68	4.36	4.11	2.53	2.44	3.14	3.08
	3.89		4.01		3.54		3.66		3.59		3.86		2.35		3.02	
27-Oct-09	3.89	3.88	4.15	4.15	3.93	3.86	3.95	3.93	4.07	4.02	3.99	3.94	3.18	3.06	3.36	3.18
	3.86		4.15		3.80		3.90		3.98		3.90		2.94		3.00	
29-Oct-09	4.25	4.23	4.33	4.32	4.19	4.15	4.11	4.12	4.10	4.06	4.20	4.16	3.34	3.14	3.78	3.72
	4.21		4.31		4.11		4.12		4.03		4.11		2.94		3.66	
31-Oct-09	4.67	4.66	4.31	4.31	4.35	4.34	4.52	4.50	4.58	4.52	4.50	4.45	3.60	3.55	3.82	3.78
	4.65		4.30		4.32		4.49		4.46		4.40		3.51		3.75	
2-Nov-09	4.72	4.44	4.29	4.28	4.19	4.15	4.53	4.44	4.21	4.19	4.75	4.45	3.44	3.40	3.86	3.54
	4.17		4.27		4.10		4.34		4.17		4.16		3.36		3.22	
4-Nov-09	4.28	4.36	4.05	4.08	4.79	4.64	4.77	4.76	4.69	4.67	4.32	4.27	3.44	3.39	3.48	3.45
	4.44		4.11		4.48		4.75		4.65		4.23		3.34		3.42	
6-Nov-09	4.08	4.07	4.19	4.16	4.20	4.16	4.12	4.11	4.10	4.08	4.24	4.20	3.09	3.04	3.48	3.43
	4.07		4.12		4.11		4.10		4.06		4.17		2.99		3.38	
10-Nov-09	4.10	4.09	4.18	4.18	4.05	4.01	3.97	3.97	3.95	3.92	4.06	4.01	3.19	3.00	3.64	3.58
	4.07		4.17		3.97		3.98		3.89		3.97		2.80		3.51	
12-Nov-09	3.67	3.65	3.30	3.28	3.43	3.41	3.55	3.54	3.46	3.43	3.46	3.43	2.47	2.44	2.57	2.54
	3.62		3.25		3.38		3.53		3.41		3.41		2.41		2.52	
14-Nov-09	3.86	3.78	3.96	3.98	4.00	3.98	3.82	3.78	3.55	3.54	3.41	3.34	2.83	2.84	2.76	2.78
	3.69		4.00		3.97		3.74		3.53		3.28		2.85		2.79	
16-Nov-09	4.10	4.05	4.77	4.81	3.57	3.53	3.86	3.83	3.88	3.84	3.96	3.92	2.82	2.84	3.55	3.41
	4.00		4.86		3.50		3.80		3.81		3.87		2.86		3.26	

Mid-Ebb	RW21		C1		C2		C3		C4		C5		C6		C7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	4.08	4.06	4.07	4.02	4.00	4.00	4.23	4.19	4.33	4.32	3.81	3.81	3.34	3.33	3.28	3.27
	4.04		3.97		4.00		4.15		4.32		3.81		3.32		3.26	
23-Oct-09	4.41	4.32	3.92	3.92	3.60	3.57	3.65	3.61	3.57	3.53	3.64	3.58	3.29	3.14	3.39	3.27
	4.24		3.92		3.53		3.58		3.50		3.52		3.00		3.15	
27-Oct-09	4.17	4.12	4.30	4.22	4.25	4.18	4.05	4.00	4.10	4.03	3.85	3.80	3.84	3.64	3.30	3.31
	4.08		4.15		4.10		3.95		3.97		3.74		3.44		3.32	
29-Oct-09	4.32	4.31	4.17	4.11	4.49	4.47	4.45	4.39	4.27	4.26	4.33	4.31	2.75	2.71	3.20	3.18
	4.30		4.06		4.44		4.33		4.26		4.28		2.66		3.16	
31-Oct-09	4.52	4.48	4.65	4.64	4.57	4.52	4.27	4.26	4.28	4.27	4.52	4.41	4.01	3.54	3.66	3.56
	4.44		4.62		4.48		4.25		4.25		4.30		3.07		3.47	
2-Nov-09	4.92	4.94	4.46	4.39	4.61	4.55	4.24	4.23	4.33	4.31	4.64	4.56	3.99	3.91	4.29	4.18
	4.97		4.31		4.48		4.23		4.29		4.49		3.83		4.08	
4-Nov-09	4.14	4.12	5.05	5.03	4.50	4.49	4.28	4.28	4.19	4.16	4.41	4.25	4.00	3.91	4.40	4.28
	4.10		5.01		4.48		4.28		4.12		4.10		3.83		4.16	
6-Nov-09	3.59	3.58	4.28	4.27	3.94	3.91	3.89	3.87	3.66	3.64	3.56	3.55	3.40	3.38	3.56	3.55
	3.58		4.25		3.87		3.84		3.62		3.54		3.36		3.54	
10-Nov-09	4.18	4.17	4.02	3.97	4.35	4.32	4.31	4.25	4.12	4.12	4.18	4.16	2.61	2.57	3.06	3.04
	4.16		3.92		4.30		4.18		4.11		4.14		2.52		3.01	
12-Nov-09	3.44	3.43	3.54	3.52	3.45	3.44	3.64	3.61	3.47	3.45	3.57	3.54	2.51	2.49	2.69	2.68
	3.42		3.50		3.42		3.58		3.42		3.51		2.48		2.66	
14-Nov-09	4.14	4.13	4.07	3.97	4.10	4.14	4.11	4.09	4.08	4.04	4.26	4.25	3.48	3.44	3.52	3.51
	4.11		3.86		4.18		4.07		4.01		4.25		3.40		3.51	
16-Nov-09	5.66	5.64	3.59	3.61	5.14	5.05	5.56	5.50	4.99	4.90	5.46	5.46	5.04	4.85	4.60	4.59
	5.62		3.62		4.95		5.45		4.80		5.46		4.66		4.58	

Projected DO Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	C8		C9		RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	4.50	4.50	4.47	4.40	3.71	3.71	4.06	4.06	3.16	3.16
	4.50		4.33		3.71		4.07		3.16	
23-Oct-09	3.80	3.74	3.47	3.46	3.74	3.74	3.52	3.51	3.19	3.01
	3.69		3.45		3.74		3.51		2.83	
27-Oct-09	3.53	3.41	3.83	3.48	3.95	3.90	4.04	4.02	4.52	3.90
	3.29		3.14		3.84		4.01		3.28	
29-Oct-09	3.77	3.72	3.22	3.17	4.16	4.14	4.24	4.23	3.72	3.66
	3.66		3.13		4.13		4.22		3.59	
31-Oct-09	4.20	4.15	3.67	3.64	4.47	4.44	4.72	4.74	3.82	3.76
	4.11		3.62		4.41		4.76		3.70	
2-Nov-09	3.65	3.59	4.44	4.24	4.05	4.03	3.95	3.92	3.61	3.47
	3.53		4.03		4.01		3.88		3.34	
4-Nov-09	3.95	3.93	4.15	4.10	5.19	5.17	4.29	4.27	3.47	3.37
	3.92		4.05		5.16		4.26		3.27	
6-Nov-09	4.02	4.01	4.22	4.19	4.04	4.01	4.26	4.21	3.22	3.18
	4.01		4.16		3.99		4.17		3.14	
10-Nov-09	3.63	3.57	3.07	3.03	4.01	4.00	4.10	4.09	3.58	3.51
	3.52		2.98		3.99		4.08		3.45	
12-Nov-09	3.61	3.59	3.62	3.58	3.49	3.45	3.48	3.46	1.53	1.51
	3.57		3.55		3.42		3.44		1.49	
14-Nov-09	4.21	4.18	4.09	4.07	4.27	4.26	3.54	3.52	1.93	1.91
	4.14		4.06		4.25		3.50		1.90	
16-Nov-09	5.77	5.76	5.74	5.65	3.24	3.26	3.86	3.88	3.86	3.86
	5.74		5.56		3.29		3.89		3.86	

Mid-Ebb	C8		C9		RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	4.50	4.41	4.54	4.60	4.03	4.00	4.23	4.18	3.30	3.31
	4.33		4.65		3.96		4.12		3.32	
23-Oct-09	4.21	4.16	4.92	4.50	3.50	3.47	3.62	3.62	3.73	3.57
	4.12		4.08		3.45		3.62		3.41	
27-Oct-09	4.02	4.02	4.21	4.12	3.74	3.68	3.76	3.74	4.09	3.86
	4.02		4.03		3.63		3.72		3.64	
29-Oct-09	4.00	3.99	4.33	4.27	4.24	4.24	4.32	4.27	3.66	3.47
	3.99		4.21		4.24		4.23		3.28	
31-Oct-09	4.29	4.28	4.42	4.36	4.10	4.10	4.40	4.33	3.72	3.65
	4.27		4.31		4.11		4.26		3.58	
2-Nov-09	4.49	4.46	3.53	3.59	4.28	4.24	5.04	5.02	4.27	4.17
	4.44		3.65		4.20		4.99		4.06	
4-Nov-09	5.22	5.21	5.16	5.14	4.21	4.18	4.12	4.13	4.51	4.45
	5.20		5.12		4.14		4.13		4.39	
6-Nov-09	4.91	4.89	4.81	4.77	3.74	3.73	3.69	3.65	3.52	3.50
	4.86		4.72		3.72		3.61		3.47	
10-Nov-09	3.85	3.85	4.19	4.12	4.10	4.10	4.18	4.13	3.51	3.33
	3.84		4.06		4.10		4.09		3.14	
12-Nov-09	3.73	3.69	3.57	3.54	3.56	3.52	3.39	3.38	2.44	2.43
	3.65		3.51		3.49		3.37		2.41	
14-Nov-09	3.98	4.02	4.12	4.13	4.12	4.11	4.10	4.12	3.20	3.22
	4.05		4.15		4.10		4.14		3.24	
16-Nov-09	5.79	5.76	5.37	5.36	5.24	5.27	6.18	6.07	4.94	4.94
	5.74		5.34		5.30		5.96		4.94	

Baseline SS Monitoring Data (Oct - Nov 2009)

Mid-flood	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21		RW1	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	11.0	11.5	11.0	10.5	9.0	8.5	7.0	7.5	10.0	10.0	9.0	9.5	11.0	11.5	14.0	14.0	10.0	9.0
	12.0		10.0		8.0		8.0		10.0		10.0		12.0		14.0		8.0	
23-Oct-09	10.0	11.5	6.0	6.0	8.0	7.0	11.0	10.5	9.0	9.5	11.0	11.0	13.0	13.0	14.0	13.0	14.0	13.5
	13.0		6.0		6.0		10.0		10.0		11.0		13.0		12.0		13.0	
27-Oct-09	12.0	12.5	10.0	10.5	9.0	8.5	10.0	10.0	11.0	10.5	12.0	11.0	8.0	8.0	10.0	10.0	10.0	11.0
	13.0		11.0		8.0		10.0		10.0		10.0		8.0		10.0		12.0	
29-Oct-09	14.0	14.0	8.0	8.5	8.0	7.5	9.0	9.0	7.0	7.0	7.0	7.5	7.0	6.5	13.0	12.0	12.0	12.0
	14.0		9.0		7.0		9.0		7.0		8.0		6.0		11.0		12.0	
31-Oct-09	13.0	12.0	8.0	7.0	7.0	7.5	8.0	8.0	12.0	11.0	11.0	12.0	8.0	8.0	11.0	10.0	9.0	9.0
	11.0		6.0		8.0		8.0		10.0		13.0		8.0		9.0		9.0	
2-Nov-09	13.0	12.5	10.0	9.5	11.0	10.0	9.0	8.5	8.0	8.5	11.0	10.0	9.0	10.0	8.0	7.5	9.0	9.0
	12.0		9.0		9.0		8.0		9.0		9.0		11.0		7.0		9.0	
4-Nov-09	12.0	13.0	9.0	8.5	8.0	9.0	10.0	11.0	9.0	8.5	8.0	8.5	10.0	11.5	13.0	12.5	9.0	10.0
	14.0		8.0		10.0		12.0		8.0		9.0		13.0		12.0		11.0	
6-Nov-09	18.0	18.5	8.0	8.0	7.0	8.0	8.0	9.0	9.0	10.0	8.0	9.0	11.0	11.5	10.0	9.5	12.0	12.0
	19.0		8.0		9.0		10.0		11.0		10.0		12.0		9.0		12.0	
10-Nov-09	12.0	13.0	10.0	11.0	13.0	12.5	6.0	6.5	13.0	12.5	14.0	14.5	7.0	8.0	10.0	10.5	10.0	11.0
	14.0		12.0		12.0		7.0		12.0		15.0		9.0		11.0		12.0	
12-Nov-09	11.0	11.0	7.0	8.0	5.0	4.5	8.0	7.5	14.0	13.5	12.0	11.5	6.0	6.5	10.0	9.5	9.0	9.0
	11.0		9.0		4.0		7.0		13.0		11.0		7.0		9.0		9.0	
14-Nov-09	9.0	8.0	7.0	6.0	10.0	9.5	9.0	8.5	8.0	8.0	12.0	11.5	10.0	10.0	11.0	10.5	7.0	7.5
	7.0		5.0		9.0		8.0		8.0		11.0		10.0		10.0		8.0	
16-Nov-09	8.0	9.0	6.0	6.5	4.0	4.5	6.0	7.0	6.0	6.0	6.0	6.0	6.0	7.0	6.0	5.0	6.0	6.5
	10.0		7.0		5.0		8.0		6.0		6.0		8.0		4.0		7.0	

Mid-Ebb	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21		RW1	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	9.0	8.5	7.0	7.0	8.0	7.5	6.0	6.5	16.0	15.5	14.0	13.0	9.0	10.0	9.0	9.5	9.0	9.5
	8.0		7.0		7.0		7.0		15.0		12.0		11.0		10.0		10.0	
23-Oct-09	8.0	8.0	8.0	8.0	8.0	7.0	6.0	5.5	9.0	8.5	10.0	9.5	5.0	6.0	11.0	10.5	10.0	11.0
	8.0		8.0		6.0		5.0		8.0		9.0		7.0		10.0		12.0	
27-Oct-09	10.0	9.5	6.0	5.0	9.0	8.0	7.0	7.5	8.0	7.5	7.0	6.5	7.0	7.5	7.0	8.0	9.0	8.5
	9.0		4.0		7.0		8.0		7.0		6.0		8.0		9.0		8.0	
29-Oct-09	12.0	11.5	8.0	8.0	8.0	8.0	8.0	8.5	8.0	8.5	8.0	9.0	9.0	8.5	8.0	9.0	9.0	9.0
	11.0		8.0		8.0		9.0		9.0		10.0		8.0		10.0		9.0	
31-Oct-09	10.0	9.0	8.0	7.0	9.0	10.0	7.0	6.0	9.0	9.5	9.0	9.0	11.0	11.0	11.0	10.5	10.0	10.0
	8.0		6.0		11.0		5.0		10.0		9.0		11.0		10.0		10.0	
2-Nov-09	12.0	11.5	7.0	8.0	6.0	6.5	12.0	11.0	12.0	12.0	9.0	8.5	8.0	7.5	10.0	10.5	8.0	8.5
	11.0		9.0		7.0		10.0		12.0		8.0		7.0		11.0		9.0	
4-Nov-09	7.0	8.0	7.0	6.5	6.0	7.0	11.0	12.5	5.0	6.0	9.0	8.5	7.0	8.0	10.0	10.5	10.0	9.5
	9.0		6.0		8.0		14.0		7.0		8.0		9.0		11.0		9.0	
6-Nov-09	11.0	10.0	6.0	6.5	7.0	6.5	11.0	10.0	10.0	9.0	10.0	9.0	8.0	9.0	9.0	8.5	11.0	10.0
	9.0		7.0		6.0		9.0		8.0		8.0		10.0		8.0		9.0	
10-Nov-09	8.0	9.0	9.0	9.0	8.0	7.0	6.0	7.0	9.0	8.5	5.0	5.5	7.0	7.0	8.0	8.0	9.0	8.0
	10.0		9.0		6.0		8.0		8.0		6.0		7.0		8.0		7.0	
12-Nov-09	8.0	7.5	6.0	5.5	5.0	5.5	10.0	9.0	9.0	9.0	9.0	9.5	5.0	5.5	11.0	10.5	10.0	10.5
	7.0		5.0		6.0		8.0		9.0		10.0		6.0		10.0		11.0	
14-Nov-09	6.0	6.0	7.0	6.5	8.0	7.5	8.0	8.0	8.0	8.5	9.0	8.0	7.0	7.0	10.0	11.0	11.0	10.5
	6.0		6.0		7.0		8.0		9.0		7.0		7.0		12.0		10.0	
16-Nov-09	7.0	6.5	8.0	8.0	4.0	5.0	6.0	7.0	11.0	9.5	4.0	4.0	8.0	8.5	8.0	8.0	10.0	9.0
	6.0		8.0		6.0		8.0		8.0		4.0		9.0		8.0		8.0	

Baseline SS Monitoring Data (Oct - Nov 2009)

Mid-flood	C1		C2		C3		C4		C5		C6		C7		C8		C9	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	8.0	8.0	9.0	8.5	9.0	9.5	11.0	11.5	14.0	14.5	6.0	6.5	6.0	6.5	12.0	11.0	11.0	11.0
	8.0		8.0		10.0		12.0		15.0		7.0		7.0		10.0		11.0	
23-Oct-09	12.0	11.5	12.0	12.5	14.0	12.5	14.0	14.0	15.0	14.0	10.0	9.0	11.0	12.0	21.0	19.5	23.0	21.5
	11.0		13.0		11.0		14.0		13.0		8.0		13.0		18.0		20.0	
27-Oct-09	13.0	12.5	8.0	9.0	9.0	8.0	11.0	10.0	11.0	11.5	10.0	10.5	10.0	9.0	15.0	14.0	23.0	23.0
	12.0		10.0		7.0		9.0		12.0		11.0		8.0		13.0		23.0	
29-Oct-09	18.0	18.5	10.0	11.0	11.0	11.0	15.0	14.5	11.0	11.5	10.0	9.5	12.0	11.5	16.0	16.0	23.0	23.5
	19.0		12.0		11.0		14.0		12.0		9.0		11.0		16.0		24.0	
31-Oct-09	11.0	10.5	10.0	10.0	15.0	15.0	10.0	9.5	9.0	9.5	8.0	7.0	6.0	7.0	14.0	13.5	19.0	18.5
	10.0		10.0		15.0		9.0		10.0		6.0		8.0		13.0		18.0	
2-Nov-09	9.0	9.0	8.0	8.0	8.0	8.5	7.0	7.0	5.0	5.5	8.0	9.0	9.0	9.0	10.0	10.0	10.0	10.5
	9.0		8.0		9.0		7.0		6.0		10.0		9.0		10.0		11.0	
4-Nov-09	10.0	11.5	9.0	9.5	10.0	10.0	9.0	9.5	10.0	10.5	4.0	5.0	8.0	8.0	13.0	12.5	14.0	14.0
	13.0		10.0		10.0		10.0		11.0		6.0		8.0		12.0		14.0	
6-Nov-09	13.0	12.0	9.0	8.5	14.0	13.0	14.0	13.5	16.0	15.0	10.0	9.5	9.0	9.0	19.0	17.5	12.0	12.0
	11.0		8.0		12.0		13.0		14.0		9.0		9.0		16.0		12.0	
10-Nov-09	9.0	8.5	11.0	10.5	12.0	11.5	10.0	10.5	10.0	10.0	7.0	7.0	8.0	7.0	14.0	12.5	13.0	13.0
	8.0		10.0		11.0		11.0		10.0		7.0		6.0		11.0		13.0	
12-Nov-09	10.0	10.0	10.0	10.0	10.0	10.0	11.0	11.0	10.0	9.5	10.0	11.0	8.0	9.0	24.0	22.0	18.0	18.5
	10.0		10.0		10.0		11.0		9.0		12.0		10.0		20.0		19.0	
14-Nov-09	6.0	7.0	9.0	10.0	12.0	11.0	12.0	13.0	16.0	14.5	8.0	7.5	7.0	7.0	14.0	14.5	16.0	15.0
	8.0		11.0		10.0		14.0		13.0		7.0		7.0		15.0		14.0	
16-Nov-09	5.0	5.5	8.0	7.0	6.0	6.5	12.0	11.0	6.0	6.0	6.0	7.0	9.0	9.0	7.0	6.0	6.0	6.0
	6.0		6.0		7.0		10.0		6.0		8.0		9.0		5.0		6.0	

Mid-Ebb	C1		C2		C3		C4		C5		C6		C7		C8		C9	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	10.0	10.5	8.0	7.0	8.0	7.0	11.0	11.5	10.0	10.5	7.0	7.5	5.0	5.5	10.0	11.0	20.0	18.5
	11.0		6.0		6.0		12.0		11.0		8.0		6.0		12.0		17.0	
23-Oct-09	6.0	5.5	14.0	14.5	10.0	10.0	9.0	9.5	11.0	12.0	10.0	9.0	8.0	7.0	13.0	12.5	10.0	11.5
	5.0		15.0		10.0		10.0		13.0		8.0		6.0		12.0		13.0	
27-Oct-09	4.0	4.5	7.0	6.0	6.0	5.0	8.0	8.0	8.0	8.0	7.0	7.0	5.0	5.0	9.0	9.0	10.0	10.0
	5.0		5.0		4.0		8.0		8.0		7.0		5.0		9.0		10.0	
29-Oct-09	9.0	9.5	10.0	9.0	11.0	10.5	7.0	6.5	9.0	10.0	9.0	8.5	8.0	7.5	12.0	12.0	13.0	13.0
	10.0		8.0		10.0		6.0		11.0		8.0		7.0		12.0		13.0	
31-Oct-09	10.0	9.5	9.0	8.5	11.0	10.0	10.0	10.0	12.0	11.0	12.0	11.0	6.0	5.5	12.0	11.0	13.0	13.5
	9.0		8.0		9.0		10.0		10.0		10.0		5.0		10.0		14.0	
2-Nov-09	11.0	10.0	10.0	10.0	12.0	13.0	13.0	12.5	12.0	12.5	10.0	9.0	9.0	8.5	12.0	13.0	13.0	12.0
	9.0		10.0		14.0		12.0		13.0		8.0		8.0		14.0		11.0	
4-Nov-09	6.0	7.0	8.0	8.5	8.0	8.5	13.0	13.5	11.0	12.5	6.0	6.0	10.0	9.0	12.0	12.5	14.0	13.5
	8.0		9.0		9.0		14.0		14.0		6.0		8.0		13.0		13.0	
6-Nov-09	6.0	6.0	7.0	8.0	7.0	6.5	9.0	9.5	11.0	11.5	8.0	8.0	9.0	8.0	9.0	10.0	12.0	13.0
	6.0		9.0		6.0		10.0		12.0		8.0		7.0		11.0		14.0	
10-Nov-09	8.0	8.0	5.0	5.0	6.0	6.0	6.0	6.5	8.0	8.0	9.0	8.0	7.0	7.0	10.0	9.5	8.0	8.0
	8.0		5.0		6.0		7.0		8.0		7.0		7.0		9.0		8.0	
12-Nov-09	6.0	7.0	7.0	7.0	7.0	7.5	8.0	9.0	16.0	15.0	7.0	6.5	7.0	5.5	8.0	8.5	12.0	12.5
	8.0		7.0		8.0		10.0		14.0		6.0		4.0		9.0		13.0	
14-Nov-09	9.0	10.0	10.0	9.5	9.0	9.5	11.0	12.0	11.0	10.5	10.0	9.0	5.0	5.5	10.0	10.0	14.0	13.0
	11.0		9.0		10.0		13.0		10.0		8.0		6.0		10.0		12.0	
16-Nov-09	6.0	6.5	8.0	7.5	7.0	6.5	8.0	8.5	7.0	7.5	10.0	9.0	8.0	7.0	8.0	8.5	7.0	7.0
	7.0		7.0		6.0		9.0		8.0		8.0		6.0		9.0		7.0	

Baseline SS Monitoring Data (Oct - Nov 2009)

Mid-flood	RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average
21-Oct-09	7.0	7.0	15.0	14.0	8.0	8.0
	7.0		13.0		8.0	
23-Oct-09	10.0	10.0	12.0	11.0	11.0	12.0
	10.0		10.0		13.0	
27-Oct-09	8.0	7.5	11.0	11.5	25.0	23.5
	7.0		12.0		22.0	
29-Oct-09	14.0	13.0	12.0	11.5	9.0	9.0
	12.0		11.0		9.0	
31-Oct-09	9.0	9.5	8.0	7.5	7.0	7.0
	10.0		7.0		7.0	
2-Nov-09	8.0	7.5	9.0	8.0	7.0	6.5
	7.0		7.0		6.0	
4-Nov-09	8.0	8.0	10.0	10.0	8.0	7.5
	8.0		10.0		7.0	
6-Nov-09	16.0	15.5	12.0	11.5	9.0	9.0
	15.0		11.0		9.0	
10-Nov-09	9.0	9.5	8.0	8.0	6.0	6.5
	10.0		8.0		7.0	
12-Nov-09	6.0	7.0	10.0	9.5	6.0	6.5
	8.0		9.0		7.0	
14-Nov-09	11.0	12.5	8.0	9.0	10.0	10.0
	14.0		10.0		10.0	
16-Nov-09	5.0	6.0	6.0	6.5	7.0	6.5
	7.0		7.0		6.0	

Mid-Ebb	RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average
21-Oct-09	7.0	7.5	8.0	8.5	6.0	5.5
	8.0		9.0		5.0	
23-Oct-09	7.0	6.5	7.0	7.0	13.0	12.5
	6.0		7.0		12.0	
27-Oct-09	6.0	5.0	5.0	5.5	10.0	10.0
	4.0		6.0		10.0	
29-Oct-09	9.0	9.5	10.0	9.5	10.0	9.0
	10.0		9.0		8.0	
31-Oct-09	10.0	9.5	8.0	8.5	10.0	10.0
	9.0		9.0		10.0	
2-Nov-09	10.0	11.0	9.0	9.0	8.0	7.5
	12.0		9.0		7.0	
4-Nov-09	6.0	6.5	10.0	10.0	9.0	9.5
	7.0		10.0		10.0	
6-Nov-09	8.0	8.5	8.0	8.5	9.0	9.0
	9.0		9.0		9.0	
10-Nov-09	7.0	7.0	8.0	7.5	8.0	8.0
	7.0		7.0		8.0	
12-Nov-09	9.0	8.5	11.0	10.5	9.0	8.0
	8.0		10.0		7.0	
14-Nov-09	8.0	7.0	10.0	9.5	10.0	9.0
	6.0		9.0		8.0	
16-Nov-09	6.0	6.5	9.0	9.0	7.0	7.0
	7.0		9.0		7.0	

Projected SS Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	10.8	11.3	13.7	13.1	10.6	10.0	12.6	13.6	11.8	11.8	8.4	8.8	7.9	8.3	17.2	17.2
	11.8		12.4		9.4		14.5		11.8		9.3		8.7		17.2	
23-Oct-09	9.9	11.3	7.5	7.5	9.4	8.2	19.9	19.0	10.6	11.2	10.2	10.2	9.4	9.4	17.2	16.0
	12.8		7.5		7.1		18.1		11.8		10.2		9.4		14.7	
27-Oct-09	11.8	12.3	12.4	13.1	10.6	10.0	18.1	18.1	13.0	12.4	11.1	10.2	5.8	5.8	12.3	12.3
	12.8		13.7		9.4		18.1		11.8		9.3		5.8		12.3	
29-Oct-09	13.8	13.8	10.0	10.6	9.4	8.8	16.3	16.3	8.2	8.2	6.5	7.0	5.1	4.7	16.0	14.7
	13.8		11.2		8.2		16.3		8.2		7.4		4.3		13.5	
31-Oct-09	12.8	11.8	10.0	8.7	8.2	8.8	14.5	14.5	14.1	13.0	10.2	11.1	5.8	5.8	13.5	12.3
	10.8		7.5		9.4		14.5		11.8		12.1		5.8		11.0	
2-Nov-09	12.8	12.3	12.4	11.8	13.0	11.8	16.3	15.4	9.4	10.0	10.2	9.3	6.5	7.2	9.8	9.2
	11.8		11.2		10.6		14.5		10.6		8.4		7.9		8.6	
4-Nov-09	11.8	12.8	11.2	10.6	9.4	10.6	18.1	19.9	10.6	10.0	7.4	7.9	7.2	8.3	16.0	15.3
	13.8		10.0		11.8		21.7		9.4		8.4		9.4		14.7	
6-Nov-09	17.7	18.2	10.0	10.0	8.2	9.4	14.5	16.3	10.6	11.8	7.4	8.4	7.9	8.3	12.3	11.7
	18.7		10.0		10.6		18.1		13.0		9.3		8.7		11.0	
10-Nov-09	11.8	12.8	12.4	13.7	15.3	14.7	10.8	11.7	15.3	14.7	13.0	13.5	5.1	5.8	12.3	12.9
	13.8		14.9		14.1		12.6		14.1		13.9		6.5		13.5	
12-Nov-09	10.8	10.8	8.7	10.0	5.9	5.3	14.5	13.6	16.5	15.9	11.1	10.7	4.3	4.7	12.3	11.7
	10.8		11.2		4.7		12.6		15.3		10.2		5.1		11.0	
14-Nov-09	8.9	7.9	8.7	7.5	11.8	11.2	16.3	15.4	9.4	9.4	11.1	10.7	7.2	7.2	13.5	12.9
	6.9		6.2		10.6		14.5		9.4		10.2		7.2		12.3	
16-Nov-09	7.9	8.9	7.5	8.1	4.7	5.3	10.8	12.6	7.1	7.1	5.6	5.6	4.3	5.1	7.4	6.1
	9.9		8.7		5.9		14.5		7.1		5.6		5.8		4.9	

Mid-Ebb	WSD7		WSD9		WSD10		WSD15		WSD17		WSD19		WSD20		WSD21	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	8.9	8.4	8.7	8.7	9.4	8.8	10.8	11.7	18.9	18.3	13.0	12.1	6.5	7.2	11.0	11.7
	7.9		8.7		8.2		12.6		17.7		11.1		7.9		12.3	
23-Oct-09	7.9	7.9	10.0	10.0	9.4	8.2	10.8	9.9	10.6	10.0	9.3	8.8	3.6	4.3	13.5	12.9
	7.9		10.0		7.1		9.0		9.4		8.4		5.1		12.3	
27-Oct-09	9.9	9.4	7.5	6.2	10.6	9.4	12.6	13.6	9.4	8.8	6.5	6.0	5.1	5.4	8.6	9.8
	8.9		5.0		8.2		14.5		8.2		5.6		5.8		11.0	
29-Oct-09	11.8	11.3	10.0	10.0	9.4	9.4	14.5	15.4	9.4	10.0	7.4	8.4	6.5	6.1	9.8	11.0
	10.8		10.0		9.4		16.3		10.6		9.3		5.8		12.3	
31-Oct-09	9.9	8.9	10.0	8.7	10.6	11.8	12.6	10.8	10.6	11.2	8.4	8.4	7.9	7.9	13.5	12.9
	7.9		7.5		13.0		9.0		11.8		8.4		7.9		12.3	
2-Nov-09	11.8	11.3	8.7	10.0	7.1	7.7	21.7	19.9	14.1	14.1	8.4	7.9	5.8	5.4	12.3	12.9
	10.8		11.2		8.2		18.1		14.1		7.4		5.1		13.5	
4-Nov-09	6.9	7.9	8.7	8.1	7.1	8.2	19.9	22.6	5.9	7.1	8.4	7.9	5.1	5.8	12.3	12.9
	8.9		7.5		9.4		25.3		8.2		7.4		6.5		13.5	
6-Nov-09	10.8	9.9	7.5	8.1	8.2	7.7	19.9	18.1	11.8	10.6	9.3	8.4	5.8	6.5	11.0	10.4
	8.9		8.7		7.1		16.3		9.4		7.4		7.2		9.8	
10-Nov-09	7.9	8.9	11.2	11.2	9.4	8.2	10.8	12.6	10.6	10.0	4.6	5.1	5.1	5.1	9.8	9.8
	9.9		11.2		7.1		14.5		9.4		5.6		5.1		9.8	
12-Nov-09	7.9	7.4	7.5	6.8	5.9	6.5	18.1	16.3	10.6	10.6	8.4	8.8	3.6	4.0	13.5	12.9
	6.9		6.2		7.1		14.5		10.6		9.3		4.3		12.3	
14-Nov-09	5.9	5.9	8.7	8.1	9.4	8.8	14.5	14.5	9.4	10.0	8.4	7.4	5.1	5.1	12.3	13.5
	5.9		7.5		8.2		14.5		10.6		6.5		5.1		14.7	
16-Nov-09	6.9	6.4	10.0	10.0	4.7	5.9	10.8	12.6	13.0	11.2	3.7	3.7	5.8	6.1	9.8	9.8
	5.9		10.0		7.1		14.5		9.4		3.7		6.5		9.8	

Projected SS Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	RW21		C1		C2		C3		C4		C5		C6		C7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	12.3	11.0	9.8	9.8	11.0	10.4	11.0	11.7	13.5	14.1	17.2	17.8	7.4	8.0	7.4	8.0
	9.8		9.8		9.8		12.3		14.7		18.4		8.6		8.6	
23-Oct-09	17.2	16.6	14.7	14.1	14.7	15.3	17.2	15.3	17.2	17.2	18.4	17.2	12.3	11.0	13.5	14.7
	16.0		13.5		16.0		13.5		17.2		16.0		9.8		16.0	
27-Oct-09	12.3	13.5	16.0	15.3	9.8	11.0	11.0	9.8	13.5	12.3	13.5	14.1	12.3	12.9	12.3	11.0
	14.7		14.7		12.3		8.6		11.0		14.7		13.5		9.8	
29-Oct-09	14.7	14.7	22.1	22.7	12.3	13.5	13.5	13.5	18.4	17.8	13.5	14.1	12.3	11.7	14.7	14.1
	14.7		23.3		14.7		13.5		17.2		14.7		11.0		13.5	
31-Oct-09	11.0	11.0	13.5	12.9	12.3	12.3	18.4	18.4	12.3	11.7	11.0	11.7	9.8	8.6	7.4	8.6
	11.0		12.3		12.3		18.4		11.0		12.3		7.4		9.8	
2-Nov-09	11.0	11.0	11.0	11.0	9.8	9.8	9.8	10.4	8.6	8.6	6.1	6.8	9.8	11.0	11.0	11.0
	11.0		11.0		9.8		11.0		8.6		7.4		12.3		11.0	
4-Nov-09	11.0	12.3	12.3	14.1	11.0	11.7	12.3	12.3	11.0	11.7	12.3	12.9	4.9	6.1	9.8	9.8
	13.5		16.0		12.3		12.3		12.3		13.5		7.4		9.8	
6-Nov-09	14.7	14.7	16.0	14.7	11.0	10.4	17.2	16.0	17.2	16.6	19.6	18.4	12.3	11.7	11.0	11.0
	14.7		13.5		9.8		14.7		16.0		17.2		11.0		11.0	
10-Nov-09	12.3	13.5	11.0	10.4	13.5	12.9	14.7	14.1	12.3	12.9	12.3	12.3	8.6	8.6	9.8	8.6
	14.7		9.8		12.3		13.5		13.5		12.3		8.6		7.4	
12-Nov-09	11.0	11.0	12.3	12.3	12.3	12.3	12.3	12.3	13.5	13.5	12.3	11.7	12.3	13.5	9.8	11.0
	11.0		12.3		12.3		12.3		13.5		11.0		14.7		12.3	
14-Nov-09	8.6	9.2	7.4	8.6	11.0	12.3	14.7	13.5	14.7	16.0	19.6	17.8	9.8	9.2	8.6	8.6
	9.8		9.8		13.5		12.3		17.2		16.0		8.6		8.6	
16-Nov-09	7.4	8.0	6.1	6.8	9.8	8.6	7.4	8.0	14.7	13.5	7.4	7.4	7.4	8.6	11.0	11.0
	8.6		7.4		7.4		8.6		12.3		7.4		9.8		11.0	

Mid-Ebb	RW21		C1		C2		C3		C4		C5		C6		C7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	11.0	11.7	12.3	12.9	9.8	8.6	9.8	8.6	13.5	14.1	12.3	12.9	8.6	9.2	6.1	6.8
	12.3		13.5		7.4		7.4		14.7		13.5		9.8		7.4	
23-Oct-09	12.3	13.5	7.4	6.8	17.2	17.8	12.3	12.3	11.0	11.7	13.5	14.7	12.3	11.0	9.8	8.6
	14.7		6.1		18.4		12.3		12.3		16.0		9.8		7.4	
27-Oct-09	11.0	10.4	4.9	5.5	8.6	7.4	7.4	6.1	9.8	9.8	9.8	9.8	8.6	8.6	6.1	6.1
	9.8		6.1		6.1		4.9		9.8		9.8		8.6		6.1	
29-Oct-09	11.0	11.0	11.0	11.7	12.3	11.0	13.5	12.9	8.6	8.0	11.0	12.3	11.0	10.4	9.8	9.2
	11.0		12.3		9.8		12.3		7.4		13.5		9.8		8.6	
31-Oct-09	12.3	12.3	12.3	11.7	11.0	10.4	13.5	12.3	12.3	12.3	14.7	13.5	14.7	13.5	7.4	6.8
	12.3		11.0		9.8		11.0		12.3		12.3		12.3		6.1	
2-Nov-09	9.8	10.4	13.5	12.3	12.3	12.3	14.7	16.0	16.0	15.3	14.7	15.3	12.3	11.0	11.0	10.4
	11.0		11.0		12.3		17.2		14.7		16.0		9.8		9.8	
4-Nov-09	12.3	11.7	7.4	8.6	9.8	10.4	9.8	10.4	16.0	16.6	13.5	15.3	7.4	7.4	12.3	11.0
	11.0		9.8		11.0		11.0		17.2		17.2		7.4		9.8	
6-Nov-09	13.5	12.3	7.4	7.4	8.6	9.8	8.6	8.0	11.0	11.7	13.5	14.1	9.8	9.8	11.0	9.8
	11.0		7.4		11.0		7.4		12.3		14.7		9.8		8.6	
10-Nov-09	11.0	9.8	9.8	9.8	6.1	6.1	7.4	7.4	7.4	8.0	9.8	9.8	11.0	9.8	8.6	8.6
	8.6		9.8		6.1		7.4		8.6		9.8		8.6		8.6	
12-Nov-09	12.3	12.9	7.4	8.6	8.6	8.6	8.6	9.2	9.8	11.0	19.6	18.4	8.6	8.0	8.6	6.8
	13.5		9.8		8.6		9.8		12.3		17.2		7.4		4.9	
14-Nov-09	13.5	12.9	11.0	12.3	12.3	11.7	11.0	11.7	13.5	14.7	13.5	12.9	12.3	11.0	6.1	6.8
	12.3		13.5		11.0		12.3		16.0		12.3		9.8		7.4	
16-Nov-09	12.3	11.0	7.4	8.0	9.8	9.2	8.6	8.0	9.8	10.4	8.6	9.2	12.3	11.0	9.8	8.6
	9.8		8.6		8.6		7.4		11.0		9.8		9.8		7.4	

Projected SS Monitoring Data (Wet Season) adjusted with Mean Variation Percentage of EPD Marine Monitoring Data (2006 - 2008)

Mid-flood	C8		C9		RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	14.9	13.7	13.7	13.7	8.6	8.6	18.4	17.2	9.8	9.8
	12.4		13.7		8.6		16.0		9.8	
23-Oct-09	26.1	24.3	28.6	26.8	12.3	12.3	14.7	13.5	13.5	14.7
	22.4		24.9		12.3		12.3		16.0	
27-Oct-09	18.7	17.4	28.6	28.6	9.8	9.2	13.5	14.1	30.7	28.9
	16.2		28.6		8.6		14.7		27.0	
29-Oct-09	19.9	19.9	28.6	29.2	17.2	16.0	14.7	14.1	11.0	11.0
	19.9		29.9		14.7		13.5		11.0	
31-Oct-09	17.4	16.8	23.6	23.0	11.0	11.7	9.8	9.2	8.6	8.6
	16.2		22.4		12.3		8.6		8.6	
2-Nov-09	12.4	12.4	12.4	13.1	9.8	9.2	11.0	9.8	8.6	8.0
	12.4		13.7		8.6		8.6		7.4	
4-Nov-09	16.2	15.6	17.4	17.4	9.8	9.8	12.3	12.3	9.8	9.2
	14.9		17.4		9.8		12.3		8.6	
6-Nov-09	23.6	21.8	14.9	14.9	19.6	19.0	14.7	14.1	11.0	11.0
	19.9		14.9		18.4		13.5		11.0	
10-Nov-09	17.4	15.6	16.2	16.2	11.0	11.7	9.8	9.8	7.4	8.0
	13.7		16.2		12.3		9.8		8.6	
12-Nov-09	29.9	27.4	22.4	23.0	7.4	8.6	12.3	11.7	7.4	8.0
	24.9		23.6		9.8		11.0		8.6	
14-Nov-09	17.4	18.0	19.9	18.7	13.5	15.3	9.8	11.0	12.3	12.3
	18.7		17.4		17.2		12.3		12.3	
16-Nov-09	8.7	7.5	7.5	7.5	6.1	7.4	7.4	8.0	8.6	8.0
	6.2		7.5		8.6		8.6		7.4	

Mid-Ebb	C8		C9		RC1		RC5		RC7	
Date	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Oct-09	12.4	13.7	24.9	23.0	8.6	9.2	9.8	10.4	7.4	6.8
	14.9		21.2		9.8		11.0		6.1	
23-Oct-09	16.2	15.6	12.4	14.3	8.6	8.0	8.6	8.6	16.0	15.3
	14.9		16.2		7.4		8.6		14.7	
27-Oct-09	11.2	11.2	12.4	12.4	7.4	6.1	6.1	6.8	12.3	12.3
	11.2		12.4		4.9		7.4		12.3	
29-Oct-09	14.9	14.9	16.2	16.2	11.0	11.7	12.3	11.7	12.3	11.0
	14.9		16.2		12.3		11.0		9.8	
31-Oct-09	14.9	13.7	16.2	16.8	12.3	11.7	9.8	10.4	12.3	12.3
	12.4		17.4		11.0		11.0		12.3	
2-Nov-09	14.9	16.2	16.2	14.9	12.3	13.5	11.0	11.0	9.8	9.2
	17.4		13.7		14.7		11.0		8.6	
4-Nov-09	14.9	15.6	17.4	16.8	7.4	8.0	12.3	12.3	11.0	11.7
	16.2		16.2		8.6		12.3		12.3	
6-Nov-09	11.2	12.4	14.9	16.2	9.8	10.4	9.8	10.4	11.0	11.0
	13.7		17.4		11.0		11.0		11.0	
10-Nov-09	12.4	11.8	10.0	10.0	8.6	8.6	9.8	9.2	9.8	9.8
	11.2		10.0		8.6		8.6		9.8	
12-Nov-09	10.0	10.6	14.9	15.6	11.0	10.4	13.5	12.9	11.0	9.8
	11.2		16.2		9.8		12.3		8.6	
14-Nov-09	12.4	12.4	17.4	16.2	9.8	8.6	12.3	11.7	12.3	11.0
	12.4		14.9		7.4		11.0		9.8	
16-Nov-09	10.0	10.6	8.7	8.7	7.4	8.0	11.0	11.0	8.6	8.6
	11.2		8.7		8.6		11.0		8.6	

Contract no. HK/2009/05
WanChai Development Phase II and Central-Wanchai Bypass
Sampling, Field Measurement, Testing Works (Stage 1)

Existing Action and Limit Levels for Water Quality proposed as Dry Season AL & LL

Parameters	Action	Limit
WSD Salt Water Intakes		
SS in mg/L	13.00	14.43
Turbidity in NTU	8.04	9.49
DO in mg/L	3.66	3.28
Cooling Water Intakes		
SS in mg/L	15.00	22.13
Turbidity in NTU	9.10	10.25
DO in mg/L	3.36	2.73

Proposed Action and Limit Levels for Water Quality in Wet Season (with projection using EPD data)

Parameters	Action	Limit
WSD Salt Water Intakes		
SS in mg/L	16.26	19.74
Turbidity in NTU	10.01	11.54
DO in mg/L	3.17	2.63
Cooling Water Intakes		
SS in mg/L	18.42	27.54
Turbidity in NTU	11.35	12.71
DO in mg/L	3.02	2.44

Appendix I

Response-to-Comment on EPD's Comments
On Baseline Monitoring Report

本署檔號 OUR REF: (45) in AX(5) to EP2/G/A/124 Pt.2
來函檔號 YOUR REF:
電話 TEL. NO.:
圖文傳真 FAX NO.: 2835 2390
電子郵件 E-MAIL: 2591 0558
網址 HOMEPAGE: http://www.epd.gov.hk

Environmental Protection Department
Branch Office
28th Floor, Southorn Centre,
130 Hennessy Road,
Wan Chai, Hong Kong.

環境保護署分處
香港灣仔
軒尼詩道
一百三十號
修頓中心廿八樓

By Post & Fax : 2993 7577 (total page:5)

25 October 2011

MTR Corporation Limited
8/F, Fo Tan Railway House,
No. 9, Lok King Street,
Fo Tan, New Territories,
Hong Kong.

(Attn: Mr. Richard Kwan, Environmental Manager)

Dear Mr. Kwan,

Environmental Impact Assessment (EIA) Ordinance, Cap.499,
Shatin to Central Link Protection Works at Causeway Bay Typhoon Shelter
(Environmental Permit No. EP-416/2011)

Baseline Monitoring Report (Oct 2011)

I refer to your letter dated 21 October 2011, enclosing the above Baseline Monitoring Report as per Condition 3.3 of EP416/2011.

Please find in attached Annex our initial comments on the submission. Please be noted that the submitted report did not fully meet some requirements in the EM&A Manual (Nov 2010) (as part of the above SCL EIA Report). Please provide clarifications and revised submissions to address the initial comments.

By copy of this letter, the Environmental Team (ET) Leader and the Independent Environmental Checker (IEC) shall carefully review any submission prior to certifying or verifying it under the permit requirements. It is expected a certified/verified submission should not contain obvious/major deficiency to meet the corresponding permit requirements and should conform to the relevant information and recommendations in the approved EIA report.

MTR - Environment	
Ref. No.	94702
Rec'd On:	25 OCT 2011 Encl ☑
Copy To:	
Cir To:	
File Ref:	

Yours sincerely,

Billy Ma

(Billy C.W. MA)
Environmental Protection Officer
for Director of Environmental Protection

c.c. (with encl.)

HyD/RDO	(Attn: Mr. Cyrus Wong	Fax: 2761 1508)
HyD/MWPMO	(Attn: Mr. Jones Lai	Fax: 2714 5289)
RSS/CWB	(Attn: Mr. Eric Wong	Fax: 3529 2829)
RSS/WDII	(Attn: Gloria Tang	Fax: 2587 1877)
ET Leader	(Attn: Mr. Raymond Dai	Fax: 2882 3331)
IEC	(Attn: David Yeung	Fax: 3548 6988)

c.c.internal (with encl.)

S[RS]2, S[RS]4, S[MA]3 & E[MA]31.

Annex

Environmental Impact Assessment (EIA) Ordinance, Cap 499
Shatin to Central Link Protection Works at Causeway Bay Typhoon Shelter
Environmental Permit: EP-416/2011
Baseline Monitoring Report (Oct 2011)

Initial Comments:

A. General Comment:

1. Baseline Monitoring Data Validity: It is noted that baseline monitoring for water, noise and air were conducted between October and December 2009, which were conducted about 2 years ago. The Permit holder should either i) conduct a new set of baseline monitoring; or ii) conduct further monitoring to show that the original set of baseline monitoring data are still valid.
2. Inconsistency on the codes for monitoring stations. It is noted that the codes used for monitoring stations in the EM&A are different from those in the baseline report. Some examples are as follows:

	EM&A Manual	Baseline Report
Air Quality	Either AM1 or CHA4 for station at "Royal Hong Kong Yacht Club", *[page 4-3, EM&A Manual]*.	CMA3 for station at Royal Hong Kong Yacht Club, *[pages 1 & 5, baseline report]*
Noise Impact	Either NM1 or CH4 for station at Marco Polo Mansion *[page 3-1, EM&A Manual]*	M2 for station at Marco Polo Mansion *[pages 12, baseline report]*

If Permit Holder wishes to change the codes, please clearly mention those changes in the baseline monitoring report.

B. Specific Comments:

Air Quality

1. Section 2.2.1 & 2.5.2, 1-hour TSP Monitoring: It is noted that Portable direct reading dust meter is used for 1-hour TSP. According to Section 4.6 of approved EM&A Manual (http://www.epd.gov.hk/eia/register/report/eiareport/eia_1872010/EM&A%20Manual/pdf/Sec%204%20-%20Air%20Quality.pdf), and "Guidelines for Development project in Hong Kong – Environmental Monitoring and Audit" (http://www.epd.gov.hk/eia/hb/materials/guidelines.htm), High volume sampler (HVS) should be used for carrying out the 1-hour and 24-hour monitoring. The 1-hour TSP monitoring shall be conducted using HVSs rather than portable direct reading dust meter. If alternative dust monitoring equipment / methodology (e.g. direct reading methods) is proposed after the EM&A manual is issued, Section 4.10 of the approved EM&A Manual should be followed.

Annex

2. Section 2.6.1 – 2.62, Results and Observation, [page 8], it states that *"No major changes in the environment settings are identified except that the CWB works have commenced in 2010 which may generate fugitive dust. Nonetheless, mitigation measures have been fully implemented on site that the dust level is unlikely to be varied; the baseline monitoring results of CWB are considered applicable to represent the baseline conditions of the Project".* As the baseline air quality was carried out between 4 & 17 Dec 2009, there is a big time gap of about 2 years between the baseline monitoring and the proposed commencement of work, are there any updated data/information to support the above statements?

Noise

1. Section 3.3, Alternative Baseline Noise Monitoring Location [page 12]: *It is noted an alternative baseline noise monitoring location is proposed. According to S2.3.2, Appendix D2, "Guidelines for Development Project in Hong Kong – Environmental Monitoring and Audit", when alternative monitoring locations are proposed, the monitoring locations shall be chosen based on the following criteria:*
   (a) at locations close to the major site activities which are likely to have noise impacts;
   (b) close to the noise sensitive receivers (N.B. For the purposes of this section, any domestic premises, hotel, hostel, temporary housing accommodation, hospital, medical clinic, educational institution, place of public worship, library, court of law, performing art centre shall be considered as a noise sensitive receiver); and
   (c) for monitoring locations located in the vicinity of the sensitive receivers, care shall be taken to cause minimal disturbance to the occupants during monitoring.

   The Condition 3.1 of the EP 416/2011 also stipulates that: *".... Any major changes to the programme shall be justified by the ET Leader and verified by the IEC as conforming to the information and requirements contained in the EM&A Manual before submission to the Director for approval ...."ET justification and IEC verification is required "* . Therefore, approval from Director of Environmental Protection is needed.

2. Noise, [page 1] & Section 3.6, Results and Observation for noise impact, [page 14]: The baseline noise monitoring was carried out between 4 Dec and 17 Dec 2009. There is a big time gap of about 2 years between the baseline monitoring and the proposed commencement of work. Sufficient monitoring data are required to support using the original set of baseline monitoring data.

Annex

C. Water Quality

1. Water Quality, [page 2] & Results and Observation, [pages 18&19]: The baseline water quality monitoring was conducted between 21 Oct and 16 Nov 2009, which was 2 years ago. In this regard, the project proponent should [i] conduct a new set of baseline monitoring; or [ii] conduct further monitoring to show that the original set of baseline monitoring do represent the prevailing water quality.
2. Results of Water Quality [page 19] & Figure 4.1: Please clarify if there are any control stations.
3. Table 4.7, [page 20]: The Dissolved Oxygen (DO) level should be measured at 3 depths i.e. surface, middle, bottom.

-END-

Responses to EPD's Comments on SCL Protection Works Baseline Monitoring Report (Letter Reference: (45) in AX(5) to EP2/G/A/124 Pt. 2 dated 25 October 2011):

(I) Baseline Monitoring Data Validity (Comment Nos. A1, B2 & C1 of EPD's letter):

In order to minimize the extent and duration of temporary reclamation under the SCL project for compliance with the Protection of Harbour Ordinance, the construction of the 160m SCL tunnel box at the crossing over CWB tunnels and the associated works, including temporary reclamation has to be constructed in conjunction with the CWB construction works in around late 2011 to early 2014. Subsequently, the SCL Protection Works has been entrusted to the CWB. The Contractor of CWB will undertake construction works for both the Project and CWB. The locations of the temporary reclamation works area and duration of the construction works for the two projects are overlapped. In order to ensure better site management and environmental compliance, the environmental monitoring stations and results of CWB would be shared for this project in avoidance of inconsistency.

Baseline on air, noise and water quality in Causeway Bay area and typhoon shelter has been conducted in December 2009 for the Central-Wan Chai Bypass (CWB). It has been revealed that no major changes in the environmental settings are identified in the area with the exception of commencement of CWB works in 2010. The CWB construction works could have potential environmental impacts that may elevate the baseline levels. However, mitigation measures have been fully implemented on-site and the environmental conditions are unlikely to be varied. The baseline monitoring results of CWB are considered applicable to represent the baseline conditions of the SCL Protection Works. Nonetheless, in light of the 2-years gap between the baseline monitoring (2009) and the proposed commencement date of works for SCL Protection Works (2011), supplementary information/data have been collaborated and reviewed to examine if the baseline are valid. Detailed discussions are as the followings:-

Water Quality:

The water quality monitoring stations C6 and C7 for SCL Protection Works are located within the Causeway Bay Typhoon Shelter. While the construction works for CWB has commenced, it would not be practicable for further baseline water quality monitoring. The marine water quality monitoring data of 2009 and 2010 at the EPD Monitoring Station VT2 in the Causeway Bay Typhoon Shelter (CBTS) have been examined instead. It can be seen from **Table 1** that the water quality within the Causeway Bay Typhoon Shelter at VT2 for Year 2009 and 2010 are very similar. The salinity, DO, DO(bottom), pH and turbidity are roughly the same whilst the SS level is slightly increased in 2010. Moreover, the baseline data at C6 and C7 are comparable to the monitoring

data at Station VT2. Therefore, it can be concluded that the baseline monitoring data obtained in 2009 are still valid and could represent the baseline for SCL Protection Works.

Table 1 Water Quality at EPD Monitoring Station VT2 and Baseline Monitoring Station

Parameter	**EPD Monitoring Station VT2**		**Baseline Monitoring Station**	
	Year 2009	**Year 2010**	**C6**	**C7**
Salinity	31.7 (29.2 – 33.0)	30.9 (29.2 – 31.8)	32.69 (31.91 – 33.38)	32.86 (31.79 – 33.59)
Dissolved Oxygen (mg/L)	4.3 (3.6 – 4.7)	4.4 (2.6 – 5.2)	3.6 (2.63 – 5.64)	3.84 (2.82 – 5.15)
Dissolved Oxygen (mg/L – bottom)	5.7 (3.9 – 6.7)	5.7 (3.9 – 6.7)	-	-
pH	7.8 (7.6 – 8.0)	7.8 (7.6 – 7.9)	6.85 (5.90 – 8.19)	6.86 (5.94 – 8.23)
Turbidity (NTU)	8.2 (4.0 – 13.0)	8.1 (2.5 – 24.5)	5.31 (3.20 – 8.90)	4.78 (2.60 – 8.20)
Suspended Solid (mg/L)	12.4 (3.4 – 40.0)	14.1 (2.9 – 62.0)	8.21 (4.0 – 12.0)	7.71 (4.00 – 13.00)

Source: http://www.epd.gov.hk/epd/english/environmentinhk/water/marine_quality/mwq_report.html

Air Quality:

Similar to water quality, monitoring data from EPD's monitoring station should be made reference to as far as possible. However, all the nearby monitoring stations are located at the road side which the air quality would be dominant by localised road traffic and would not represent the environment in the Causeway Bay Typhoon Shelter area. Therefore, the recent 1-hr and 24-hr TSP impact dust monitoring results obtained for CWB project are used to verify if the 2009 baseline monitoring data represent the existing baseline conditions.

Figure 1 Comparison of 24-hour TSP Baseline and CWB Impact Monitoring Data

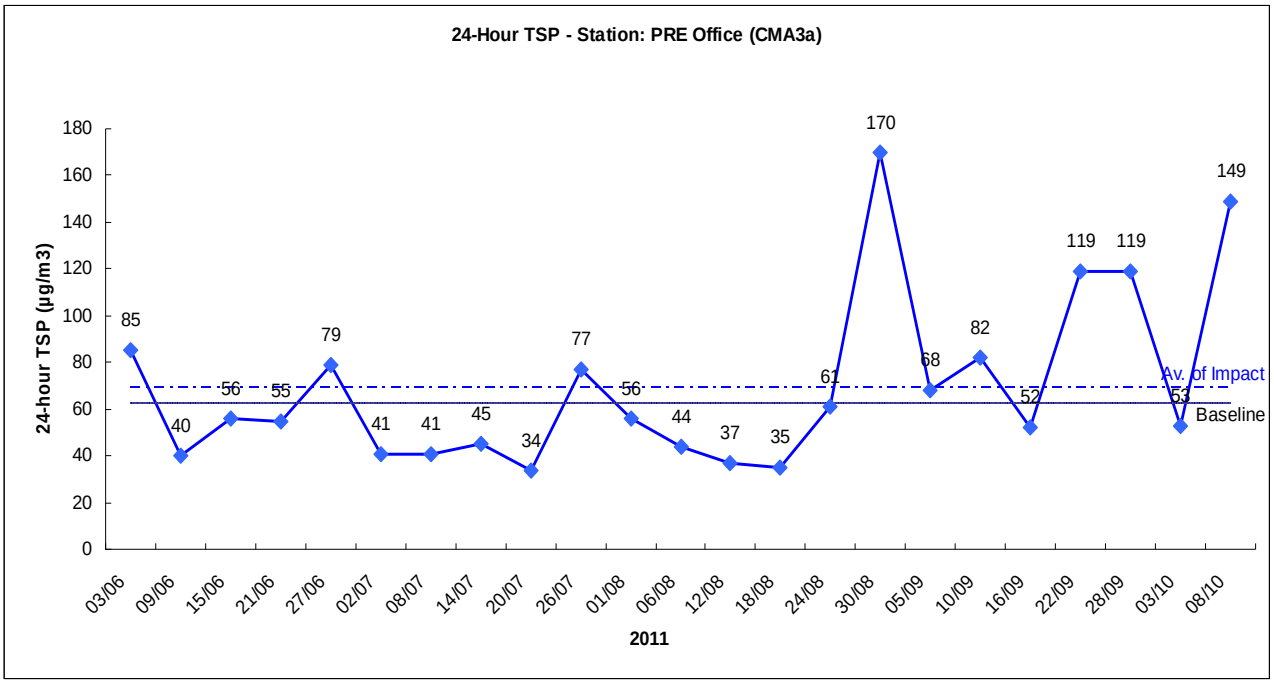
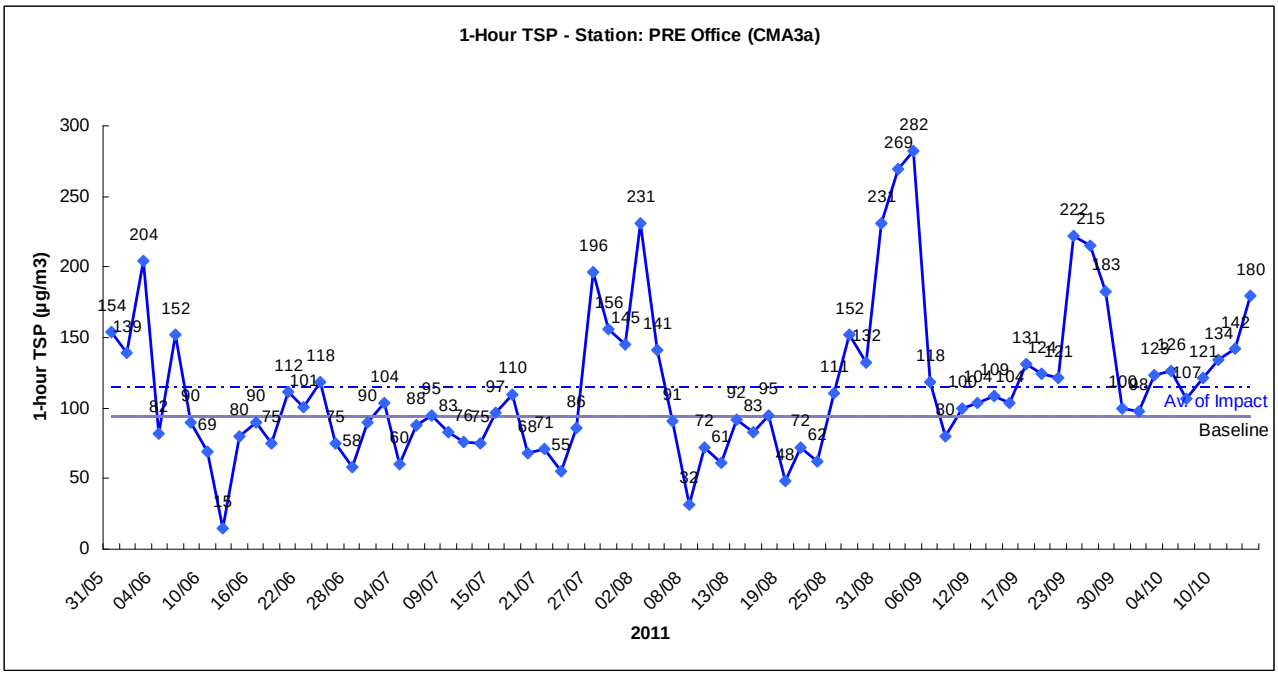


Figure 2 Comparison of 1-hour TSP Baseline and CWB Impact Monitoring Data



It can be seen from Figures 1 and 2 on the comparison of the CWB impact monitoring data and SCL Protection Works baseline monitoring data that both levels are in the same magnitude. Despite the averages of 1-hour and 24-hour TSP impact levels are slightly higher, the 2009 baseline monitoring data could represent the baseline condition for the SCL Protection Works as a conservative approach.

Noise:

Irrespective to water and air quality, environmental compliance regarding construction noise is evaluated against complaint and criterion of 75 dB(A). The baseline noise condition is for reference and to account for cases in which ambient noise levels approach or exceed the stipulated criterion of 75 dB. The baseline level for CWB/SCL Protection Works is measured at below 75dB(A) and no correction to the impact monitoring results is made. Thus, it is suggested that the baseline monitoring data obtained in late Year 2009 would be the baseline reference for the SCL Protection Works and the action and limit level remain as "when one documented complaint is received" and "75dB(A)".

(II) Other EPD's comments:

1. Inconsistency on the codes for monitoring station (Comment No. A2 of EPD's letter)

The ID codes for the air quality and noise impact monitoring stations in the EM&A Manual of WDII/CWB will be adopted for the SCL Protection Works. Cross-reference of both ID systems will be clearly indicated in the revised Baseline Monitoring Report and they are as following:

Aspect	**ID in EM&A Manual of SCL Protection Work**	**ID in EM&A Manual of WDII/CWB**	**Description**
Air Quality	AM1	CMA3	Causeway Bay – Royal Hong Kong Yacht Club
Noise	NM1	M2	Marco Polo Mansion

2. 1-hour TSP Monitoring by Portable direct reading dust meter (Comment No. B1-Air of EPD's letter)

HVS are used for both 24-hour TSP baseline and impact monitoring for the CWB whilst direct reading dust meter (Sibata Digital Dust Monitor – Model No. LD-3) and HVS were used for 1-hour TSP baseline and impact monitoring respectively. With reference to Figures 1 and 2, the baseline 1-hour TSP monitoring data obtained using portable direct reading dust meter generally agree with the 1-Hour and 24-hour TSP impact data obtained using HVS; therefore, it can prove that the direct reading dust meter is capable of achieving a comparable results to the HVS. Also, this supporting information has been reviewed and certified by IEC to fulfil 4.10 of the EM&A Manual.

3. Alternative Baseline Noise Monitoring Location (Comment No. B1-Noise of EPD's letter)

The alternative baseline noise monitoring location proposal has been submitted on 20 October 2011 and approved on 27 October 2011.

4. Control Station (Comment No. C2 of EPD's letter)

Please be clarified that there are no control stations.

5. Monitoring Depth (Comment No. C3 of EPD's letter)

According to the EM&A Manual, measurement shall be undertaken at the seawater intakes for all parameters, including Dissolved Oxygen (DO) level. Therefore, sampling at surface, middle and bottom is not necessary.