



**CONTRACT NO: HK/2011/07**

**WANCHAI DEVELOPMENT PHASE II AND CENTRAL  
WANCHAI BYPASS  
SAMPLING, FIELD MEASUREMENT AND TESTING WORKS  
(STAGE 2)**

**ENVIRONMENTAL PERMIT NO. EP-356/2009,  
FURTHER ENVIRONMENTAL PERMIT NOS. FEP-02/356/2009,  
FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009,  
FEP-06/356/2009 AND FEP-07/356/2009**

**MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT**

**- JULY 2014 -**

**CLIENTS:**

**Civil Engineering and Development  
Department**

**and**

**Highways Department**

**PREPARED BY:**

**Lam Geotechnics Limited**

11/F Centre Point  
181-185 Gloucester Road,  
Wanchai, H.K.

Telephone: (852) 2882-3939

Facsimile: (852) 2882-3331

E-mail: [info@lamenviro.com](mailto:info@lamenviro.com)

Website: <http://www.lamenviro.com>

**CERTIFIED BY:**

Raymond Dai  
Environmental Team Leader

**DATE:**

14 August 2014

Ref.: AACWBIECEM00\_0\_5563L.14

14 August 2014

AECOM Asia Company Limited  
11/F, Tower 2  
Grand Central Plaza  
138 Shatin Rural Committee Road  
Shatin, New Territories  
Hong Kong

By Post and Fax (2691 2649)

Attention: Mr. Conrad Ng

Dear Sir,

**Re: Wan Chai Development Phase II and Central-Wan Chai Bypass  
Monthly Environmental Monitoring and Audit Report (July 2014)  
for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009,  
FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009**

Reference is made to the Environmental Team's submission of the captioned Monthly Environmental Monitoring and Audit (EM&A) Report for July 2014 received by e-mail on 11 August 2014 and the subsequent revision of the report received by e-mail on 14 August 2014 for our review and comment.

Please be informed that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 3.4 in the captioned Environmental Permits.

Thank you very much for your kind attention and please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,



David Yeung  
Independent Environmental Checker

c.c. HyD Mr. Eddy Wu  
CEDD Mr. Jason Cheung  
AECOM Mr. Francis Leong / Mr. Stephen Lai  
Lam Mr. Raymond Dai

by Fax: 2714 5289  
by Fax: 2577 5040  
by Fax: 2691 2649  
by Fax: 2882 3331

Q:\Projects\AACWBIECEM00\Corr\AACWBIECEM00\_0\_5563L.14.doc



**TABLE OF CONTENTS**

**EXECUTIVE SUMMARY ..... 4**

**1. INTRODUCTION..... 11**

1.1 Scope of the Report ..... 12

1.2 Structure of the Report..... 12

**2. PROJECT BACKGROUND..... 14**

2.1 Background ..... 14

2.2 Scope of the Project and Site Description ..... 14

2.3 Division of the Project Responsibility ..... 15

2.4 Project Organization and Contact Personnel..... 16

**3. STATUS OF REGULATORY COMPLIANCE ..... 20**

3.1 Status of Environmental Licensing and Permitting under the Project..... 22

**4. MONITORING REQUIREMENTS..... 32**

4.1 Noise Monitoring ..... 35

4.2 Air Monitoring ..... 36

4.3 Water Quality Monitoring..... 39

**5. MONITORING RESULTS ..... 44**

5.1 Noise Monitoring Results ..... 44

5.2 Real-time Noise Monitoring..... 46

5.3 Air Monitoring Results ..... 47

5.4 Water Monitoring Results..... 48

5.5 Waste Monitoring Results ..... 55

**6. COMPLIANCE AUDIT ..... 60**

6.1 Noise Monitoring ..... 62

6.2 Real-time noise Monitoring ..... 62

6.3 Air Monitoring ..... 62

6.4 Water Quality Monitoring..... 63

6.5 Review of the Reasons for and the Implications of Non-compliance..... 64

6.6 Summary of action taken in the event of and follow-up on non-compliance ..... 64

**7. CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS ..... 64**

**8. ENVIRONMENTAL SITE AUDIT..... 65**

**9. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION ..... 67**

**10. CONCLUSION ..... 71**

**LIST OF TABLES**

**Table I** *Summary of Water Quality Monitoring Exceedances in Reporting Month*

**Table II** *Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month*

**Table 2.1** *Schedule 2 Designated Projects under this Project*

**Table 2.2** *Details of Individual Contracts under the Project*

**Table 2.3** *Contact Details of Key Personnel*

**Table 3.1** *Summary of the current status on licences and/or permits on environmental protection pertinent to the Project*

**Table 3.4** *Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/01*

**Table 3.5** *Summary of submission status under FEP-02/356/2009 Condition*

**Table 3.6** *Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/02*

**Table 3.7** *Summary of submission status under FEP-03/356/2009 Condition*

**Table 3.8** *Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/15*

**Table 3.9** *Summary of submission status under FEP-04/356/2009 Condition*

**Table 3.10** *Cumulative Summary of Valid Licences and Permits under Contract no. HK/2010/06*

**Table 3.11** *Summary of submission status under EP-356/2009 and FEP-05/356/2009 Condition*

**Table 3.12** *Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19*

**Table 4.1** *Noise Monitoring Station*

**Table 4.2** *Real Time Noise Monitoring Station*

**Table 4.3** *Air Monitoring Station*

**Table 4.4** *Marine Water Quality Stations for Water Quality Monitoring*

**Table 4.5** *Marine Water Quality Monitoring Frequency and Parameters*

**Table 4.6** *Marine Water Quality Stations for Enhanced Water Quality Monitoring*

**Table 4.7** *Marine Water Quality Stations for Additional DO Monitoring*

**Table 5.2** *Noise Monitoring Station for Contract nos. HK/2009/01, HK/2009/02 and HK/2010/06*

**Table 5.3** *Noise Monitoring Station for Contract no. HY/2009/15*

**Table 5.4** *Noise Monitoring Station for Contract no. HY/2009/19*

**Table 5.5** *Real Time Noise Monitoring Station for Contract no. HY/2009/19*

**Table 5.8** *Air Monitoring Station for Contract no. HK/2009/02*

**Table 5.9** *Air Monitoring Station for Contract no. HY/2009/15*

**Table 5.10** *Air Monitoring Stations for Contract no. HY/2009/19*

**Table 5.12** *Water Monitoring Stations for Contract no. HK/2009/01*

**Table 5.13** *Water Monitoring Stations for Contract no. HK/2009/02*

**Table 5.14** *Water Monitoring Stations for Contract no. HK/2010/06*

**Table 5.15** *Water Monitoring Stations for Contract no. HY/2009/15*

**Table 5.16** *Water Monitoring Stations for Contract no. HY/2009/19*

**Table 5.17** *Summary of Water Quality Monitoring Exceedances in Reporting Month*

**Table 5.18** *Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month*

**Table 5.19** *Details of Waste Disposal for Contract no. HK/2009/01*

**Table 5.20** *Details of Waste Disposal for Contract no. HK/2009/02*

**Table 5.21** *Details of Waste Disposal for Contract no. HY/2009/15*

**Table 5.22** *Details of Waste Disposal for Contract no. HK/2010/06*

**Table 5.23** *Details of Waste Disposal for Contract no. HY/2009/19*

**Table 5.24** *Details of Waste Disposal for Contract no. HK/2012/08*

**Table 5.25** *Details of Waste Disposal for Contract no. HY/2010/08*

**Table 8.1** *Summary of Environmental Inspections for Contract no. HK/2009/01*

**Table 8.2** *Summary of Environmental Inspections for Contract no. HK/2009/02*

**Table 8.3** *Summary of Environmental Inspections for Contract no. HY/2009/15*

**Table 8.4** *Summary of Environmental Inspections for Contract no. HK/2010/06*

**Table 8.5** *Summary of Environmental Inspections for Contract no. HY/2009/19*



**Table 9.1** *Cumulative Statistics on Complaints*  
**Table 9.2** *Cumulative Statistics on Successful Prosecutions*  
**Table 10.1** *Construction Activities and Recommended Mitigation Measures in Coming Reporting Month*

#### LIST OF FIGURES

**Figure 2.1** *Project Layout*  
**Figure 2.2** *Project Organization Chart*  
**Figure 4.1** *Locations of Environmental Monitoring Stations*

#### LIST OF APPENDICES

**Appendix 3.1** *Environmental Mitigation Implementation Schedule*  
**Appendix 4.1** *Action and Limit Level*  
**Appendix 4.2** *Copies of Calibration Certificates*  
**Appendix 5.1** *Monitoring Schedule for Reporting Month and Coming month*  
**Appendix 5.2** *Noise Monitoring Results and Graphical Presentations*  
**Appendix 5.3** *Air Quality Monitoring Results and Graphical Presentations*  
**Appendix 5.4** *Water Quality Monitoring Results and Graphical Presentations*  
**Appendix 5.4a** *Additional Dissolved Oxygen Monitoring Results*  
**Appendix 5.5** *Real-time Noise Monitoring Results and Graphical Presentations*  
**Appendix 6.1** *Event Action Plans*  
**Appendix 6.2** *Summary for Notification of Exceedance*  
**Appendix 9.1** *Complaint Log*  
**Appendix 10.1** *Construction Programme of Individual Contracts*

**EXECUTIVE SUMMARY**

- i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report –July 2014 for the Project of Wan Chai Development Phase II and Central-Wanchai Bypass under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009. This report presents the environmental monitoring findings and information recorded during the period June 2014 to July 2014. The cut-off date of reporting is at 27<sup>th</sup> of each reporting month.

Construction Activities for the Reported Period

- ii. During this reporting period, the major work activities for Contract no. HK/2009/01 included:
- Rock trimmings works
- iii. During this reporting period, the major work activities for Contract no. HK/2009/02 included:
- Road works between Expo Drive and Expo Drive East
  - Backfilling work
  - Defect rectification works in WSD Salt Water Pumping Station
  - ABWF Works in Section VIIIA
  - E&M Works for instance fire services ducting and cabling works
  - Capping beam construction
  - Installation of seawall block
  - Removal of marine mud and reclamation at WCR2
  - Temporary drainage construction
  - Concrete decking
- iv. During this reporting period, the major work activities for Contract no. HY/2009/15 included:
- EVA construction at Eastern Breakwater
  - Reinstatement of Eastern Breakwater
  - Removal of Seawall Blocks at TPCWAE & TS4
  - Demolition of D-Wall at TS2, TPCWAE & TS4
  - Maintenance dredging
- v. During this reporting period, the major work activities for Contract no. HK/2010/06.
- Nil
- vi. During this reporting period, the major work activities for Contract no. HY/2009/19 included:
- Construction of Dolphin Cap
  - Extraction of temporary pile from marine section

- vii. During this reporting period, the major work activities for Contract no. HK/2012/08 included:
- ELS for box culvert La at Lung King Street
  - Filling for seawall rock mound formation
  - Filling for reclamation
- viii. During this reporting period, the major work activities for Contract no. HY/2010/08.
- Rock filling works (works cease on 8<sup>th</sup> Feb. 2014)
  - Dredging works

#### Noise Monitoring

- ix. No exceedance was recorded in this reporting month.
- x. Noise monitoring during daytime and restricted hour were conducted at the stations M1a, M2b, M3a, M4b, M5b and M6 on a weekly basis in the reporting month.

#### Real-time Noise Monitoring

- xi. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- xii. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- xiii. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No project related exceedance was recorded in the reporting month.

#### Air Quality Monitoring

- xiv. Due to electricity interruption, the following 24hr TSP monitoring events were rescheduled in the reporting month.
- 24hr TSP monitoring at CMA1b was rescheduled from 28 June 2014 to 30 June 2014.
  - 24hr TSP monitoring at CMA3a was rescheduled from 28 June 2014 to 02 July 2014.
  - 24hr TSP monitoring at CMA5a was rescheduled from 22 July 2014 to 23 July 2014.
  - 1hr TSP monitoring at CMA3a was rescheduled from 30 June 2014 to 02 July 2014.
- xv. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 8 and 22 July 2014 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded during this reporting month.
- xvi. Due to extension of site boundary by contractor of HY/2009/19, location of air monitoring station CMA1b – Oil Street Community Liaison Centre has been finely adjusted on 21 April 2012.
- xvii. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.

- xviii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at CMA1b – Oil Street Site Office; CMA2a – Causeway Bay Community Center; CMA3a – CWB PRE Site Office Area; CMA4a – Society for the Prevention of Cruelty to Animals; CMA5a – Children Garden opposite to Pedestrian Plaza.

#### Water Quality Monitoring

- xix. [Due to the hoisting of strong wind signal No. 3 on 18 July 2014, water quality monitoring on 18 July 2014 during both flood and ebb tides were cancelled.](#)
- xx. Action and Limit level of water quality monitoring was transited from dry season to wet season from 1 April 2014.
- xxi. As advised by WDII RSS, the water quality monitoring for WSD21 pump station with respect to HK/2009/02 was switched over to the relocated location since 12 March 2014. According to the EM&A Manual, the water quality monitoring station WSD21 was relocated to station RW21-P789 and the water quality monitoring at station WSD21 was temporarily suspended since 12 March 2014.
- xxii. According to CWB RSS, oil dispersion at the culvert outfall location at SW corner of CBTS was observed on 6, 22, 24 and 28 Feb 2014. An ICC case (ICC ref: 2-92821253) regarding the above issue was lodged by CWB RSS team to request for follow-up action by relevant departments.
- xxiii. Oil dispersion at the culvert outfall location at Ex-Cargo handling area was observed on 28 Feb 2014 by CWB RSS. An ICC case (ICC ref: 2-125779508) regarding the above observation was lodged by CWB RSS team to request for follow-up action by relevant departments.
- xxiv. With respect to the commencement of marine dredging works under contract HY/2010/08. The respective water quality monitoring station C7 were associated with HY/2009/15 and HY/2010/08
- xxv. With respect to the commencement of marine dredging works under contract HK/2012/08. The respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08 since September 2013.
- xxvi. With respect to the switching over of cooling water intake location, the water quality monitoring at the relocated intake station RW21-P789 under HK/2009/02 was commenced since 29 July 2013.
- xxvii. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013 and WQM events at monitoring stations C2, C3, C4e and C4w were temporarily suspended since 22 April 2013.
- xxviii. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others were remains unchanged.
- xxix. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and was completed on 6 Feb 2012 water quality monitoring.

- xxx. Water quality monitoring at WSD10 and WSD15 will be temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;
- xxxi. Water quality monitoring at C8 and C9 have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 12.
- xxxii. As confirmed by CWB RSS, the marine piling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.
- xxxiii. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- xxxiv. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- xxxv. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- xxxvi. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- xxxvii. Water quality monitoring at 10 monitoring stations was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in **Table I**.
- xxxviii. RSS confirmed that all Type III Dredging works under HK/2009/01 have been completed since Oct 2012.

**Table I Summary of Water Quality Monitoring Exceedances in Reporting Month**

Contract no.	Water Monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01	C1	0	0	0	0	0	0	0	0	0	0	0	0
HK/2012/08	WSD19	0	0	0	0	0	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0
	P3	0	0	0	0	0	0	0	0	0	0	0	0
	P4	0	0	0	0	0	0	0	0	0	0	0	0
	P5	0	0	0	0	0	0	0	0	0	0	0	0
HK/2009/02 Monitoring started on 8 Feb 2012	WSD9	0	0	0	0	0	0	0	0	0	0	0	0

Contract no.	Water Monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
	WSD17	0	0	0	0	0	0	0	0	0	0	0	0
Monitoring started on 29 July 2013	RW21-P789	0	0	0	0	0	0	0	0	0	0	0	0
HY/2009/15 & HY/2010/08	C7	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

- Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
  - 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 were completed on 6 Feb 2012.
  - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
  - C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
  - WSD7 and WSD20 water quality monitoring were temporarily suspended from 27 Apr 2012.
  - C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
  - C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
  - WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
  - Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.

xxxix. No action and limit levels were recorded in the reporting month.

- xl. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in **Table II**.

**Table II Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month**

Contract no.	Water Monitoring Station	Mid-flood		Mid-ebb	
		DO		DO	
		AL	LL	AL	LL
HY/2009/15	C6	0	0	0	0
	C7	0	0	0	0
	Ex-WPCWA SW	0	4	0	0
	Ex-WPCWA SE	0	4	0	0
<b>Total</b>		<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>

- xli. There were no action level exceedances and 8 limit level exceedances of enhanced dissolved oxygen recorded in this reporting month. Investigation found that the exceedances are not related to the Project works. The details of the recorded exceedances can be referred to the **Section 6.4**.



- xlii. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.
- xliii. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013.

#### Complaints, Notifications of Summons and Successful Prosecutions

- xliv. One environmental complaint under EP-356/2009 was received in the reporting period.
- xlv. A public complaint regarding construction noise impact referred by RSS was received by ET on 25 July 2014. The complainant reported that at 00:57hrs on 21 July 2014, the complainant could not sleep due to work and machine at the project site opposite to Ngan Tao Building, where he is staying were still going on and in operation. Noise travelled to his flat despite it was some distance away.
- xlvi. ET confirmed with the RSS that horizontal cutting and removal of D-wall at Eastern, Southern and Northern side of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter before 23:00 on 20 July 2014 that total 3 numbers of derrick lighter and 3 numbers of saw cut machine were in operation, and removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway bay Typhoon Shelter around 00:25hrs to 00:56hrs on 21 July 2014 that total 1 number of derrick lighter was in operation.
- xlvii. According to the relevant site records under Contract HY/2009/15, before 23:00hrs on 20 July 2014, horizontal cutting and removal of Diaphragm Wall at Eastern, Southern and Northern side of TS2 was conducted under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 3 nos. of derrick lighter and 3 nos. of saw cut machine were in operation at the above period. From around 00:25hrs to 00:56hrs on 21 July 2014, removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter. Total 1 no. of derrick lighter was found operating at the above period.
- xlviii. After reviewing the relevant records and information verified by RSS and the Construction Noise Permit (CNP) no. GW-RS0592-14, it was considered the condition of CNP GW-RS0592-14 was not fulfilled by the Contractor of HY/2009/15. "From 00:25hrs to 00:57hrs on 21 July 2014, the PME(s) (1 no. of Derrick Lighter) on-site could not follow with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0592-14." According to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting

procedure was incomplete. Under safety and navigation considerations, the completion of diaphragm wall removal was necessary and of imminent need.

- xlix. The contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be strictly followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works.
- i. The details of cumulative complaint log and updated summary of complaints are presented in [Appendix 9.1](#)

#### Site Inspections and Audit

- ii. The Environmental Team (ET) conducted weekly site inspections for Contract nos. HK/2009/01, HK/2009/02, HY/2009/15 HK/2010/06, HY/2009/19, HK/2012/08 and HY/2010/08 under EP no. EP-356/2009 in the reporting month. Major observations and recommendations made during the audit sessions were rectified by the Contractors. No non-conformance was identified during the site inspections.

#### Future Key Issues

- iii. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

#### Contract no. HK/2009/01 – Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

- Rock trimming works

#### Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East

- Covered walkway at Expo Drive East
- Road works on Hung Hing Road
- ABWF works at WSD Salt Water Pumping Station
- Backfilling works for Tunnel Portion 1
- ABWF and E&M works at Ferry Pier
- Concreting works and steelworks for Temporary Covered Walkway
- Capping beam construction
- Reclamation at WCR2
- Installation of Bridge 2
- Site haul road construction and commence at-grade road construction

#### Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- EVA construction at Eastern Breakwater
- Reinstatement of Eastern Breakwater
- Removal of Seawall Blocks at TPCWAE & TS4
- Demolition of D-Wall at TS2, TPCWAE & TS4

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line

- Nil

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- Construction of Dolphin Cap

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

- ELS for box culvert La at Lung King Street
- Filling for seawall rock mound formation
- Filling for reclamation
- Dredging

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8)

- Dredging works

## 1 Introduction

### 1.1 Scope of the Report

- 1.1.1. Lam Geotechnics Limited (LGL) has been appointed to work as the Environmental Team (ET) under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-014/2001).
- 1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 10.3 of EM&A Manual and “*Environmental Monitoring and Audit Requirements*” under Particular Specification Section 27.
- 1.1.3. This report documents the finding of EM&A works for Environmental Permit no. EP-356/2009, Further Environmental Permit no. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009 during the period of June 2014 to July 2014. The cut-off date of reporting is at 27<sup>th</sup> of each reporting month.

### 1.2 Structure of the Report

- Section 1**     **Introduction** – details the scope and structure of the report.
- Section 2**     **Project Background** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.
- Section 3**     **Status of Regulatory Compliance** – summarizes the status of valid Environmental Permits / Licenses during the reporting period.
- Section 4**     **Monitoring Requirements** – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.
- Section 5**     **Monitoring Results** – summarizes the monitoring results obtained in the reporting period.
- Section 6**     **Compliance Audit** – summarizes the auditing of monitoring results, all exceedances environmental parameters.
- Section 7**     **Cumulative Construction Impact due to the Concurrent Projects** – summarizes the relevant cumulative construction impact due to the concurrent activities of the concurrent Projects.



- Section 8**     ***Site Inspection*** – summarizes the findings of weekly site inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.
- Section 9**     ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution
- Section 10**    ***Conclusion***

## 2 Project Background

### 2.1 Background

- 2.1.1. “Wan Chai Development phase II and Central-Wan Chai Bypass” and “Central-Wan Chai Bypass and Island Eastern Corridor Link” (hereafter called “the Project”) are Designed Project (DP) under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). The Environmental Impact Assessment (EIA) Reports for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001) and Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) have been approved on 31 August 2001 and 11 December 2008 respectively.
- 2.1.2. The key purpose of Wan Chai Development Phase II (WDII) is to provide land at Wan Chai North and North Point for construction of the Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB). Land formed under the project will be developed as a world-class waterfront promenade joining that at the new Central waterfront for public enjoyment.
- 2.1.3. There is a compelling and present need for the CWB to provide relief to the very congested east-west Connaught Road Central/Harcourt Road / Gloucester Road Corridor (the Corridor) which is currently operating beyond its capacity. The CWB will provide relief to the existing congestion along the Corridor and cater for the anticipated growth of traffic on Hong Kong Island. Without the CWB and its access roads, there will not be sufficient capacity to serve the heavy traffic demands at both strategic and local levels.

### 2.2 Scope of the Project and Site Description

- 2.2.1. The Project is located mainly in Wan Chai North, Causeway Bay and North Point, and is demarcated by Gloucester Road and Victoria Park Road to the south, Fenwick Pier Street to the west and Tong Shui Road Interchange to the east, as shown in ***Figure 2.1***.
- 2.2.2. The study area encompasses existing developments along the Wan Chai, Causeway Bay and North Point shorelines. Major land uses include the Hong Kong Convention & Exhibition Centre (HKCEC) Extension, the Wan Chai Ferry Pier, the ex-Wan Chai Public Cargo Working Area (ex-PCWA), the Royal Hong Kong Yacht Club (RHKYC), the Police Officers’ Club, the Causeway Bay Typhoon Shelter (CBTS) and commercial and residential developments.
- 2.2.3. The scope of the Project comprises:
- Land formation for key transport infrastructure and facilities, including the Trunk Road (i.e. CWB) and the associated slip roads for connection to the Trunk Road and for through traffic from Central to Wan Chai and Causeway Bay. The land formed for the above transport infrastructure will provide opportunities for the development of an attractive waterfront promenade for the enjoyment of the public
  - Reprovisioning / protection of the existing facilities and structures affected by the land formation works mentioned above
  - Extension, modification, reprovisioning or protection of existing storm water drainage outfalls, sewerage outfalls and water mains affected by the revised land use and land formation works mentioned above



- Upgrading of hinterland storm water drainage system and sewerage system, which would be rendered insufficient by the land formation works mentioned above
- Provision of the ground level roads, flyovers, footbridges, necessary transport facilities and the associated utility services
- Construction of the new waterfront promenade, landscape works and the associated utility services
- The Trunk Road (i.e. CWB) within the study area and the associated slip roads for connection to the Trunk Road.

2.2.4. The project also contains various Schedule 2 DPs that, under the EIAO, require Environmental Permits (Eps) to be granted by the DEP before they may be either constructed or operated. **Table 2.1** summarises the five individual DPs under this Project. [Figure 2.1](#) shows the locations of these Schedule 2 DPs.

**Table 2.1 Schedule 2 Designated Projects under this Project**

Item	Designated Project	EIAO Reference	Reason for inclusion
DP1	Central-Wanchai Bypass (CWB) including its road tunnel and slip roads	Schedule 2, Part I, A.1 and A.7	Trunk road and road tunnel more than 800 m in length
DP2	Road P2 and other roads which are classified as primary/district distributor roads	Schedule 2, Part I, A.1	Primary / district distributor roads
DP3	Reclamation works including associated dredging works	Schedule 2, Part I, C.1 and C.12	Reclamation more than 5 ha in size and a dredging operation less than 100 m from a seawater intake point
DP5	Wan Chai East Sewage Outfall	Schedule 2, Part I, F.5 and F.6	Submarine sewage pipelines with a total diameter more than 1,200 mm and include a submarine sewage outfall
DP6	Dredging for the Cross-harbour Water Mains from Wan Chai to Tsim Sha Tsui	Schedule 2, Part I, C.12	A dredging operation less than 100 m from a seawater intake point

### 2.3 Division of the Project Responsibility

2.3.1. Due to the multi-contract nature of the Project, there are a number of contracts sub-dividing the whole works area into different work areas to be commenced. Contractors of individual contracts will be required by the EP holder to apply Further Environmental Permits (FEP) such that the impact monitoring stations are sub-divided accordingly to facilitate the implementation of EM&A programme and to streamline the EM&A reporting for individual FEP holders correspondingly.

2.3.2. The details of individual contracts are summarized in **Table 2.2**.

**Table 2.2 Details of Individual Contracts under the Project**

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HK/2009/01	Wan Chai Development Phase II – Central –Wanchai Bypass at Hong Kong Convention and Exhibition Centre	DP3, DP6	23 July 2010
		DP1, DP2	25 August 2011
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East	DP3, DP5	5 July 2010
		DP1	26 April 2011
HY/2009/11	Wan Chai Development Phase II and Central – Wan Chai Bypass – North Point Reclamation	DP3	17 March 2010 (Completed)
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP3	10 November 2010
		DP1	13 July 2011
HK/2010/06	Wan Chai Development Phase II-Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)
HY/2009/17	Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works.	DP1	5 October 2010 (Completed)
HY/2009/18	Central – Wan Chai Bypass (CWB) – Central Interchange	DP1	21 April 2011
HY/2009/19	Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011
HK/2012/08	Wan Chai Development Phase II Central-Wan Chai Bypass at Wan Chai West	DP1,DP2, DP3	10 March 2014
HY/2010/08	Central- Wanchai Bypass Tunnel – Tunnel (Slip Road 8)	DP1, DP2, DP3	21 March 2013
HY/2011/08	Central-Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning	DP1	To be commenced tentatively on 4 <sup>th</sup> quarter in 2014

## 2.4 Project Organization and Contact Personnel

- 2.4.1. Civil Engineering and Development Department and Highways Department are the overall project controllers for the Wan Chai Development Phase II and Central-Wan Chai Bypass respectively. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.
- 2.4.2. The proposed project organization and lines of communication with respect to environmental protection works are shown in **Figure 2.2**. Key personnel and contact particulars are summarized in **Table 2.3**:

**Table 2.3 Contact Details of Key Personnel**

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Principal Resident Engineer	Mr. Frankie Fan	2587 1778	2587 1877
	Engineer's Representative for CWB	Principal Resident Engineer	Mr. Peter Poon	3912 3388	3912 3010
Chun Wo – Leader Joint Venture	Contractor under Contract no. HK/2009/01	Joint Venture Board Representative	Mr. Simon Liu	9304 8355	2587 1878
		Deputy Site Agent	Mr. Andy Yu	9648 4896	
		Construction Manager	Mr. Terry Wong	9757 9846	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Construction Manager	Mr. Kenneth Chan	9160 3850	
		Senior Environmental Engineer	Ms. Wendy Ng	9803 0057	
		Assistant Environmental Engineer	Miss. Connie Chan	6157 7057	
Chun Wo – CRGL Joint Venture	Contractor under Contract no. HK/2009/02	Project Manager	Mr. Alfred Leung	3658-3022	2827 9996
		Quality & Environmental Manager	Mr. C.P. Ho	9191 8856	
China State Construction Engineering (HK) Ltd.	Contractor under Contract no. HY/2009/15	Project Director	K C Cheung	3557 6399	2566 2192
		Site Manager	J H Chen	3557 6368	
		Contractor's Representative	Andrew Wong	3557 6358	
		Head of Construction Manager	Roger Cheung	3557 6371	
		Senior Construction Manager	Gene Cheung	3557 6395	
		Environmental Officer	Andy Mak	3557 6347	
Gammon -Leader JV	Contractor under Contract no. HK/2010/06	Project Manager	Mr. Paul Lui	9095 7922	2529 2880
		Site Agent	Mr. Eric Yip	2529 2068	
		Environmental Officer	Clement Pang	9735 9200	
		Environmental Supervisor	Jacky Cheung	9779 2292	



Party	Role	Post	Name	Contact No.	Contact Fax
Chun Wo – CRGL – MBEC Joint Venture	Contractor under Contract no. HY/2009/19	Project Manager	Mr. Rayland Lee	3758 8879	
		Site Agent	Mr. Eric Yip	252902068	
		Environmental Engineer	Mr. Calvin Leung	9286 9208	
		Environmental Manager / Environmental Officer	Mr. M.H. Isa	9884 0810	
		Construction Manager (Marine)	William Luk	9610 1101	
		Construction Manager (Land)	Patrick Cheung	9643 3012	
		Construction Manager (Land)	Eric Fong	6191 9337	
		Operation Manager (Land)	Yung Kwok Wah	9834 1010	
China State-Leader JV	Contractor under Contract no. HK/2012/08	Project Director	Andrew Tse	9137 1811	2877 1522
		Project Manager	Victor Wu	9193 8871	
		Deputy Project Manager	George Cheung	9268 1918	
		Site Agent	Paul Lui	9095 7922	
		Environmental Officer	James Ma	9130 9549	
		Environmental Supervisor	Ching Man, Chan	6050 4919	
China State	Contractor under Contract no. HY/2010/08	Project Director	Cheung Kit Cheung	3557 6399	2566 8061
		Project Manager	Chan Ying Lun	9812 0592	
		Deputy Project Manager	Chris Leung	3467 4299	
		Site Agent	Dave Chan	3467 4277	
		Environmental Officer	C.M. Wong	3557 6464	
		Environmental Supervisor	Louis Lam Tsz Kwan	3557 6470	
Leighton Joint Venture	Contractor under Contract no. HY/2011/08	Project Manager	Paul Evans	2823 1111	21406799
		Site Agent	Colman Wong	9730 0806	
		Environmental Officer	Donald Ip	6461 8635	
		Environmental Supervisor	Penny Yiu	2214 7738	
ENVIRON	Independent	Independent	Mr. David	3465 2888	3465 2899

Party	Role	Post	Name	Contact No.	Contact Fax
Hong Kong Limited	Environmental Checker (IEC)	Environmental Checker (IEC)	Yeung		
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331

2.4.3. For Contract no. HK/2009/01, the principal work activities in this reporting month included:

- Rock trimming works

2.4.4. For Contract no. HK/2009/02, the principal work activities in this reporting month included:

- Road works between Expo Drive and Expo Drive East
- Backfilling work
- Defect rectification works in WSD Salt Water Pumping Station
- ABWF Works in Section VIIIA
- E&M Works for instance fire services ducting and cabling works
- Capping beam construction
- Installation of seawall block
- Removal of marine mud and reclamation at WCR2
- Temporary drainage construction
- Concrete decking

2.4.5. For Contract no. HY/2009/15, the principal work activities in this reporting month included:

- EVA construction at Eastern Breakwater
- Reinstatement of Eastern Breakwater
- Removal of Seawall Blocks at TPCWAE & TS4
- Demolition of D-Wall at TS2, TPCWAE & TS4
- Maintenance dredging

2.4.6. For Contract no. HK/2010/06, no principal work activities in this reporting month.

2.4.7. For Contract no. HY/2009/19, the principal work activity in this reporting month included:

- Construction of Dolphin Cap
- Extraction of temporary pile from marine section

2.4.8. For Contract no. HK/2012/08, the principal work activity in this reporting month included:

- ELS for box culvert La at Lung King Street
- Filling for seawall rock mound formation

- Filling for reclamation

2.4.9. For Contract no. HY/2010/08, no principal work activities this reporting month.

- Rock filling works (works cease on 8<sup>th</sup> Feb. 2014)
- No dredging works

2.4.10. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

- Rock trimming works

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East

- Covered walkway at Expo Drive East
- Road works on Hung Hing Road
- ABWF works at WSD Salt Water Pumping Station
- Backfilling works for Tunnel Portion 1
- ABWF and E&M works at Ferry Pier
- Concreting works and steelworks for Temporary Covered Walkway
- Capping beam construction
- Reclamation at WCR2
- Installation of Bridge 2
- Site haul road construction and commence at-grade road construction

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- EVA construction at Eastern Breakwater
- Reinstatement of Eastern Breakwater
- Removal of Seawall Blocks at TPCWAE & TS4
- Demolition of D-Wall at TS2, TPCWAE & TS4

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line

- Nil



Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- Construction of Dolphin Cap

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

- ELS for box culvert La at Lung King Street
- Filling for seawall rock mound formation
- Filling for reclamation
- Dredging

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8)

- Dredging works

### 3 Status of Regulatory Compliance

#### 3.1 Status of Environmental Licensing and Permitting under the Project

3.1.1. A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in **Table 3.1**.

**Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project**

Permits and/or Licences	Reference No.	Issued Date	Status
Environmental Permit	EP-356/2009	30 Jul 2009	Valid
Environmental Permit	EP-364/2009	17 Aug 2009	Superseded
Environmental Permit	EP-364/2009/A	4 Aug 2010	Superseded
Environmental Permit	EP-364/2009/B	20 Sep 2012	Superseded
Environmental Permit	EP-364/2009/C	11 Jul 2014	Valid
Environmental Permit	EP-376/2009	13 Nov 2010	Valid
Further Environmental Permit	FEP-01/356/2009	18 Feb 2010	Surrendered
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	Valid
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	Valid
Further Environmental Permit	FEP-01/364/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-02/364/2009	21 Apr 2010	Valid
Further Environmental Permit	FEP-03/364/2009	12 Jul 2010	Surrendered
Further Environmental Permit	FEP-04/364/2009/A	14 Oct 2010	Surrendered
Further Environmental Permit	FEP-05/364/2009/A	15 Nov 2010	Valid
Further Environmental Permit	FEP-06/364/2009/A	22 Nov 2010	Valid
Further Environmental Permit	FEP-07/364/2009/B	20 Sep 2012	Valid
Further Environmental Permit	FEP-08/364/2009/A	15 Jun 2012	Valid
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	Valid
Further Environmental Permit	FEP-07/356/2009	26 July 2013	Valid
Further Environmental Permit	FEP-10/364/2009/B	26 July 2013	Valid
Further Environmental Permit	FEP-11/362/2009/B	2 May 2014	Valid

3.1.2. Due to the multi-contract nature of the Project, the status of permits and/or licences under the individual contract(s) are presented as below:

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

3.1.3. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2009/01 under FEP-02/356/2009 are shown in **Table 3.4** and **Table 3.5**.

**Table 3.4 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/01**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	N/A	Valid
	FEP-02/364/2009	21 Apr 2010	N/A	Valid
Notification of Works Under APCO	313088	06 Jan 2010	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0111-14	11 Feb 2013	15 Feb 2014 to 14 Aug 2014	Valid
	GW-RS0765-14	30 Jul 2014	15 Aug 2014 to 14 Feb 2015	Valid
	GW-RS0200-14	18 Mar 2014	21 Mar 2014 to 15 Sept 2014	Valid
	GW-RS0317-14	7 Apr 2014	8 Apr 2014 to 7 Oct 2014	Valid
	GW-RS0362-14	17 Apr 2014	20 Apr 2014 to 8 Oct 2014	Valid
	GW-RS0381-14	8 Apr 2014	9 May 2014 to 11 Nov 2014	Valid
	GW-RS0435-14	30 Apr 2014	13 May 2014 to 12 Nov 2014	Valid
	GW-RS0437-14	7 May 2014	8 May 2014 to 7 Nov 2014	Valid
	GW-RS0451-14	5 May 2014	12 May 2014 to 11 Nov 2014	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0462-14	17 Apr 2014	18 Apr 2014 to 17 Oct 2014	Valid
	GW-RS0498-14	22 May 2014	24 May 2014 to 22 Nov 2014	Valid
Discharge Licence	WT00018110-2014	6 Jan 2014	31 Mar 2015	Valid
	WT00006220-2010	18 Mar 2010	31 Mar 2015	Valid
	WT00009641-2011	24 Jul 2011	31 Jul 2016	Valid
Billing account under Waste Disposal Ordinance	7010069	21 Jan 2010	N/A	Valid
Registration as a Chemical Waste Producer	WPN5213-134-C3585-01	21 Jan 2010	N/A	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal)	EP/MD/14-010	24 Apr 2014	01 Jun 2014 to 30 Jun 2014	Valid

**Table 3.5 Summary of submission status under FEP-02/356/2009 Condition**

EP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	13 Apr 2010
Condition 2.7	Works Schedule and Location Plan	8 Apr 2010
Condition 2.8	Silt Curtain Deployment Plan (Rev. 5)	24 Aug 2012
	Silt Curtain Deployment Plan (Rev. 4)	12 July 2012
	Silt Curtain Deployment Plan (Rev. 3)	27 June 2012
	Silt Curtain Deployment Plan	19 Apr 2010

EP Condition	Submission	Date of Submission
Condition 2.9	Silt Screen Deployment Plan (Rev.5)	24 Jul 2013
	Silt Screen Deployment Plan (Rev.4)	15 Nov 2012
	Silt Screen Deployment Plan	19 Apr 2010
Conditions 2.8 and 2.9	Supplementary Document on Silt Curtain and Silt Screen Deployment Plan	19 Jul 2010
	Report on Field Testing for Silt Curtain	26 Aug 2010
	Report on Field Testing for Silt Curtain (Rev. A)	15 Nov 2010
Condition 2.12(d)	Alternative Proposal on Concurrent Dredging for Sewage Pipeline and Cross Harbour Water Mains	15 Apr 2011
Condition 2.17	Noise Management Plan	23 Apr 2010
Condition 2.18	Landscape Plan (Erection of Decorative Screen Hoarding along Construction Site around Hong Kong Exhibition and Convention Centre)	15 May 2010
	Landscape Plan (Night-time Lighting)	22 Oct 2010
	Landscape Plan (Rev. B)	15 Nov 2010
Condition 1.12	Notification of Commencement Date	20 Jun 2011
Condition 2.6 to 2.8	Management Organization, Works Schedule and Location Plan	18 May 2011
Condition 2.9	Silt Screen Deployment Plan	10 Jun 2011
Condition 2.18	Landscape Plan	31 Oct 2013

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

- 3.1.4. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2009/02 under FEP-03/356/2009 are shown in **Table 3.6** and **Table 3.7**.

**Table 3.6 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/02**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	N/A	Valid
	FEP-01/364/2009	24 Mar 2010	N/A	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Notification of Works Under APCO	313962	2 Feb 2010	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS1466-13	24 Dec 2013	17 Jan 2014 to 16 July 2014	Expired
	GW-RS1458-13	24 Dec 2013	2 Jan 2014 to 1 July 2014	Expired
	GW-RS0067-14	29 Jan 2014	15 Feb 2014 to 14 Aug 2014	Valid
	GW-RS0112-14	13 Jan 2014	16 Feb 2014 to 13 Aug 2014	Valid
	GW-RS0161-14	7/3/2014	11 Mar 2014 to 10 Sep 2014	Valid
	GW-RS0162-14	7/3/2014	20 Mar 2014 to 19 Sep 2014	Valid
	GW-RS0233-14	21/3/2014	25 Mar 2014 to 24 Sep 2014	Valid
	GW-RS0269-14	28/3/2014	7 Apr 2014 to 6 Oct 2014	Valid
	GW-RS0319-14	7/4/2014	18 Apr 2014 to 17 Oct 2014	Valid
	GW-RS0407-14	25/4/2014	28 Apr 2014 to 16 Oct 2014	Valid
	GW-RS0421-14	30/4/2014	30 Apr 2014 to 15 Oct 2014	Valid
	GW-RS0460-14	9/5/2014	10 May 2014 to 9 Nov 2014	Valid
	GW-RS0491-14	16/5/2014	17 May 2014 to 16 Nov 2014	Valid
	GW-RS0494-14	16/5/2014	22 May 2014 to 21 Nov 2014	Valid
	GW-RS0482-14	13/5/2014	14 May 2014 to 6 Nov 2014	Valid
	GW-RS0461-14	9/5/2014	10 May 2014 to 9 Nov 2014	Valid
	GW-RS0422-14	30/4/2014	2 May 2014 to 16 Oct 2014	Valid
	GW-RS0515-14	26/5/2014	29 May 2014 to 25 Nov 2014	Valid
	GW-RE0565-14	30/5/2014	30 May 2014 to 29 Nov 2014	Valid
	GW-RS0637-14	26/6/2014	2 Jul 2014 to 25 Nov 2014	Valid
GW-RS0742-14	25/7/2014	15 Aug 2014 to 14 Feb 2014	Valid	



Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0745-14	25/7/2014	14 Aug 2014 to 13 Feb 2014	Valid
Discharge Licence	WT00006249-2010	22 Mar 2010	31 Mar 2015	Valid
	WT00006436-2010	15 Apr 2010	30 Apr 2015	Valid
	WT00006673-2010	14 May 2010	31 Mar 2015	Cancelled
	WT00006757-2010	28 May 2010	31 May 2015	Valid
	WT00007129-2010	28 July 2010	31 Jul 2015	Valid
	WT00008982-2011	26 Apr 2011	30 April 2016	Valid
	WT00009691-2011	1 Aug 2011	31 July 2016	Valid
Billing Account under Waste Disposal Ordinance (Land)	7010255	10 Feb 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance (Marine)	7011496	6 Oct 2010	N/A	Valid
Registration as Chemical Waste Producer (Wan Chai)	WPN5213-135-C3 593-01	10 Mar 2010	N/A	Valid
Registration as Chemical Waste Producer (TKO 137)	WPN5213-839-C3 593-02	22 Sep 2010	N/A	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/15-027	21 May 2014	29 May 2014 to 30 Jun 2014	Expired
	EP/MD/15-046	24 Jun 2014	1 Jul 2014 to 31 Dec 2014	Valid

**Table 3.7 Summary of submission status under FEP-03/356/2009 Condition**

EP Condition	Submission	Date of Submission
Condition 1.12	Commencement Date of Construction of Marine Works	8 April 2010
Condition 2.6	Management Organization of Main Construction Companies	10 April 2010
Condition 2.7	Works Schedule and Location Plans	8 April 2010
Condition 2.8	Silt Curtain Deployment Plan (Revision A)	20 April 2010
	Silt Curtain Deployment Plan (Revision B)	25 May 2010
	Silt Curtain Deployment Plan (Revision C)	14 Jun 2010
	Silt Curtain Deployment Plan (Revision H)	15 Feb 2011
	Silt Curtain Deployment Plan (Revision I)	17 Nov 2011

EP Condition	Submission	Date of Submission
	Silt Curtain Deployment Plan (Revision J)	15 Feb 2012
	Silt Curtain Deployment Plan (Revision K)	3 May 2012
	Silt Curtain Deployment Plan (Revision L)	25 Oct 2012
	Silt Curtain Deployment Plan (Revision M)	30 Nov 2012
Condition 2.9	Silt Screen Deployment Plan	21 April 2010
	Supplementary Information for Existing WSD Salt Water Intakes at Quarry Bay and Sai Wan Ho	5 Oct 2010
	Silt Screen Deployment Plan (Revision B)	15 Feb 2012
	Silt Screen Deployment Plan (Revision C)	3 May 2012
	Silt Screen Deployment Plan (Revision D)	10 Dec 2012
Condition 2.17	Noise Management Plan	6 May 2010
Condition 2.18	Landscape Plan (Decorative Screen Hoarding)	11 May 2010
	Landscape Plan (Control of Night Time Lighting)	2 June 2010
	Landscape Plan (Combined Version)	20 July 2011
	Landscape Plan (Combined Version)	5 Aug 2011
----	Acknowledge of Submission	22 Aug 2011

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

3.1.5. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2009/15 under EP-356/2009 are shown in **Table 3.8** and **Table 3.9**.

**Table 3.8 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/15**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	N/A	Valid
Notification of Works Under APCO	321822	24 Sep 2010	N/A	Valid
Construction Noise Permit (CNP) for concreting works at Eastern Breakwater of CBTS	GW-RS0095-14	10 Feb 2014	19 Feb 2014 to 18 Aug 2014	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Construction Noise Permit (CNP) for Pre-treatment, ELS and rock breaking works at TS4/ME4	GW-RS1437-13	17 Dec 2013	31 Dec 2013 to 30 Jun 2014	Expired
Construction Noise Permit (CNP) for Pre-treatment, ELS and rock breaking works at TS4/ME4	GW-RS0649-14	26 Jun 2014	1 Jul 2014 to 31 Dec 2014	Cancelled
Construction Noise Permit (CNP) for D-wall cutting and seawall removal works at TS4/ME4	GW-RS0721-14	16 Jul 2014	18 Jul 2014 to 15 Jan 2015	Valid
Construction Noise Permit (CNP) for maintenance dredging	GW-RS0368-14	22 Apr 2014	1 May 2014 to 31 Oct 2014	Valid
Construction Noise Permit (CNP) for P3 Mooring	GW-RS0191-14	12 Mar 2014	12 Mar 2014 to 11 Sep 2014	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C116 9-35	15 Nov 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance	7011553	30 Sep 2010	27 Sep 2010 to 27 Jan 2016	Valid
Billing Account under Waste Disposal Ordinance (Dumping by Vessel)	7011761	27 Mar 2014	17 Apr 2014 to 16 Jul 2014	Expired
Billing Account under Waste Disposal Ordinance (Dumping by Vessel)	7011761	30 Jun 2014	17 Jul 2014 to 16 Oct 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/14-122	23 Jan 2014	24 Jan 2014 to 23 Jul 2014	Expired
Dumping Permit (Type 1 – Open Sea Disposal) P3 Mooring	EP/MD/14-123	21 Jan 2014	23 Jan 2014 to 22 Jul 2014	Expired
Dumping Permit (Type 1 – Open Sea Disposal(Dedicated Site) and Type 2 – Confined Marine Disposal)	EP/MD/15-032	11 Jun 2014	13 Jun 2014 to 12 Jul 2014	Expired
	EP/MD/15-055	9 Jul 2014	13 Jul 2014 to 12 Aug 2014	Valid
Dumping Permit (Type 3 – Special Treatment/Disposal contained in Geosynthetic Containers)	EP/MD/15-031	11 Jun 2014	15 Jun 2014 to 14 Jul 2014	Expired
	EP/MD/15-054	11 Jul 2014	15 Jul 2014 to 14 Aug 2014	Valid

**Table 3.9 Summary of submission status under FEP-04/356/2009 Condition**

FEP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	30 Sep 2010
	Amendment for Management Organization of Main Construction Companies	16 May 2011
Condition 2.7	Works Schedule and Location Plans	27 Oct 2010
	Amendment for Works Schedule and Location Plans	12 Nov 2010
Condition 2.8	Silt Curtain Deployment Plan	30 Nov 2010
	Amendment for Silt Curtain Deployment Plan	24 Feb 2011
	Amendment for Silt Curtain Deployment Plan	11 May 2011
	Amendment for Silt Curtain Deployment Plan	11 Sep 2012
	Amendment for Silt Curtain Deployment Plan	30 Oct 2012
Condition 2.9	Silt Screen Deployment Plan	19 Oct 2010
	Amendment for Silt Screen Deployment Plan	18 Feb 2011
	Amendment for Silt Screen Deployment Plan	15 Jun 2011
Condition 2.18	Proposal for the Removal of Odorous Sediment and Slime	13 Jan 2011
	Amendment for Proposal for the Removal of Odorous Sediment and Slime	8 Mar 2011
	Amendment for Proposal for the Removal of Odorous Sediment and Slime	2 Aug 2011
Condition 2.21	Landscape Plan	18 Feb 2011
Condition 2.20	Noise Management Plan	20 Oct 2010
	Amendment for Noise Management Plan	27 Jan 2011

- 3.1.6. Implementation status of the recommended mitigation measures during this reporting period is presented in **Appendix 3.1**.

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line

- 3.1.7. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2010/06 under EP-356/2009 is shown in **Table 3.10** and **Table 3.11**.

**Table 3.10 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2010/06**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	N/A	Valid
	FEP-08/364//2009/A	15 June 2012	N/A	Valid
Notification of Works Under APCO	326344	18 Jan 2011	N/A	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Construction Noise Permit (CNP) for piling equipment	PP-RS0030-13	19 Dec 2013	6 Jan 14 – 5 Jul 14	Valid
Billing Account under Waste Disposal Ordinance	7012338	16 Feb 2011	N/A	Valid

**Table 3.11 Summary of submission status under EP-356/2009 and FEP-05/356/2009 Condition**

EP Condition	Submission	Date of Submission
Condition 2.23	Noise Management Plan	11 March 2011
Condition 2.6	Management Organization of Main Construction Companies	29 April 2013
Condition 2.7	Works Schedule and Location Plans	11 March 2011
Condition 2.8	Revised Silt Curtain Deployment Plan	31 August 2011
	Revised Silt Curtain Deployment Plan	22 October 2012
	Revised Silt Curtain Deployment Plan	26 November 2012
	Revised Silt Curtain Deployment Plan	28 January 2013
Condition 2.9	Silt Screen Deployment Plan	11 April 2011

Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- 3.1.8. Summary of the current status on licences and/or permits on environmental protection pertinent for contract no. HY/2009/19 is shown in **Table 3.12**.

**Table 3.12 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19**

Permit / Licence / Notification / Approval	Reference No.	Issued Date	Valid Period / Expiry date	Status
Further Environmental Permit	FEP-07/364/2009/B	20 Sep 2012	Granted	Valid
Notification of Works Under APCO	326160	24 Jan 2011	Notified	Valid
Construction Noise Permit (CNP) (For Portion Vi Marine)	GW-RS10073-14	06-Feb-14	02-Aug-14	Cancelled
	GW-RS0507-14	23-May-14	14-Nov-14	Valid
Discharge Licence (Land)	WT00010093-2011	17 Aug 2012	30-Sept-16	Valid

Permit / Licence / Notification / Approval	Reference No.	Issued Date	Valid Period / Expiry date	Status
Discharge Licence (Sea)	WT00010865-2011	03 Nov 2011	30-Nov-16	Valid
C&D Waste Disposal	7012306	10 Feb 2011	Registered	-
Vessel Disposal	7013285	21 July 2011	Registered	-
Registration as Chemical Waste Producer	5213-151-C3654-01	24 Mar 2011	Registered	-
Dumping Permit (Tunnel) (Type 1 – Open Sea Disposal)	EP/MD/14-128	30 Jan 2014	30 Jun 2014	Expired
	EP/MD/15-035	18 Jun 2014	17 Dec 2014	Valid
Dumping Permit (Tunnel) (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal)	EP/MD/15-036	20 Jun 2014	19 Jul 2014	Valid
	EP/MD/15-072	06 Aug 2014	05 Sep 2014	Valid

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

3.1.9. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2012/08 under EP-356/2009 are shown in **Table 3.13** and **Table 3.14**.

**Table 3.13 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2012/08**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	N/A	Valid
Notification of Works Under APCO	355439	4 Feb 2013	N/A	Valid
Registration as a Chemical Waste Producer	5213-134-C3790-01	8 Mar 2013	N/A	Valid
Billing Account under Waste Disposal Ordinance	7016883	18 Feb 2013	18 Jul 2017	Valid
Water Discharge Licence	WT00018223-2014	28 Jan 2014	31 Jan 2019	Valid
Construction Noise Permit	GW-RS1477-13	2 Jan 2014	3 Jan 2014 to 2 Jul 2014	Cancelled
	GW-RS0232-14	21 Mar 2014	23 Mar 2014 to 20 Sep 2014	Valid
	GW-RS1357-13	2 Dec 2013	4 Dec 2013 to 1 Jun 2014	Cancelled
	GW-RS0257-14	26 Mar 2014	28 Mar 2014 to 25 Sep 2014	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0193-14	13 Mar 2014	27 Mar 2014 to 26 Sep 2014	Valid
	GW-RS0293-14	1 Apr 2014	1 Apr 2014 to 30 Sep 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/14-111	1 Jan 2014	30 Jun 2014	Expired
	EP/MD/15-039	1 Jul 2014	31 Dec 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/15-040	20 Jun 2014	24 Jul 2014	Expired
	EP/MD/15-059	15 Jul 2014	24 Aug 2014	Valid

**Table 3.14 Summary of submission status under EP-356/2009 and FEP-06/356/2009 Condition**

FEP Condition	Submission	Date of Submission
Condition 2.8	Silt Curtain Deployment Plan (Rev. 3)	Submitted on 25 Nov 2013 was returned to CSLJV by EPD.
Condition 2.9	Silt Screen Deployment Plan (Rev. 2)	Generally in order as commented by EPD on 19 Sep 2013
Condition 2.23	Noise Management Plan (Rev. 2)	Generally in order as commented by EPD on 15 Aug 2013
Condition 2.24	Landscape Plan (Rev. 3)	Generally in order as commented by EPD on 31 Oct 2013

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8)

- 3.1.10. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2010/08 under EP-356/2009 are shown in Table 3.15 and Table 3.16.

**Table 3.15 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2010/08**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-07/356/2009	26 Jul 2013	NA	Valid
	FEP-10/364/2009/B	26 Jul 2013	NA	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Notification of Works Under APCO	357176	2 Apr 2013	NIL	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C11 69-44	27 Mar 2013	NIL	Valid
Billing Account under Waste Disposal Ordinance	7017170	27 Mar 2013	NIL	Valid
Water Discharge Licence	WT00016561-2013	9 Jul 2013	31 Jul 2018	Valid*
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/15-033	9 Jun 2014	9 Dec 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/15-034	11 June 2014	14 Jul 2014	Valid
	EP/MD/15-056	15 Jul 2014	14 Aug 2014	Valid

**Table 3.16 Summary of submission status under EP-356/2009 and FEP-07/356/2009 Condition**

FEP Condition	Submission	Date of Submission
Condition 2.8	Silt Curtain Deployment Plan	28 Nov 2013
Condition 2.9	Silt Screen Deployment Plan	29 Nov 2013
Condition 2.23	Noise Management Plan (rev02)	25 Mar 2014
Condition 2.24	Landscape Plan (rev02)	25 Mar 2014
	Landscape Plant (rev03)	5 Aug 2014



## Monitoring Requirements

### 4.1 Noise Monitoring

#### NOISE MONITORING STATIONS

- 4.1.1. The noise monitoring stations for the Project are listed and shown in **Table 4.1** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.1 Noise Monitoring Station**

Station	Description
M1a	Harbour Road Sports Centre
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

#### REAL-TIME NOISE MONITORING STATIONS

- 4.1.2. The real-time noise monitoring stations for the Project are listed and shown in **Table 4.2** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.
- 4.1.3. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 4.1.4. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

**Table 4.2 Real Time Noise Monitoring Station**

District	Station	Description
Tin Hau	RTN1	FEHD Hong Kong Transport Section Whitfield Depot
North Point	RTN2	Oil Street Community Liaison Centre
North Point	RTN2a	Electric Centre

- Real time noise monitoring results and graphical presentation during night time period are for information only.
- RTN2 had been relocated to RTN2a since 5 Oct 2012
- RTN1 monitoring had been finished on 28 Nov 2012

#### NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.1.5. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ).  $L_{eq}$  (30 minutes) shall be used as the monitoring parameter

for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods,  $L_{eq(5\text{ minutes})}$  shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L10 and L90 shall also be obtained for reference.

4.1.6. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:

- One set of measurements between 0700 and 1900 hours on normal weekdays.

4.1.7. If construction works are extended to include works during the hours of 1900 – 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

#### MONITORING EQUIPMENT

4.1.8. As referred to in the Technical Memorandum <sup>TM</sup> issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.

4.1.9. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

## 4.2 Air Monitoring

### AIR QUALITY MONITORING STATIONS

4.2.1. The air monitoring stations for the Project are listed and shown in **Table 4.3** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.3 Air Monitoring Station**

Station ID	Monitoring Location	Description
CMA1b	Oil Street Community Liaison Centre	North Point
CMA2a	Causeway Bay Community Centre	Causeway Bay
CMA3a	CWB PRE Site Office *	Causeway Bay
CMA4a	Society for the Prevention of Cruelty to Animals	Wan Chai
CMA5a	Children Playgrounds opposite to Pedestrian Plaza	Wan Chai
CMA6a	WDII PRE Site Office *	Wan Chai

Remarks: As per the ENPC meeting in January 2011, the monitoring stations CMA3a – Future CWB site office at Wanchai Waterfront Promenade and CMA6a – Future AECOM site office at Work Area were renamed as remark.

#### AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.
- 4.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.
- 4.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

#### SAMPLING PROCEDURE AND MONITORING EQUIPMENT

- 4.2.5. High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:
- 0.6 – 1.7 m<sup>3</sup> per minute adjustable flow range;
  - equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
  - installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
  - capable of providing a minimum exposed area of 406 cm<sup>2</sup>;
  - flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
  - equipped with a shelter to protect the filter and sampler;
  - incorporated with an electronic mass flow rate controller or other equivalent devices;
  - equipped with a flow recorder for continuous monitoring;
  - provided with a peaked roof inlet;
  - incorporated with a manometer;
  - able to hold and seal the filter paper to the sampler housing at horizontal position;
  - easily changeable filter; and
  - capable of operating continuously for a 24-hour period.
- 4.2.6. Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The concern parties such as IEC shall properly document the calibration data for future reference. All the data should be converted into standard temperature and pressure condition.

#### LABORATORY MEASUREMENT / ANALYSIS

- 4.2.7. A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.
- 4.2.8. An alternative non-HOKLAS accredited laboratory was set-up for carrying out the laboratory analysis, the laboratory equipment was approved by the ER on 8 February 2011 and the measurement procedures were witnessed by the IEC. Any measurement performed by the laboratory was demonstrated to the satisfaction of the ER and IEC. IEC shall regularly audit to the measurement performed by the laboratory to ensure the accuracy of measurement results.
- 4.2.9. Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24-hours and be pre-weighed before use for the sampling.
- 4.2.10. After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.
- 4.2.11. All the collected samples shall be kept in a good condition for 6 months before disposal.

#### IMPACT MONITORING FOR ODOUR PATROL

- 4.2.12. Odour patrols along the shorelines of Causeway Bay Typhoon Shelter and ex-Wan Chai Public Cargo Working Area when there is temporary reclamation in Causeway Bay Typhoon Shelter and/or in the ex-Wan Chai Public Cargo Working Area, or when there is dredging of the odorous sediment and slime at the south-western corner of the Causeway Bay Typhoon Shelter. Odour patrols will be carried out at bi-weekly intervals during July, August and September by a qualified person of the ET who shall:
- be at least 16 years of age;
  - be free from any respiratory illnesses; and
  - not be allowed to smoke, eat, drink (except water) or use chewing gum or sweets 30 min
  - before and during odour patrol
- 4.2.13. Odour patrol shall be conducted by independent trained personnel / competent persons patrolling and sniffing around the shore as shown in **Figure 4.1** to detect any odour at the concerned hours (afternoon is preferred for higher daily temperature).
- 4.2.14. The qualified person will use the nose (olfactory sensor) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance will be identified.
- 4.2.15. The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 – Not detected. No odour perceived or an odour so weak that it cannot be easily characterized or described;
- 1 – Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 – Moderate Identifiable odour, and moderate chance to have odour nuisance;
- 3 – Strong Identifiable, likely to have odour nuisance;
- 4 – Extreme Severe odour, and unacceptable odour level.

4.2.16. The findings including odour intensity, odour nature and possible odour sources, and also the local wind speed and direction at each location will be recorded. In addition, some relevant meteorological and tidal data such as daily average temperature, and daily average humidity, on that surveyed day will be obtained from the Hong Kong Observatory Station for reference. The Action and Limit levels for odour patrol are shown in **Appendix 6.1**.

4.2.17. The qualified odour patrol member has individual n-butanol thresholds complied with the requirement of European Standard Method of Air Quality – Determination of Odour Concentration by Dynamic Olfactometry (EN13725) in the range of 20 to 80 ppb.

### 4.3 Water Quality Monitoring

4.3.1. The EIA Report has identified that the key water quality impact would be associated with the dredging works during the construction phase. Marine water quality monitoring for dissolved oxygen (DO), suspended solid (SS) and turbidity is therefore recommended to be carried out at selected WSD flushing water intakes. The impact monitoring should be carried out during the proposed dredging works to ensure the compliance with the water quality standards.

4.3.2. The updated EM&A Manual for EP-356/2009 (Version in March 2011) is approval by EPD on 29 April 2011. As such, the Action Level and Limit Level for the wet season (April – September) will be effected and applied to the water quality monitoring data from 30 April 2011.

#### Water Quality Monitoring Stations

4.3.3. It is proposed to monitor the water quality at 4 WSD salt water intakes and 8 cooling water intakes along the seafront of the Victoria Harbour. The proposed water quality monitoring stations of the Project are shown in **Table 4.4** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.4 Marine Water Quality Stations for Water Quality Monitoring**

Station Ref.	Location	Easting	Northing
<b>WSD Salt Water Intake</b>			
WSD9	Tai Wan	837921.0	818330.0
WSD17	Quarry Bay	839790.3	817032.2
WSD19	Sheung Wan	833415.0	816771.0
WSD21	Wan Chai	836220.8	815940.1
<b>Cooling Water Intake</b>			
C1	HKCEC Extension	835885.6	816223.0
C7	Windsor House	837193.7	816150.0
P1	HKCEC Phase I	835774.7	816179.4

Station Ref.	Location	Easting	Northing
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/CWB	836268.0	816020.0

WATER QUALITY PARAMETERS

- 4.3.4. Monitoring of dissolved oxygen (DO), turbidity and suspended solids (SS) shall be carried out at WSD flushing water intakes and cooling water intakes. DO and Turbidity are measured in-situ while SS is determined in laboratory.
- 4.3.5. In association with the water quality parameters, other relevant data shall also be measured, such as monitoring location/position, time, sampling depth, water temperature, pH, salinity, dissolved oxygen (DO) saturation, weather conditions, sea conditions, tidal stage, and any special phenomena and work underway at the construction site etc.

SAMPLING PROCEDURES AND MONITORING EQUIPMENT

- 4.3.6. The interval between two sets of monitoring should not be less than 36 hours except where there are exceedances of Action and/or Limit Levels, in which case the monitoring frequency will be increased. **Table 4.5** shows the proposed monitoring frequency and water quality parameters. Duplicate in-situ measurements and water sampling should be 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 should be not less than 0.5m.

**Table 4.5 Marine Water Quality Monitoring Frequency and Parameters**

Activities	Monitoring Frequency <sup>1</sup>	Parameters <sup>2</sup>
During the 4-week baseline monitoring period	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
During marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
After completion of marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity

Notes:

- For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.
- Turbidity should be measured in situ whereas SS should be determined by laboratory.

DISSOLVED OXYGEN AND TEMPERATURE MEASURING EQUIPMENT

- 4.3.7. The instrument should be a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and use a DC power source. It should be capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/l and 0-200% saturation
- a temperature of 0-45 degree Celsius

4.3.8. It should have a membrane electrode with automatic temperature compensation complete with a cable. Sufficient stocks of spare electrodes and cables should be available for replacement where necessary. (e.g. YSI model 59 meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).

4.3.9. Should salinity compensation not be build-in in the DO equipment, in-situ salinity shall be measured to calibrate the DO equipment prior to each DO measurement.

#### TURBIDITY MEASUREMENT INSTRUMENT

4.3.10. The instrument should be a portable, weatherproof turbidity-measuring instrument complete with comprehensive operation manual. The equipment should use a DC power source. It should have a photoelectric sensor capable of measuring turbidity between 0-1000 NTU and be complete with a cable (e.g. Hach model 2100P or an approved similar instrument).

#### SAMPLER

4.3.11. A water sampler comprises a transparent PVC cylinder, with a capacity of not less than 2 litres, and can be effectively sealed with latex cups at both ends. The sampler should have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth (e.g. Kahlsico Water Sampler or an approved similar instrument).

#### SAMPLE CONTAINER AND STORAGE

4.3.12. Water samples for suspended solids measurement should be collected in high-density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to ALS Technichem (HK) Pty Ltd. as soon as possible after collection for analysis.

#### WATER DEPTH DETECTOR

4.3.13. A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station. This unit can either be handheld or affixed to the bottom of the workboat, if the same vessel is to be used throughout the monitoring programme.

#### SALINITY

4.3.14. A portable salinometer capable of measuring salinity in the range of 0-40 ppt shall be provided for measuring salinity of the water at each of monitoring location.

#### MONITORING POSITION EQUIPMENT

4.3.15. A hand-held or boat-fixed type digital Global Positioning System (GPS) with waypoint bearing indication or other equivalent instrument of similar accuracy shall be provided and used during monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

#### CALIBRATION OF IN-SITU INSTRUMENTS

4.3.16. All in-situ monitoring instrument shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or equivalent before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Responses of sensors



and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.

- 4.3.17. For the on site calibration of field equipment by the ET, the BS 127:1993, "Guide to Field and on-site test methods for the analysis of waters" should be observed.
- 4.3.18. Sufficient stocks of spare parts should be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.
- 4.3.19. Current calibration certificates of equipments are presented in [Appendix 4.2](#).

LABORATORY MEASUREMENT / ANALYSIS

- 4.3.20. Analysis of suspended solids has been carried out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd. Water samples of about 1L shall be collected at the monitoring stations for carrying out the laboratory SS determination. The SS determination work shall start within 24 hours after collection of the water samples. The SS determination shall follow APHA 19ed or equivalent methods subject to the approval of IEC and EPD.

ENHANCED WATER QUALITY MONITORING IN THE EX-WAN CHAI PUBLIC CARGO WORKING AREA AND THE CAUSEWAY BAY TYPHOON SHELTER

- 4.3.21. The enhanced water quality monitoring and audit programme is to avoid aggravation of odour nuisance from seawater arising from temporary reclamation in the ex-Wan Chai Public Cargo Working Area and the Causeway Bay Typhoon Shelter.
- 4.3.22. Dissolved oxygen monitoring at the intakes C6 and C7 in Causeway Bay Typhoon Shelter when there is temporary reclamation in Causeway Bay Typhoon Shelter and at the south-western and south-eastern corners of the ex-Wan Chai Public Cargo Working Area. The proposed water quality monitoring stations of the Project are shown in **Table 4.6** and [Figure 4.1](#).

**Table 4.6 Marine Water Quality Stations for Enhanced Water Quality Monitoring**

Station	Location
C6	Excelsior Hotel
C7	Windsor House
Ex-WPCWA-SW	South-western of the ex-Wan Chai Public Cargo Working Area
Ex-WPCWA-SE	South-eastern of the ex-Wan Chai Public Cargo Working Area

- 4.3.23. The monitoring of dissolved oxygen are to be carried out 3 days per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be equal to or less than 3m, only the mid-depth will be monitored).



#### DAILY SS MONITORING AND 24 HOURS TURBIDITY MONITORING SYSTEM

- 4.3.24. During dredging of the sediment at the south-western corner of the Causeway Bay Typhoon Shelter, daily monitoring of suspended solids and 24 hour monitoring of turbidity at the cooling water intakes (C6 and C7) shall be conducted.
- 4.3.25. The 24 hours monitoring of turbidity at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data logger which is capable of data capturing at every 5 minutes. The data shall be downloaded daily and compared with the Action and Limit level determined during the baseline water quality monitoring at the cooling water intake locations.

#### ADDITIONAL DISSOLVED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE FLOW

- 4.3.26. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.
- 4.3.27. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013
- 4.3.28. The monitoring of dissolved oxygen are to be carried out once per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be equal to or less than 3m, only the mid-depth will be monitored).

**5. Monitoring Results**

5.0.1. The environmental monitoring will be implemented based on the division of works areas of each designed project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in **Figure 2.1** and **Figure 4.1**. The monitoring results are presented in according to the Individual Contract(s).

5.0.2. In the reporting month, the concurrent contracts are as follows:

- Contract no. HK/2009/01 – Wan Chai Development Phase II – Central-Wan Chai Bypass at Hong Kong Convention and Exhibition Centre; and
- Contract no. HK/2009/02 Wan Chai Development Phase II – Central-Wan Chai Bypass at Wan Chai East
- Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)
- Contract no. HK/2010/06 Wan Chai Development Phase II – Central-Wan Chai Bypass over MTR Tsuen Wan Line
- Contract no. HY/2009/19- Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link
- Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West
- Contract no. HY/2010/08 – Central- Wanchai Bypass Tunnel (Slip Road 8 Section)

5.0.3. The environment monitoring schedules for reporting month and coming month are presented in **Appendix 5.1**.

**5.1 Noise Monitoring Results**

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC, Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East and Contract no. HK/2010/06 Wan Chai Development Phase II – Central-Wan Chai Bypass over MTR Tsuen Wan Line

5.1.1. The proposed division of noise monitoring stations are summarized in **Table 5.2** below.

**Table 5.2 Noise Monitoring Station for Contract nos. HK/2009/01, HK/2009/02 and HK/2010/06**

Station	Description
M1a	Harbour Road Sports Centre

5.1.2. Daytime and evening period noise monitoring was conducted at the Harbour Road Sport Centre in the reporting month.

5.1.3. No exceedance was recorded in this reporting period. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2**

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

5.1.4. The noise monitoring for HY/2009/15 was commenced on 10 November 2010. The proposed division of noise monitoring stations are summarized in **Table 5.3** below.

**Table 5.3 Noise Monitoring Station for Contract no. HY/2009/15**

Station	Description
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station

5.1.5. No exceedance was recorded in this reporting month.

5.1.6. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in [Appendix 5.2.](#)

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.1.7. The proposed division of noise monitoring stations are summarized in **Table 5.4** below.

**Table 5.4 Noise Monitoring Station for Contract no. HY/2009/19**

Station	Description
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

5.1.8. No exceedance was recorded in this reporting month.

5.1.9. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in [Appendix 5.2.](#)

Contract no. HY/2010/08-Central-Wanchai Bypass Tunnel (Slip Road 8 Section)

5.1.10. The proposed division of noise monitoring stations are summarized in **Table 5.5** below.

**Table 5.5 Noise Monitoring Station for Contract no. HY/2010/08**

Station	Description
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station

5.1.11. No exceedance was recorded in this reporting month.

5.1.12. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in [Appendix 5.2](#).

**5.2 Real-time Noise Monitoring**

Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.2.1 As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

5.2.2 The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.

5.2.3 The major work activities for Contract no. HY/2009/11 was confirmed substantial complete by RSS on 4 January 2012. The construction site was handed over to contractor HY/2009/19 on 31 December 2011 and the FEP-01/356/2009 was surrendered on 22 Oct 2012.

5.2.4 Real-time noise monitoring at FEHD Hong Kong Transport Section Whitfield Depot commenced external wall renovation since 1 June 2012

**Table 5.6 Real Time Noise Monitoring Station for Contract no. HY/2009/19**

District	Station	Description
North Point	RTN2a	Electric Centre

- *Real time noise monitoring results and graphical presentation during night time period are for information only.*
- *RTN2 had been relocated to RTN2a since 5 Oct 2012*
- *RTN1 monitoring had been finished on 28 Nov 2012*

5.2.5 [Limit level exceedances were recorded at RTN2a-Electric Centre during restricted hours on 27 July 2014 and during daytime on 22 July 2014 in the reporting month. After checking with Contractor, despite socket H-piling was conducted at the concerned location on 22 July 2014 during the recorded period, contractor mitigation measures including erection of temporary noise barrier was in place and the exceedance was considered to be contributed by the adverse weather condition during the hoisting period of rainstorm signal. On 27 July 2014, no construction activity was conducted at the concerned location during the monitoring period. As such, it was considered that the exceedance was considered as non-project related and considered to be contributed by nearby IEC traffic.](#)

5.2.6 Details of real time noise monitoring results and graphical presentation can be referred to [Appendix 5.5](#).

### 5.3 Air Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

- 5.3.1. Air monitoring was commenced on 1 April 2011 in response to the commencement of the land-filling work for Contract no. HK/2009/01. The proposed divisions of air monitoring stations are summarized in **Table 5.7** below. No exceedance was recorded in the reporting month.

**Table 5.7 Air Monitoring Stations for Contract no. HK/2009/01**

Station	Description
CMA5a	Children Playgrounds opposite to Pedestrian Plaza
CMA6a	WDII PRE Site Office

- 5.3.1 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in [Appendix 5.3](#).

Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

- 5.3.2. Air monitoring was commenced in mid-January 2011 for the land-filling work for Contract no. HK/2009/02. The proposed division of air monitoring stations are summarized in **Table 5.8** below. No exceedance was recorded in the reporting month.

**Table 5.8 Air Monitoring Station for Contract no. HK/2009/02**

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- 5.3.3. Air monitoring was commenced on 15 March 2011 for the land filling work for Contract no. HY/2009/15. The proposed division of air monitoring stations are summarized in **Table 5.9** below.

**Table 5.9 Air Monitoring Station for Contract no. HY/2009/15**

Station	Description
CMA3a	CWB PRE Site Office

- 5.3.4. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in [Appendix 5.3](#).

- 5.3.5. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 8 and 22 July 2014 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded during this reporting month. The details

of the odour patrol results and meteorological conditions and on the date of odour patrol are shown in [Appendix 5.3](#).

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.3.6. The proposed division of air monitoring stations are summarized in Table 5.10 below. No exceedance was recorded in the reporting month.

**Table 5.10 Air Monitoring Stations for Contract no. HY/2009/19**

Station	Description
CMA1b	Oil Street Site Office
CMA2a	Causeway Bay Community Centre

5.3.7. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in [Appendix 5.3](#).

Contract no. HK/2012/08- Wan Chai Development Phase II – Central-Wan Chai Bypass at Wan Chai West

5.3.8. The proposed division of air monitoring stations are summarized in Table 5.11 below. No exceedance was recorded in the reporting month.

**Table 5.11 Air Monitoring Stations for Contract no. HY/2012/08**

Station	Description
CMA5a	Children Playgrounds opposite to Pedestrian Plaza

5.3.9. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in [Appendix 5.3](#).

Contract no. HY/2010/08- Central-Wanchai Bypass Tunnel (Slip Road 8 Section)

5.3.10. The proposed division of air monitoring stations are summarized in Table 5.12 below. No exceedance was recorded in the reporting month.

**Table 5.12 Air Monitoring Stations for Contract no. HY/2009/19**

Station	Description
CMA3a	CWB PRE Site Office

5.3.11. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in [Appendix 5.3](#).

**5.4 Water Monitoring Results.**

- 5.4.1. [Due to the hoisting of strong wind signal No. 3 on 18 July 2014, water quality monitoring on 18 July 2014 during both flood and ebb tides were cancelled.](#)
- 5.4.2. Action and Limit level of water quality monitoring was transited from dry season to wet season from 1 April 2014.
- 5.4.3. According to CWB RSS, oil dispersion at the culvert outfall location at SW corner of CBTS was observed on 6, 22, 24 and 28 Feb 2014. An ICC case (ICC ref: 2-92821253) regarding the above issue was lodged by CWB RSS team to request for follow-up action by relevant departments.
- 5.4.4. Another oil dispersion at the culvert outfall location at Ex-Cargo handling area was observed on 28 Feb 2014 by CWB RSS. An ICC case (ICC ref: 2-125779508) regarding the above observation was lodged by CWB RSS team to request for follow-up action by relevant departments.
- 5.4.5. [With respect to the switching over of cooling water intake location, the water quality monitoring at the relocated intake station RW21-P789 under HK/2009/02 was commenced since 29 July 2013 and monitoring station C5e and C5w were temporarily suspended and switched over to monitoring station RW21-P789 on 29 July 2013 due to suspension of pump house operation.](#)
- 5.4.6. [As advised by WDII RSS, the water quality monitoring for WSD21 pump station with respect to HK/2009/02 was switched over to the relocated location since 12 March 2014. According to the EM&A Manual, the water quality monitoring station WSD21 was relocated to station RW21-P789 and the water quality monitoring at station WSD21 was temporarily suspended since 12 March 2014.](#)
- 5.4.7. WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013.
- 5.4.8. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others remain unchanged.
- 5.4.9. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and it was completed on 6 February 2012.
- 5.4.10. Water quality monitoring at WSD10 and WSD15 was temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;
- 5.4.11. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013



- have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 5.4.12. The water quality monitoring at the respective monitoring station C8 and C9 were temporarily suspended from 30 March 2013.
- 5.4.13. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 5.4.14. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.
- 5.4.15. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- 5.4.16. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- 5.4.17. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.

**Table 5.13 Water Monitoring Stations for contracts with respect to remaining DP3 work areas after the completion of DP5 & DP6 in 2012 and intake diversion in 2013**

Contract No.	Remaining DP3 and work area(s)	Relevant Water Monitoring Stations,	Division of WQM w.r.t tentative works commenced / to be commenced
HK/2009/01	WCR3	C1 <sup>1</sup>	Apr 2013
HK/2009/02	WCR3, WCR4, TWCR4	RW21-P789 <sup>1</sup>	Apr 2013
HK/2012/08	HKCEC2W, HKCEC2E	WSD19, P1 <sup>3</sup> , P3 <sup>3</sup> , P4 <sup>3</sup> , P5 <sup>3</sup>	Aug 2013
HY/2009/15	TCBR2, TCBR3, TCBR1W, TPCWAE, TPCWAW	C6 <sup>4</sup> , C7, Ex-WPCWA SW, Ex-WPCWA SE (plus enhanced DO monitoring described in 4.6.3)	Nov 2010
HY/2010/08	TCBR3, TCBR4	C6 <sup>4</sup> , C7 (plus enhanced DO monitoring described in 4.6.3)	Mar 2014



Remarks:

-The water monitoring stations for WSD19, P1, P3, P4, P5 shall be associated with Contract No. HK/2009/01 prior to their transition to Contract HK/2012/08.

-4 intakes (re-provisioned Wanchai WSD intake, Great Eagle Centre, China Resources Centre & Sun Hung Kai Centre constructed adjacent to each other) taken as a single group for silt screen protection and monitoring.

-Re-provisioned intake reference: P1: HKCEC Phase 1; P3: APA, P4: Shui On; P5: Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)

-Enhanced DO Monitoring at C6 since the intake abandon in May 2011.

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

5.4.18. Water monitoring for Contract no. HK/2009/01 was commenced on 23 July 2010. The proposed division of water monitoring stations are summarized in **Table 5.14** below.

**Table 5.14 Water Monitoring Stations for Contract no. HK/2009/01**

Station Ref.	Location	Easting	Northing
<b>Cooling Water Intake</b>			
C1	HKCEC Extension	835885.6	816223.0

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations have not been carried out by others.
- WSD7 and WSD20 water quality monitoring were temporarily suspended since 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013

Contract no. HK/2009/02 - Wan Chai Development Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

5.4.19. Water monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water monitoring stations are summarized in **Table 5.15** below.

**Table 5.15 Water Monitoring Stations for Contract no. HK/2009/02**

Station Ref.	Location	Easting	Northing
<b>WSD Salt Water Intake</b>			
WSD9	Tai Wan	837921.0	818330.0
WSD17	Quarry Bay	839790.3	817032.2
<b>Cooling Water Intake</b>			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/CWB	836268.0	816020.0

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations has not been carried out by others.
- Water quality monitoring at WSD9 and WSD 17 was implemented with respect to HK/2009/02 from 8 Feb 2012.

- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014

Contract no. HK/2012/08 - Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

5.4.20. Water monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water monitoring stations are summarized in **Table 5.16** below.

**Table 5.16 Water Monitoring Stations for Contract no. HK/2012/08**

Station Ref.	Location	Easting	Northing
<b>WSD Salt Water Intake</b>			
WSD19	Sheung Wan	833415.0	816771.0
<b>Cooling Water Intake</b>			
P1	HKCEC Phase I	835774.7	816179.4
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- 5.4.21. As the removal of reclamation work of TS1 at CBTS has been completed, all procedures have been rectified and complied with the conditions set in EP-356/2009 and FEP-04/356/2009.
- 5.4.22. Due to the commencement of the maintenance dredging on 10 November 2010, water quality monitoring for Contract no. HY/2009/15 was commenced on 9 November 2010. The proposed division of water monitoring stations are summarized in Table 5.15 below.
- 5.4.23. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.

**Table 5.17 Water Monitoring Stations for Contract no. HY/2009/15**

Station Ref.	Location	Easting	Northing
<b>Cooling Water Intake</b>			
C7	Windsor House	837193.7	816150.0

Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.

Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.4.24. Due to the commencement of the marine bored piling on 28 Jan 2012, water quality monitoring for Contract no. HY/2009/19 was commenced on 28 Jan 2012. The proposed division of water monitoring stations are summarized in **Table 5.16** below.

- 5.4.25. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 5.4.26. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Center (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 5.4.27. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- 5.4.28. As per the meeting with the representative of Excelsior Hotel and World Trade Centre on 17 May 2011, they confirmed that the seawater intake for The Excelsior was no longer in use and replaced by the connected permanent water supply from WSD pipelines since 11 January 2011. Thus, the impact water quality monitoring for the cooling intake - C6 was terminated effective from 26 May 2011.
- 5.4.29. 24 hours monitoring of turbidity at the cooling water intakes at C7 was conducted. With respect to the seawall collapsing at TS4 on 17 November 2011, the 24 hours turbidity monitoring and was kept in November 2011. Since the reinstating the seawall was completed on 13 January 2012 and no any water deterioration was performed, 24 hour turbidity monitoring was then suspended on 27 January 2012.
- 5.4.30. Water monitoring results measured in this reporting period are reviewed and summarized. Details of water quality monitoring results and graphical presentation can be referred in **Appendix 5.4**.

**Table 5.18 Summary of Water Quality Monitoring Exceedances in Reporting Month**

Contract no.	Water Monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01	C1	0	0	0	0	0	0	0	0	0	0	0	0
HK/2012/08	WSD19	0	0	0	0	0	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0
	P3	0	0	0	0	0	0	0	0	0	0	0	0
	P4	0	0	0	0	0	0	0	0	0	0	0	0
	P5	0	0	0	0	0	0	0	0	0	0	0	0
HK/2009/02 Monitoring started on 8 Feb 2012	WSD9	0	0	0	0	0	0	0	0	0	0	0	0
	WSD17	0	0	0	0	0	0	0	0	0	0	0	0
	RW21-P789	0	0	0	0	0	0	0	0	0	0	0	0
Monitoring started on 29 July 2013													
HY/2009/15 & HY/2010/08	C7	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

- Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
  - 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 were completed on 6 Feb 2012.
  - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
  - C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
  - WSD7 and WSD20 were temporarily suspended from 27 Apr 2012
  - C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
  - C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
  - WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
  - Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.

5.4.31. No action and limit levels were recorded in the reporting month.

5.4.32. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in **Table 5.19**.

**Table 5.19 Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month**

Contract no.	Water Monitoring Station	Mid-flood		Mid-ebb	
		DO		DO	
		AL	LL	AL	LL
HY/2009/15	C6	0	0	0	0
	C7	0	0	0	0
	Ex-WPCWA SW	0	4	0	0
	Ex-WPCWA SE	0	4	0	0
Total		0	8	0	0

- 5.4.33. There were no action level exceedances and 8 limit level exceedances of enhanced dissolved oxygen recorded in this reporting month. Investigation found that the exceedances are not related to the Project works. The details of the recorded exceedances can be referred to the [Section 6.4](#).
- 5.4.34. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored. Details of additional DO monitoring results can be referred in [Appendix 5.4a](#).
- 5.4.35. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013

## 5.5 Waste Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

- 5.5.1. No inert C&D waste and non- inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in *Table 5.20*.

**Table 5.20 Details of Waste Disposal for Contract no. HK/2009/01**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	NIL	62116.405	TKO137, TM38
Inert C&D materials recycled, m <sup>3</sup>	NIL	5856.5	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	1673.69	SENT Landfill
Non-inert C&D materials recycled, kg	NIL	203993	N/A
Chemical waste disposed, kg	NIL	10250	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	NIL (Bulk Volume)	97428.2 (Bulk Volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup>	NIL (Bulk Volume)	52250 (Bulk Volume)	East of Cha Chau
Dredged Sediment Requiring Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers	NIL (Bulk Volume)	6773 (Bulk Volume)	East of Cha Chau

- 5.5.2. There were no marine sediment Type 1- Open Sea Disposal and no marine sediments Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East

5.5.3. No Inert C&D waste and Non-inert C&D waste disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.21**.

**Table 5.21 Details of Waste Disposal for Contract no. HK/2009/02**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	NIL	263704.45	TKO137 / TM 38
Inert C&D materials recycled, m <sup>3</sup>	NIL	18161	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	1515.103	SENT Landfill
Non-inert C&D materials recycled, m <sup>3</sup>	N/A	N/A	N/A
Chemical waste disposed, kg	NIL	13860	SENT Landfill
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	NIL	186070* (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m <sup>3</sup>	NIL	129320 (Bulk volume)	East of Sha Chau

\*Remarks: Contractor clarified the quantity of marine sediment – type 1 open sea disposal for May and June reporting month were 907 and 996 respectively, hence the cumulative quantity is updated in July reporting month.

5.5.4. There was no Marine Sediment disposed in this reporting month.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

5.5.5. No Inert C&D waste and no non- inert C&D waste disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.22**

**Table 5.22 Details of Waste Disposal for Contract no. HY/2009/15**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Inert C&D materials disposed, m <sup>3</sup>	NIL	141579.2	Tuen Mun Area 38	NIL
	NIL	65216	TKO137 FB	NIL
Inert C&D materials recycled, m <sup>3</sup>	NIL	304	ex-PCWA	NIL
	NIL	111.9	TS4	NIL
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	252.2	SENT Landfill	NIL
Non-inert C&D materials recycled, kg	NIL	299361.5	N/A	NIL
Chemical waste disposed, kg	NIL	8,200	N/A	NIL
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	NIL (Bulk Volume)	100208 (Bulk Volume)	Cheung Chau South	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup>	13600 (Bulk Volume)	243945 (Bulk Volume)	East of Sha Chau / South of the Brothers	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers) m <sup>3</sup>	3860 (Bulk Volume)	12640 (Bulk Volume)	East of Sha Chau / South of the Brothers	Dredging from TCBR1W / Maintenance dredging
Marine Sediment (Type 2 – Confined Marine Disposal), m <sup>3</sup>	NIL	9350 (Bulk Volume)	East of Sha Chau	Dredging from Eastern Breakwater of CBTS
Marine Sediment (Type 1 – Open Sea Disposal) , m3	NIL (Bulk Volume)	600 (Bulk Volume)	East Sha Chau / South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement



Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Marine Sediment (Type 2– Confined Marine Disposal) , m3	NIL (Bulk Volume)	14,780 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers) , m3	NIL (Bulk Volume)	2,760 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement

- 5.5.6. There were marine sediment Type 2 – Confined Marine Disposal and marine sediment Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers disposed in this reporting month.

Contract no. HK/2010/06 - Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line

- 5.5.7. No inert C&D waste was disposed and no non-Inert C&D waste was recycled in this reporting month. Details of the waste flow table are summarized in **Table 5.23**.

**Table 5.23 Details of Waste Disposal for Contract no. HK/2010/06**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	NIL	12567.88	TM38
Inert C&D materials recycled, m <sup>3</sup>	NIL	267	HK/2009/01
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	369.48	SENT/TKO137SF
Non-inert C&D materials recycled, T	NIL	60.58	Recyclers
Chemical waste disposed, L	NIL	2600	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	NIL	3,891 (Bulk Volume)	South Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup>	NIL	12,586 (Bulk Volume)	East Sha Chau

- 5.5.8. There were no marine sediments Type1- Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal was disposed in this reporting month.

Contract no. HY/2009/19 –Central- WanChai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.5.9. No inert C&D waste and non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in **Table 5.24**.

**Table 5.24 Details of Waste Disposal for Contract no. HY/2009/19**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	NIL	355921.04	TM38
Inert C&D materials recycled, m <sup>3</sup>	NIL	59367	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	1068.6	N/A
Non-inert C&D materials recycled, kg	NIL	333.14	N/A
Chemical waste disposed, L	NIL	2.12	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	NIL	162	South Cheung Chau
Marine Sediment (Type 2 – Confined Marine Disposal) , m <sup>3</sup>	NIL	681	East Sha Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup>	NIL	4976.00	

5.5.10. There was no marine sediment Type1- Open Sea Disposal and there was no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal generated were disposed in this reporting month.

Contract no. HK/2012/08 –Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

5.5.11. No inert C&D waste was disposed and non-inert C&D waste were disposed in this reporting month. Details of the waste flow table are summarized in **Table 5.25**.

**Table 5.25 Details of Waste Disposal for Contract no. HK/2012/08**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	NIL	1247	TM38
Inert C&D materials recycled, m <sup>3</sup>	NIL	NIL	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	315*	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Chemical waste disposed, L	NIL	NIL	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	NIL (Bulk volume)	31674* (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m3	NIL (Bulk volume)	108485* (Bulk volume)	South of The Brothers (from 27 Aug 2013 onwards)

\*Remarks: Contractor clarified the cumulative quantity of Non-inert C&D material and marine sediment in July reporting month.

- 5.5.12. There were no Marine Sediment Type 1 – Open Sea Disposal and marine sediment Type 1 – Open Sea Disposal (Delicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8)

- 5.5.13. No Inert C&D waste and non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in **Table 5.26**

**Table 5.26 Details of Waste Disposal for Contract no. HY/2010/08**

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	NIL	NIL	N/A
Inert C&D materials recycled, m <sup>3</sup>	NIL	NIL	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	NIL	NIL	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A
Chemical waste disposed, L	NIL	NIL	N/A
Dumping Permit (Type 1 – Open Sea Disposal)	3270	16130	South Cheung Chau
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	NIL	17820	Brothers Island

- 5.5.14. There was marine sediment Type 1 – Open Sea Disposal disposed and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

## 6. Compliance Audit

- 6.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in Appendix 6.1.

### 6.1 Noise Monitoring

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

- 6.1.1 No exceedance was recorded in the reporting month.

Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

- 6.1.2 No exceedance was recorded in the reporting month.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- 6.1.3 No exceedance was recorded in the reporting month.

Contract no. HK/2010/06 - Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line

- 6.1.4 No exceedance was recorded in the reporting month.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- 6.1.5 No exceedance was recorded in the reporting month.

### 6.2 Real-time noise Monitoring

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- 6.2.1. Limit level exceedances were recorded at RTN2a-Electric Centre during restricted hours on 27 July 2014 and during daytime on 22 July 2014 in the reporting month. After checking with Contractor, despite socket H-piling was conducted at the concerned location on 22 July 2014 during the recorded period, contractor mitigation measures including erection of temporary noise barrier was in place and the exceedance was considered to be contributed by the adverse weather condition during the hoisting period of rainstorm warning signal and thunderstorm warning signal. On 27 July 2014, no construction activity was conducted at the concerned location during the monitoring period. As such, it was considered that the exceedance was considered to be contributed by nearby IEC traffic and non-project related.

### 6.3 Air Monitoring

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

- 6.3.1 No exceedance was recorded in the reporting month.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- 6.3.2 No exceedance was recorded in the reporting month.

6.3.3 No Action and Limit Level was recorded for odour patrol during this reporting month.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

6.3.4 No exceedance was recorded in the reporting month.

#### 6.4 Water Quality Monitoring

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

6.4.1 No exceedance was recorded in this reporting month

Contract no. HK/2012/08 –Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West.

6.4.2 No exceedance was recorded in this reporting month.

Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

6.4.3 No exceedance was recorded in this reporting month

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

6.4.4 There were occasionally DO exceedances at Ex-WPCWA SW and Ex-WPCWA SW recorded on 7, 14, 21 and 25 July 2014. No odour nuisance was noted during DO monitoring.

6.4.5 After checking with Contractor, there was no marine work undertaken at Ex-WPCWA on 7 July 2014 that the exceedance was possible in relation to the accumulation of organic particles discharge from culvert near monitoring station and considered not related to the Project works.

6.4.6 Despite temporary reclamation removal works were conducted during on the monitoring dates on 14, 21 and 25 July 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective that the exceedances were possible in relation to upstream discharge at the concerned location. In view that exceedances were not continuous and the DO level was restored to normal level during subsequent monitoring on the 14, 23 and 28 July 2014, it was considered the exceedances were not related to Project.

Contract no. HK/2010/06 - Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line

6.4.7 No exceedance was recorded in this reporting month.

Contract no. HY/2009/19- Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

6.4.8 No exceedance was recorded in this reporting month.

Contract no. HK/2012/08- Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

6.4.9 No exceedance was recorded in this reporting month.

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8)

6.4.10 No exceedance was recorded in this reporting month.

**6.5 Review of the Reasons for and the Implications of Non-compliance**

6.5.1 There was no non-compliance from the site audits in the reporting period. The observations and recommendations made in each individual site audit session were presented in Section 8.

6.5.2 No non-compliances from monitoring was recorded in the reporting month.

**6.6 Summary of action taken in the event of and follow-up on non-compliance**

6.6.1 There was no particular action taken since no non-compliance was recorded from the site audits in the reporting period.

## **7. Cumulative Construction Impact due to the Concurrent Projects**

- 7.0.1. According to Condition 3.4 of the EP-356/2009, this section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III, Central-Wanchai Bypass and Island Eastern Corridor Link projects.
- 7.0.2. According to the Final EM&A Report of Central Reclamation Phase III (CRIII) for Contract HK 12/02, the major construction activities were completed by end of January 2014 and no construction activities were undertaken thereafter and the water quality monitoring was completed in October 2011 and no Project-related exceedance was recorded for air and noise monitoring. It can be concluded that cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was insignificant.
- 7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area, Diaphragm wall construction and pipe pile wall construction were performed in July 2014 reporting month. As no project related exceedance were recorded during the reporting period, cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was considered as insignificant.
- 7.0.4. According to the construction programme of Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects, the major construction activity under Wan Chai Development Phase II were marine works at HKCEC areas, tunnel works at Wan Chai East and filling works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were backfilling works at TS4 and TPCWAE. Bridge construction and tunnel works at Central Interchange, ELS, segment launching works and tunnel works at North Point area. The major environmental impact was water quality impact at Causeway Bay and Wan Chai. Marine-based construction activities were filling works at WanChai West and removal of temporary reclamation at TS4, TS2 and EX-PCWA at Wan Chai East in the reporting month.
- 7.0.5. No significant air impact from construction activities was anticipated in the reporting month. Besides, no project-related exceedances were recorded during the air and noise environmental monitoring events in the reporting month. Thus, it is evaluated that the cumulative construction impact from the concurrent projects including Central Reclamation Phase III (CRIII), Wan Chai Development Phase II (WDII), Central-WanChai Bypass (CWB), Island Eastern Corridor Link projects (IECL) was insignificant.

**8. Environmental Site Audit**

8.0.1. During this reporting month, weekly environmental site audits were conducted for Contracts no. HK/2009/01, HK/2009/02, HY/2009/15, HK/2010/06, HY/2009/19, HK/2012/08 and HY/2010/08. No non-conformance was identified during the site audits.

8.0.2. Four site inspections for Contract no. HK/2009/01 were conducted on 2, 9, 17 and 23 July 2014 in reporting month. Results of these inspections and outcomes are summarized in **Table 8.1**.

**Table 8.1 Summary of Environmental Inspections for Contract no. HK/2009/01**

Item	Date	Observations	Action taken by Contractor	Outcome
140709_01	9-Jul-14	Chemical cans should be placed on a drip tray.	Drip tray was provided for chemicals cans.	Completion as observed on 17 July 2014
140723_01	23-Jul-14	Drip tray should be provided for oil cans.	Drip tray was provided for oil cans.	Completion as observed on 30 July 2014

8.0.3. Four site inspections for Contract no. HK/2009/02 were carried out on 3, 10, 16 and 24 July 2014 in reporting month. Results of these inspections and outcomes are summarized in **Table 8.2**.

**Table 8.2 Summary of Environmental Inspections for Contract no. HK/2009/02**

Item	Date	Observations	Action taken by Contractor	Outcome
140703_01	3-Jul-14	Silt curtain should be properly deployed and maintained (WCR2)	Double silt curtain are maintained and are properly deployed.	Completion as observed on 10 July 2014
140703_2	3-Jul-14	Cover of stockpile should be improved.	Additional covers were placed above the stockpile and barriers were placed between the stockpile and the shore. The size of stockpile was reduced.	Completion as observed on 10 July 2014
140710_1	10-Jul-14	Drip tray should be provided for used oil cans.	Drip tray was provided for oil cans.	Completion as observed on 14 July 2014
140716_01	16-Jul-14	Drip tray should be provided for air compressor	Drip tray was provided for air compressor.	Completion as observed on 24 July 2014.
140716_02	16-Jul-14	Hole of drip tray should be covered under the air compressor.	The hole of drip tray was covered under the air compressor.	Completion as observed on 24 July 2014.



Item	Date	Observations	Action taken by Contractor	Outcome
140724_01	24-Jul-14	The wheel washing facility should be improve such that no particulates washed out to the silt boundary (Gate 2)	A channel at the wheel wash facility site was added for better runoff to soak away drainage and a stop line for vehicle at the site boundary was added.	Completion as observed on 31 July 2014
140716_02	24-Jul-14	Stockpile should be properly handle and covered (WCR1)	Stockpile was regularly sprayed by water during active phase, and inactive stockpile was covered.	Completion as observed on 31 July 2014

8.0.4. Four site inspections for Contract no. HY/2009/15 were carried out on 2, 8, 15 and 22 July 2014 in reporting month. The results of these inspections and outcomes are summarized in **Table 8.3**.

**Table 8.3 Summary of Environmental Inspections for Contract no. HY/2009/15**

Item	Date	Observations	Action taken by Contractor	Outcome
140702_01	2/7/2014	Review the wastewater treatment procedure to prevent milky discharge (EX-PCWA)	No further milky discharge observed	Completion as observed on 8 July 2014
140702_02	2/7/2014	Provide proper chemical waste collection point for chemical waste	Chemical waste container was removed.	Completion as observed on 8 July 2014
140715_01	15/7/2014	Clear the floating refuse/scum accumulated with site boundary (EX-PCWA)	Floating scum and refuses have been removed.	Completion as observed on 22 July 2014
140715_02	15/7/2014	Provide acoustic screen to breakers (EX-PCWA,TS4)	Acoustic screen have been provided to breaker.	Completion as observed on 22 July 2014
140722_02	22/7/2014	Collect the floating refuse and scum layer trapped within the silt formation EX-PCWA)	Floating scum and refuses have been removed.	Completion as observed on 29 July 2014

8.0.5. Four site inspections for Contract no. HK/2010/06 were carried out on 30 June 2014, 7, 14 and 21 July 2014 in reporting month. No particular finding was observed in this reporting month.

8.0.6. Four site inspections for Contract no. HY/2009/19 were carried out on 2, 9, 16 and 23 July 2014 in reporting month. No particular finding was observed in this reporting month.

8.0.7. Four site inspections for Contract no. HK/2012/08 were carried out on 2, 8, 14 and 22 July 2014 in this reporting period. The results of these inspections and outcomes are summarized in **Table 8.4**.

**Table 8.4 Summary of Environmental Inspections for Contract no. HK/2012/08**

Item	Date	Observations	Action taken by Contractor	Outcome
140702_01	2-Jul-14	Drip tray should be provided to oil containers.	Drip tray was provided.	Completion as observed on 8 July 2014

8.0.8. Four site inspections for Contract no. HY/2010/08 were carried out on 4, 10, 17 and 24 July 2014 in this reporting period. The results of these inspections and outcomes are summarized in **Table 8.5**.

**Table 8.5 Summary of Environmental Inspections for Contract no. HY/2010/08**

Item	Date	Observations	Action taken by Contractor	Outcome
140704_01	4-Jul-14	Improve the protection at shoreline to mitigate seepage of muddy water during land piling works (Victoria Park Road)	Protection for mitigation of seepage of muddy water have been improved	Completion as observed on 17 Aug 2014
140710_01	10-Jul-14	Chemical container shall be cleared or provided with drip tray (Victoria Park)	Chemical waste container have been removed	Completion as observed on 17 Aug 2014
140717_01	17-Jul-14	Clear the mud/ silt deposit at public area (Victoria Park/ Victoria Park Road)	Mud/ silt deposit at Victoria Park Road have been removed	Completion as observed on 24 Aug 2014
140717_02	17-Jul-14	Provide watering to haul road (Victoria Park)	Watering to haul road was provided	Completion as observed on 24 Aug 2014
140724_01	24-Jul-14	Rectify and repair the damaged silt screen and clear the floating refuse trapped within (Windsor House)	Damaged silt screen have been repaired and the floating refuses have been collected	Completion as observed on 31 July 2014
140724_02	24-Jul-14	Clear the chemical waste container (Victoria Road)	Chemical waste container have been removed	Completion as observed on 31 July 2014

## 9. Complaints, Notification of Summons and Prosecution

- 9.0.1. One environmental complaint under EP-356/2009 was received in the reporting period.
- 9.0.2. A public complaint regarding construction noise impact referred by RSS was received by ET on 25 July 2014. The complainant reported that at 00:57hrs on 21 July 2014, the complainant could not sleep due to work and machine at the project site opposite to Ngan Tao Building, where he is staying were still going on and in operation. Noise travelled to his flat despite it was some distance away.
- 9.0.3. ET confirmed with the RSS that horizontal cutting and removal of D-wall at Eastern, Southern and Northern side of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter before 23:00 on 20 July 2014 that total 3 numbers of derrick lighter and 3 numbers of saw cut machine were in operation, and removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway bay Typhoon Shelter around 00:25hrs to 00:56hrs on 21 July 2014 that total 1 number of derrick lighter was in operation.
- 9.0.4. According to the relevant site records under Contract HY/2009/15, before 23:00hrs on 20 July 2014, horizontal cutting and removal of Diaphragm Wall at Eastern, Southern and Northern side of TS2 was conducted under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 3 nos. of derrick lighter and 3 nos. of saw cut machine were in operation at the above period. From around 00:25hrs to 00:56hrs on 21 July 2014, removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter. Total 1 no. of derrick lighter was found operating at the above period.
- 9.0.5. After reviewing the relevant records and information verified by RSS and the Construction Noise Permit (CNP) no. GW-RS0592-14, it was considered the condition of CNP GW-RS0592-14 was not fulfilled by the Contractor of HY/2009/15. "From 00:25hrs to 00:57hrs on 21 July 2014, the PME(s) (1 no. of Derrick Lighter) on-site could not follow with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0592-14." According to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting procedure was incomplete. Under safety and navigation considerations, the completion of diaphragm wall removal was necessary and of imminent need.
- 9.0.6. The contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works.
- 9.0.7. The details of cumulative complaint log and updated summary of complaints are presented in [Appendix 9.1](#)
- 9.0.8. Cumulative statistic on complaints and successful prosecutions are summarized in **Table 9.1** and **Table 9.2** respectively.

**Table 9.1 Cumulative Statistics on Complaints**

Reporting Period	No. of Complaints
Commencement works (Mar 2010) to last reporting month	29
July 2014	1
<b>Total</b>	<b>30</b>

**Table 9.2 Cumulative Statistics on Successful Prosecutions**

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
<b>Total</b>	<b>-</b>	<b>0</b>	<b>0</b>

## 10. Conclusion

- 10.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.
- 10.0.2. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others were remains unchanged.
- 10.0.3. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- 10.0.4. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 10.0.5. Water quality monitoring at WSD10 and WSD15 will be temporary suspended while water quality monitoring at WSD9 and WSD17 were implemented with respect to HK/2009/02 for the water quality monitoring scheduled on 8 Feb 12 onwards;
- 10.0.6. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 10.0.7. Water quality monitoring at C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013, and conclude if any water deterioration had been identified during the 4-week water quality monitoring.
- 10.0.8. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 10.0.9. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.

- 10.0.10. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.
- 10.0.11. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui- DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- 10.0.12. The scheduled construction activities and the recommended mitigation measures for the coming month are listed in **Table 10.1**.

**Table 10.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month**

Contract No.	Key Construction Works	Recommended Mitigation Measures
HK/2009/01	<ul style="list-style-type: none"> <li>Rock trimming works</li> </ul>	<ul style="list-style-type: none"> <li>To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance and dark smoke emission</li> </ul>
HK/2009/02	<ul style="list-style-type: none"> <li>Covered walkway at Expo Drive East</li> <li>Road works on Hung Hing Road</li> <li>ABWF works at WSD Salt Water Pumping Station</li> <li>Backfilling works for Tunnel Portion 1</li> <li>ABWF and E&amp;M works at Ferry Pier</li> <li>Concreting works and steelworks for Temporary Covered Walkway</li> <li>Capping beam construction</li> <li>Reclamation at WCR2</li> <li>Installation of Bridge 2</li> <li>Site haul road construction and commence at-grade road construction</li> </ul>	<ul style="list-style-type: none"> <li>To cover the dusty material or stockpile by impervious sheet;</li> <li>To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance and dark smoke emission</li> <li>To conform the installation and setting as in the silt screen and silt curtain deployment plan</li> <li>Movable noise barrier shall be deployed for demolition works</li> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> <li>Review silt screen deployment and silt curtain deployment and resubmit associate plans to EPD</li> <li>Implement silt screen and silt curtain in accordance with the associated plans submitted to EPD.</li> </ul>

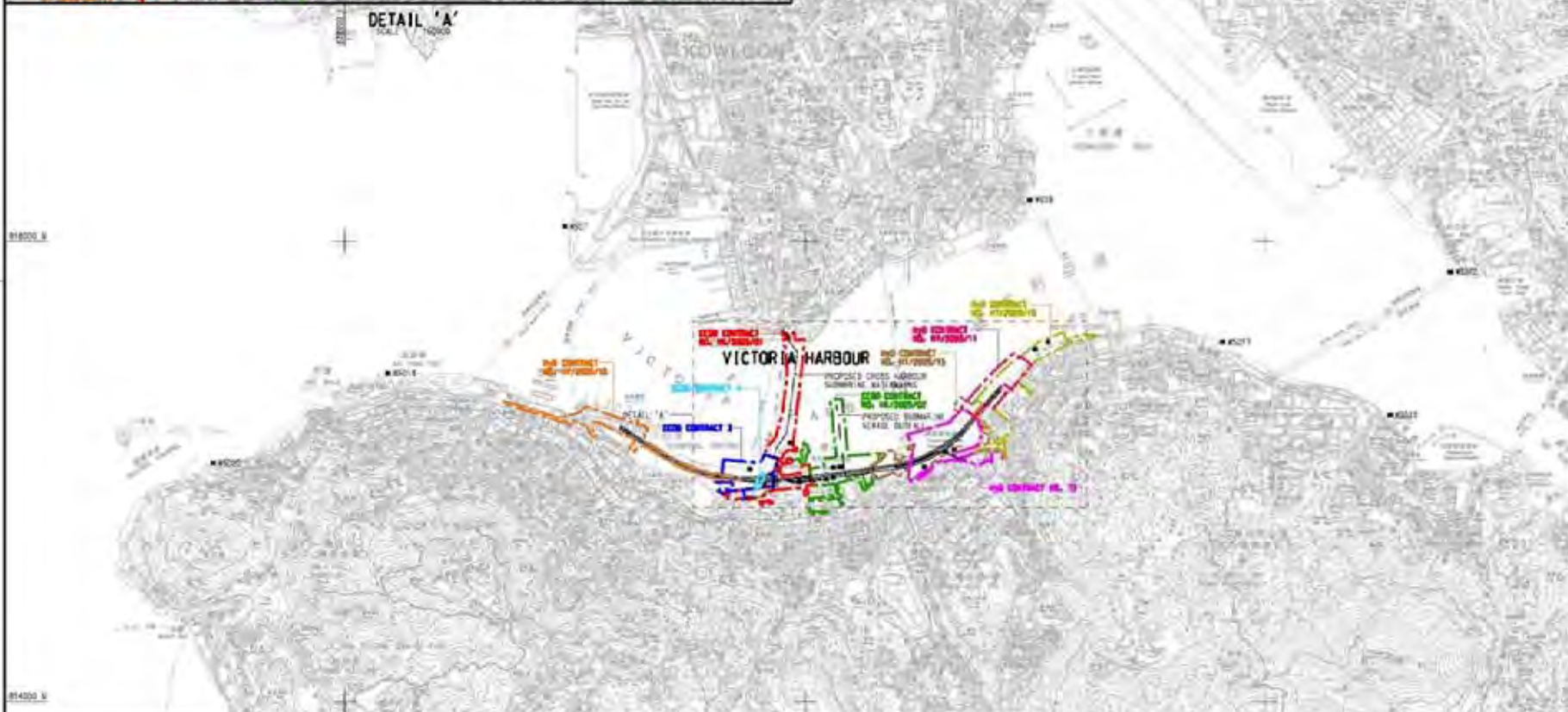
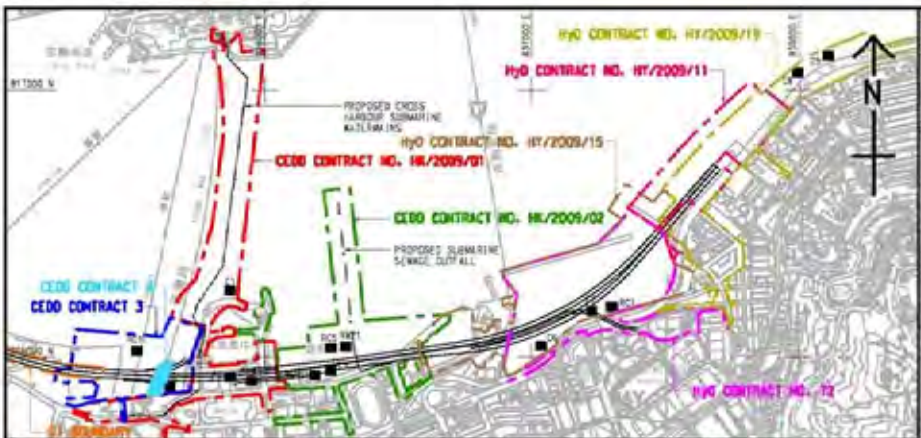
Contract No.	Key Construction Works	Recommended Mitigation Measures
HY/2009/15	<ul style="list-style-type: none"> <li>EVA construction at Eastern Breakwater</li> <li>Reinstatement of Eastern Breakwater</li> <li>Removal of Seawall Blocks at TPCWAE &amp; TS4</li> <li>Demolition of D-Wall at TS2, TPCWAE &amp; TS4</li> </ul>	<ul style="list-style-type: none"> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> <li>Implement silt curtain in accordance with the associated plans submitted to EPD.</li> </ul>
HK/2010/06	<ul style="list-style-type: none"> <li>Nil</li> </ul>	<ul style="list-style-type: none"> <li>Nil</li> </ul>
HY/2009/19	<ul style="list-style-type: none"> <li>Construction of Dolphin Cap</li> </ul>	<ul style="list-style-type: none"> <li>To space out noisy equipment and position as far as possible from sensitive receiver.</li> </ul>
HK/2012/08	<ul style="list-style-type: none"> <li>ELS for box culvert La at Lung King Street</li> <li>Filling for seawall rock mound formation</li> <li>Filling for reclamation</li> <li>Dredging</li> </ul>	<ul style="list-style-type: none"> <li>To conform the installation and setting as in the silt screen and silt curtain deployment plan</li> <li>To space out noisy equipment and position as far as possible from sensitive receiver.</li> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> </ul>
HY/2010/08	<ul style="list-style-type: none"> <li>Dredging works</li> </ul>	<ul style="list-style-type: none"> <li>To conform the installation and setting as in the silt screen and silt curtain deployment plan</li> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> </ul>



***Figure 2.1***

***Project Layout***





- LEGEND:**
- WATER QUALITY MONITORING STATIONS
- COOLING WATER INTAKES**
- 01 HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
  - 02 TELECOM HONG KONG ACADEMY 1 (2) PERFORMANCE ARTS / SAITLWAY CENTRE
  - 03 HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE 1
  - 04 WAN CHAI TOWER AND GREAT WALL CENTRE
  - 05 SUN HANG KAI CENTRE
  - 06 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
  - 07 WINDSOR HOUSE
  - 08 CITY SQUARE
  - 09 PROVIDENT CENTRE
  - 102 PROPOSED HERPA EXTENSION
  - 103 SUN HANG KAI CENTRE / REPRODUCTION
  - 107 WINDSOR HOUSE (TEMPORARY REPRODUCTION)
- WSD SALT WATER INTAKE**
- WSD1 WAN CHAI
  - WSD2 WAN CHAI (REPRODUCTION)
  - WSD3 CEMILION SQUARE
  - WSD4 SA. SAN
  - WSD10 CHA KWO LING
  - WSD15 SA. SAN (2)
  - WSD17 CLARRY BAY
  - WSD19 SHILOE BAY
  - WSD20 KENNEDY TOWN

DESIGNATED PROJECT'S TOP	WORK CONTRACT	DESIGNATED PROJECT NUMBER	COMPLETION (APPROXIMATE)
SP1 - CENTRAL WAN CHAI STYASS WORKS INCLUDING 15 ROAD TUNNEL AND SLOPE ROADS	CEDD CONTRACT NO. HK/2009/01	SP1 - SP3 - SP6	APRIL 2010
SP2 - ROAD P2 AND OTHER ROADS (PRIMARY & DISTRICT DISTRIBUTION ROADS)	CEDD CONTRACT NO. HK/2009/02	SP1 - SP3 - SP5	APRIL 2010
SP3 - PERMANENT AND TEMPORARY ROAD MAINTENANCE WORKS INCLUDING ASSOCIATED DRAINAGE WORKS IN WAN CHAI DEVELOPMENT PHASE 1 (WSD1) AREA	CEDD CONTRACT 3	SP1 - SP3	END 2011
SP4 - TEMPORARY BRIDGE-SHELTER 1 (SP4 NOT TO BE IMPLEMENTED)	CEDD CONTRACT 4	SP1 - SP3	END 2011
SP5 - WAN CHAI EAST SEWAGE DUCTFALL	CEDD CONTRACT 5	SP3	2010
SP6 - DISCREET FOR THE CROSS-HARBOUR WATER MAINS	HYD CONTRACT NO. HY/2009/11	SP3	18 AUGUST 2010
	HYD CONTRACT NO. HY/2009/15	SP1 - SP3	SEPTEMBER 2010
	HYD CONTRACT NO. HY/2009/16	SP1	OCTOBER 2010
	HYD CONTRACT NO. HY/2009/18	SP1	NOVEMBER 2010
	HYD CONTRACT 12	SP1 - SP3	MID 2010



**CEDD** 土木工程發展局  
Civil Engineering and Development Department

**WAN CHAI DEVELOPMENT PHASE II**

WAN CHAI DEVELOPMENT PHASE II (WSD) CENTRE - SANITARY FITTING REVISIONS AND TESTING WORKS (STAGE 1)

**LOCATIONS OF WATER QUALITY MONITORING STATIONS**

**AECOM**

PROJECT NUMBER: **60041297/C5/SK001**

DATE: 2010	SCALE: 1:10000	DATE: 2010	SCALE: 1:10000
BY: [Signature]	BY: [Signature]	BY: [Signature]	BY: [Signature]
CHK: [Signature]	CHK: [Signature]	CHK: [Signature]	CHK: [Signature]
APP: [Signature]	APP: [Signature]	APP: [Signature]	APP: [Signature]

COPYRIGHT RESERVED





**NOTES:**

1. SETTING OUT COORDINATES REFER DRG. No. 60095653/NP/1601.
2. THE CONTRACTOR SHALL KEEP OPEN AND PROVIDE ACCESS (PEDESTRIAN AND TRAFFIC) TO THE PUBLIC AT ALL TIMES DURING THE PERIOD OF THE CONTRACTOR'S OCCUPATION OF DIL STREET. THE CONTRACTOR SHALL MAINTAIN THIS PORTION OF SITE IN A CLEAN, PASSABLE AND SAFE STATE AT ALL TIMES.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. No. 60095653/NP/1652.

**LEGEND:**

[Dotted pattern]	PORTION NPR1	[Cross-hatch pattern]	PORTION NPR4
[Diagonal lines /]	PORTION NPR2	[Diagonal lines \]	PORTION NPR5
[Diagonal lines /]	PORTION NPR3	[Stippled pattern]	PORTION NPR6
[Diagonal lines \]	PORTION NPR4	[Vertical lines]	PORTION NPR7

B	WORKING DRAWING	REV	DEC 09
A	TENDER ADDENDUM NO. 1	RC	DEC 09
-	TENDER DRAWING	RC	SEP 09

Highways Department 路政署  
Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK  
CENTRAL - WAN CHAI BYPASS - NORTH POINT RECLAMATION

PORTION OF SITE  
SHEET 1 OF 2

**AECOM**

DRGNO. 圖紙編號	60095653/NP/1651B
DESIGNED BY 設計	TTF
CHECKED BY 校核	CJH
DATE 日期	AT 17 2009
SCALE 比例尺	AS SHOWN
ISSUED BY 發出	WORKING DRAWING
APPROVED BY 核准	CW
UNIT 單位	METRES





LOCATION PLAN  
SCALE 1 : 5000

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
  2. THE RESTRICTION ZONE IS THIS DRAWING WILL COME INTO EFFECT AFTER THE OPERATION OF THE GOVERNMENT HULLING AT 09:00 ON 15/09/09.

LEGEND:

- CONTRACT BOUNDARY
- [Hatched Box] WORKING RESTRICTION ZONE
- [Cross-hatched Box] NAVIGATION AND WORKING RESTRICTION ZONE
- [Dotted Box] WORKING BARGE, NAVIGATION AND WORKING RESTRICTION ZONE

TENDER ADDENDUM NO. 4	SEP 25, 2009
TENDER ADDENDUM NO. 1	SEP 25, 2009
TENDER DRAWING	SEP 25, 2009

CEDD 土木工程發展署  
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II -  
KONG KONG CONVENTION AND EXHIBITION CENTRE  
**RESTRICTED ZONE FOR  
CONSTRUCTION VESSELS**  
(Contract no: HK/2009/01)

**AECOM**

DRGNO. 圖號	60041297/C1/100/10108
DATE 日期	16/2009/01
SCALE 比例尺	AS 1:8000
COPYRIGHT RESERVED	



INSET 'A'  
SCALE 1:1000

CENTRAL DISTRICT



CUT LINE B-B  
SEE AT DRAWING NO. A00025/C1/100/1006

HONG KONG CONVENTION AND EXHIBITION CENTRE

HKCEC (Western Part)

HKCEC (Middle Part)

HKCEC (Eastern Part)

EIA-141/2007  
DP3

INT	COORDINATES	
	EASTING	NORTHING
C41	835986.528	818105.708
C42	835979.417	818104.408
C43	835983.943	818079.326
C44	835983.543	818086.581
C45	835984.818	818085.528
C46	835985.524	818085.514
C46	835975.757	818081.208
C47	835974.956	818082.441
C48	835980.846	818075.887
C49	835981.347	818073.238
C50	835976.828	818066.814
C51	835988.478	818080.846
C52	835975.226	818089.224
C53	835973.504	818077.897
C54	835975.827	818084.764
C55	835973.745	818079.883
C56	835991.071	818078.764
C56-1	835995.679	818078.873
C56-2	835982.468	818078.765
C56-3	835987.248	818182.758
C57	835983.403	818181.878
C58	835978.498	818087.198
C59	835978.574	818083.818
C60	835978.507	818120.744
C61	835980.881	818184.524
C62	835982.434	818171.812
C63	835973.504	818080.748
C64	835975.828	818078.507

INT	COORDINATES	
	EASTING	NORTHING
C65	836018.933	818413.438
C66	836034.000	818413.614
C67	836022.816	818413.240
C68	836019.515	818413.882
C69	836021.110	818414.000
C70	836027.289	818413.880
C71	836041.050	818413.270
C72	836048.415	818407.187
C72-1	835555.589	818106.587
C73	836047.435	818385.890
C74	836049.797	818374.107
C75	836024.185	818382.148
C76	836038.298	818388.000
C77	836048.906	818382.898
C78	836048.439	818374.038
C79	836042.630	818351.015
C80	836024.635	818328.880
C81	836028.417	818308.782
C82	836028.882	818378.148
C83	836107.025	818328.084
C84	836098.473	818322.444
C85	836082.342	818348.714
C86	836084.499	818348.925
C87	836084.196	818348.388
C88	836082.512	818348.142
C89	836078.987	818345.898
C90	836071.630	818337.198



KEY PLAN  
SCALE 1:10000

NOTE:  
1. FOR NOTES & LEGEND, REFER TO DRAWING NO. A00025/C1/100/1006.

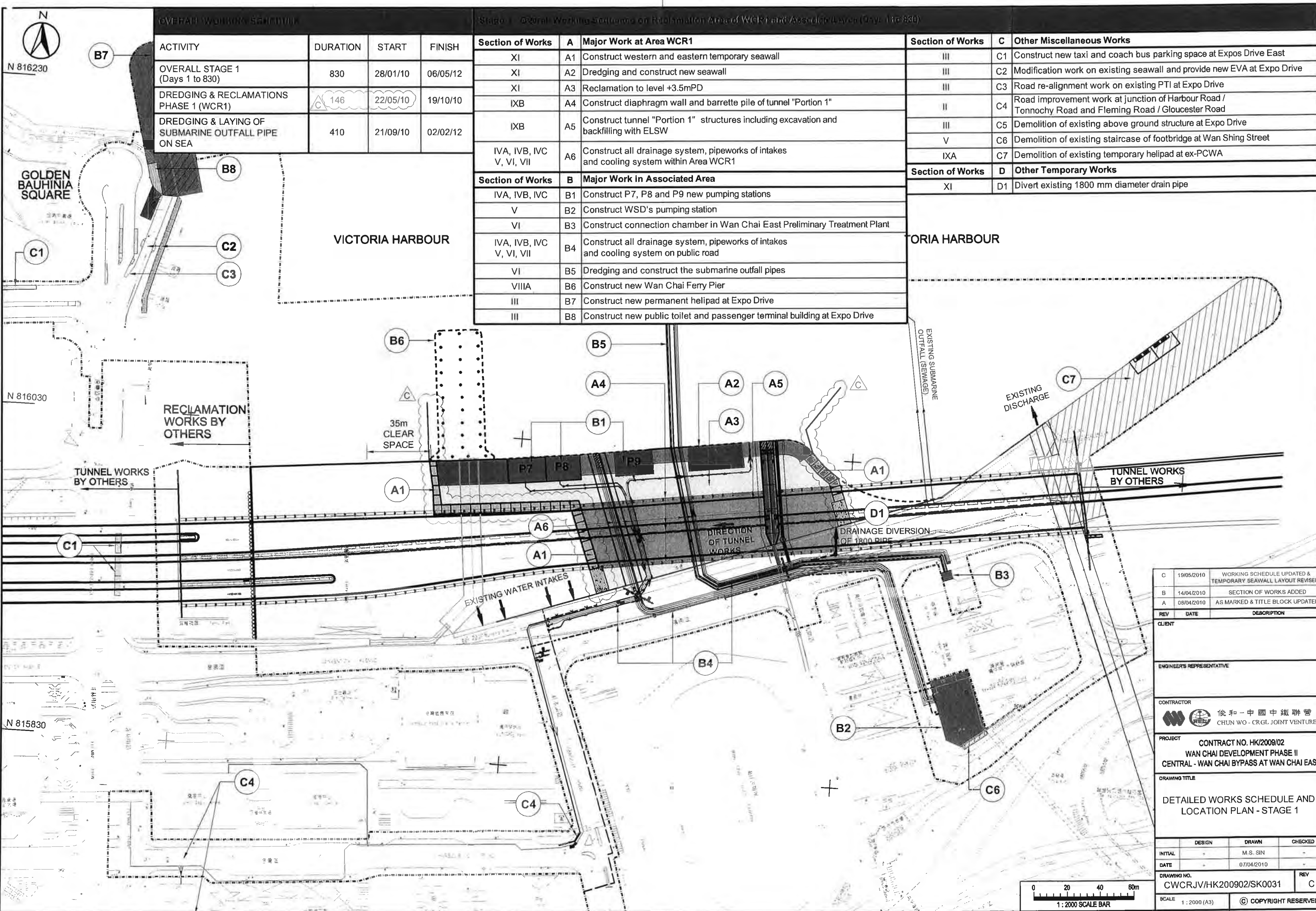
INT	COORDINATES	
	EASTING	NORTHING
C1	836875.205	818222.559
C2	836875.207	818222.559
C3	836874.561	818228.425
C4	836871.020	818231.014
C5	836882.492	818229.522
C6	836881.584	818218.612
C7	836886.585	818215.197
C8	836886.199	818207.147
C9	836886.433	818202.247
C10	836891.082	818207.050
C11	836885.389	818208.075
C12	836871.486	818208.107
C13	836925.468	818204.817
C14	836886.433	818217.122
C15	836874.289	818208.593
C16	836875.195	818205.525
C17	836888.138	818204.441
C18	836846.085	818208.816
C19	836871.421	818205.587
C20	836902.537	818220.881
C21	836875.205	818217.484
C22	836873.182	818207.442
C23	836887.086	818208.074
C24	836878.984	818203.670
C25	836875.288	818208.251
C26	836881.647	818212.286
C27	836904.025	818243.896
C28	836908.218	818244.445
C29	836901.525	818238.180
C30	836883.781	818208.487
C31	836831.216	818228.470
C32	836824.142	818225.117
C33	836821.081	818215.482
C34	836828.290	818204.700
C35	836827.428	818202.056
C36	836808.187	818201.280
C37	836824.812	818208.093
C38	836824.747	818202.285
C39	836828.850	818218.784
C40	836818.190	818208.057
C41	836828.810	818207.295
C42	836818.908	818218.080
C43	836825.682	818215.512

C	TENDER ADDENDUM NO.4	SHEN JYL DEP C8
B	TENDER ADDENDUM NO.2	SHEN JYL DEP C8
A	TENDER ADDENDUM NO.1	SHEN JYL DEP C8
-	TENDER DRAWING	SHEN JYL DEP C8
W	WATER TRENCH	SHEN JYL DEP C8


**土木工程發展署**  
 Civil Engineering and Development Department  
**WAN CHAI DEVELOPMENT PHASE II**  
 WAI CHAI DEVELOPMENT PHASE II -  
 CENTRAL AND WEST DISTRICTS  
 HONG KONG CONVENTION AND EXHIBITION CENTRE  
**SITE BOUNDARY SETTING OUT PLAN**  
 (Contract no. HK/2009/01)

**AECOM**  
 DRGNO. 60041297/C1/100/1006C  
 SHEET NO. 1 OF 1  
 DATE: 18/2009/01  
 DRAWN BY: JYL  
 CHECKED BY: JYL  
 APPROVED BY: JYL  
 SCALE: AS SHOWN  
 COPYRIGHT RESERVED





**OVERALL WORKING SCHEDULE**

ACTIVITY	DURATION	START	FINISH
OVERALL STAGE 1 (Days 1 to 830)	830	28/01/10	06/05/12
DREDGING & RECLAMATIONS PHASE 1 (WCR1)	146	22/05/10	19/10/10
DREDGING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA	410	21/09/10	02/02/12

**Stage 1 - Overall Working Schedule on Reclamation Area of WCR1 and Associated Area (Days 1 to 830)**

Section of Works	A	Major Work at Area WCR1
XI	A1	Construct western and eastern temporary seawall
XI	A2	Dredging and construct new seawall
XI	A3	Reclamation to level +3.5mPD
IXB	A4	Construct diaphragm wall and barrette pile of tunnel "Portion 1"
IXB	A5	Construct tunnel "Portion 1" structures including excavation and backfilling with ELSW
IVA, IVB, IVC, V, VI, VII	A6	Construct all drainage system, pipeworks of intakes and cooling system within Area WCR1
Section of Works	B	Major Work in Associated Area
IVA, IVB, IVC	B1	Construct P7, P8 and P9 new pumping stations
V	B2	Construct WSD's pumping station
VI	B3	Construct connection chamber in Wan Chai East Preliminary Treatment Plant
IVA, IVB, IVC, V, VI, VII	B4	Construct all drainage system, pipeworks of intakes and cooling system on public road
VI	B5	Dredging and construct the submarine outfall pipes
VIIIA	B6	Construct new Wan Chai Ferry Pier
III	B7	Construct new permanent helipad at Expo Drive
III	B8	Construct new public toilet and passenger terminal building at Expo Drive

Section of Works	C	Other Miscellaneous Works
III	C1	Construct new taxi and coach bus parking space at Expos Drive East
III	C2	Modification work on existing seawall and provide new EVA at Expo Drive
III	C3	Road re-alignment work on existing PTI at Expo Drive
II	C4	Road improvement work at junction of Harbour Road / Tonnochy Road and Fleming Road / Gloucester Road
III	C5	Demolition of existing above ground structure at Expo Drive
V	C6	Demolition of existing staircase of footbridge at Wan Shing Street
IXA	C7	Demolition of existing temporary helipad at ex-PCWA
Section of Works	D	Other Temporary Works
XI	D1	Divert existing 1800 mm diameter drain pipe

REV	DATE	DESCRIPTION
C	19/05/2010	WORKING SCHEDULE UPDATED & TEMPORARY SEAWALL LAYOUT REVISED
B	14/04/2010	SECTION OF WORKS ADDED
A	08/04/2010	AS MARKED & TITLE BLOCK UPDATED

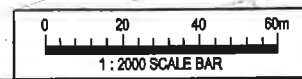
CLIENT: \_\_\_\_\_  
 ENGINEER'S REPRESENTATIVE: \_\_\_\_\_

CONTRACTOR: 俊和-中國中鐵聯營  
 CHUN WO - CRGL JOINT VENTURE

PROJECT: CONTRACT NO. HK/2009/02  
 WAN CHAI DEVELOPMENT PHASE II  
 CENTRAL - WAN CHAI BYPASS AT WAN CHAI EAST

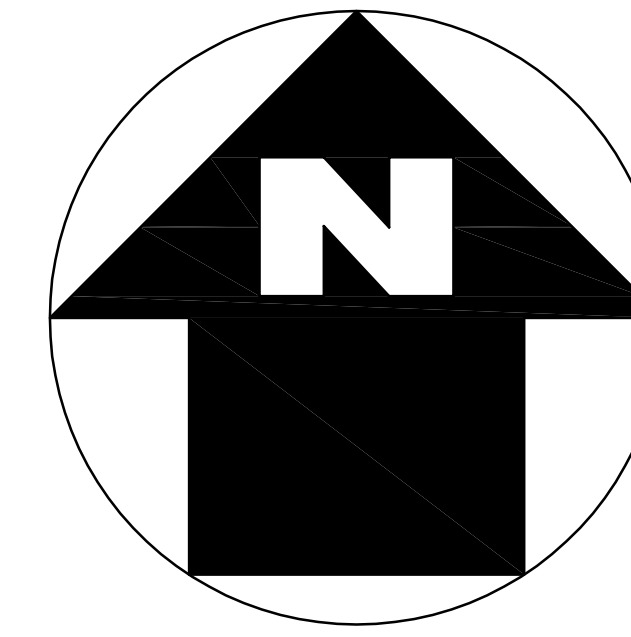
DRAWING TITLE: DETAILED WORKS SCHEDULE AND LOCATION PLAN - STAGE 1

DESIGN	DRAWN	CHECKED
INITIAL	M.S. SIN	
DATE	07/04/2010	
DRAWING NO.	CWCRJV/HK200902/SK0031	REV C
SCALE	1:2000 (A3)	© COPYRIGHT RESERVED

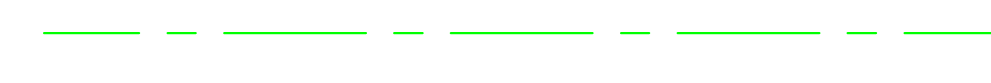




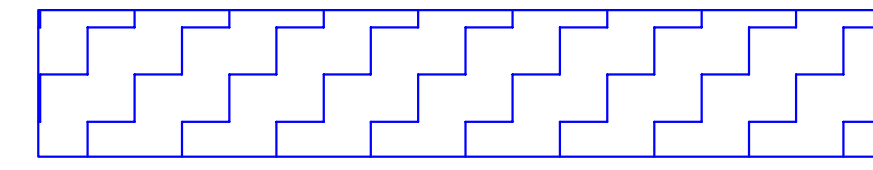
港口  
HARBOUR



LEGEND:



WORKS AREA



DREDGING AREA FOR  
MITGATION OF ODOUR(DP3)



SITE BOUNDARY

TCBR1E

TCBR2  
AND  
TCBR3

TCBR4

TCBR1W

TPCWAW

TPCWAE

DP3

銅鑼灣避風塘  
CAUSEWAY BAY TYPHOON SHELTER

吉列島  
KELLETT ISLAND

貨物裝卸灣  
Cargo Handling Basin

維多利亞公園  
Victoria Park

中國建築工程(香港)有限公司  
CHINA STATE CONSTRUCTION ENGR. (HONG KONG) LTD.

Highways Department  
CONTRACT NO. HY/2009/15  
CENTRAL-WAN CHAI BYPASS -TUNNEL  
(CAUSEWAY BAY TYPHOON  
SHELTER SECTION)

TITLE  
LOCATION PLAN OF WORKS AREA

DRG. NO.  
CWBT/EPD/001B

SCALE  
1:1000 @ A0

STATUS  
DIMENSIONS ARE IN  
MILLIMETERS

COPYRIGHT RESERVED







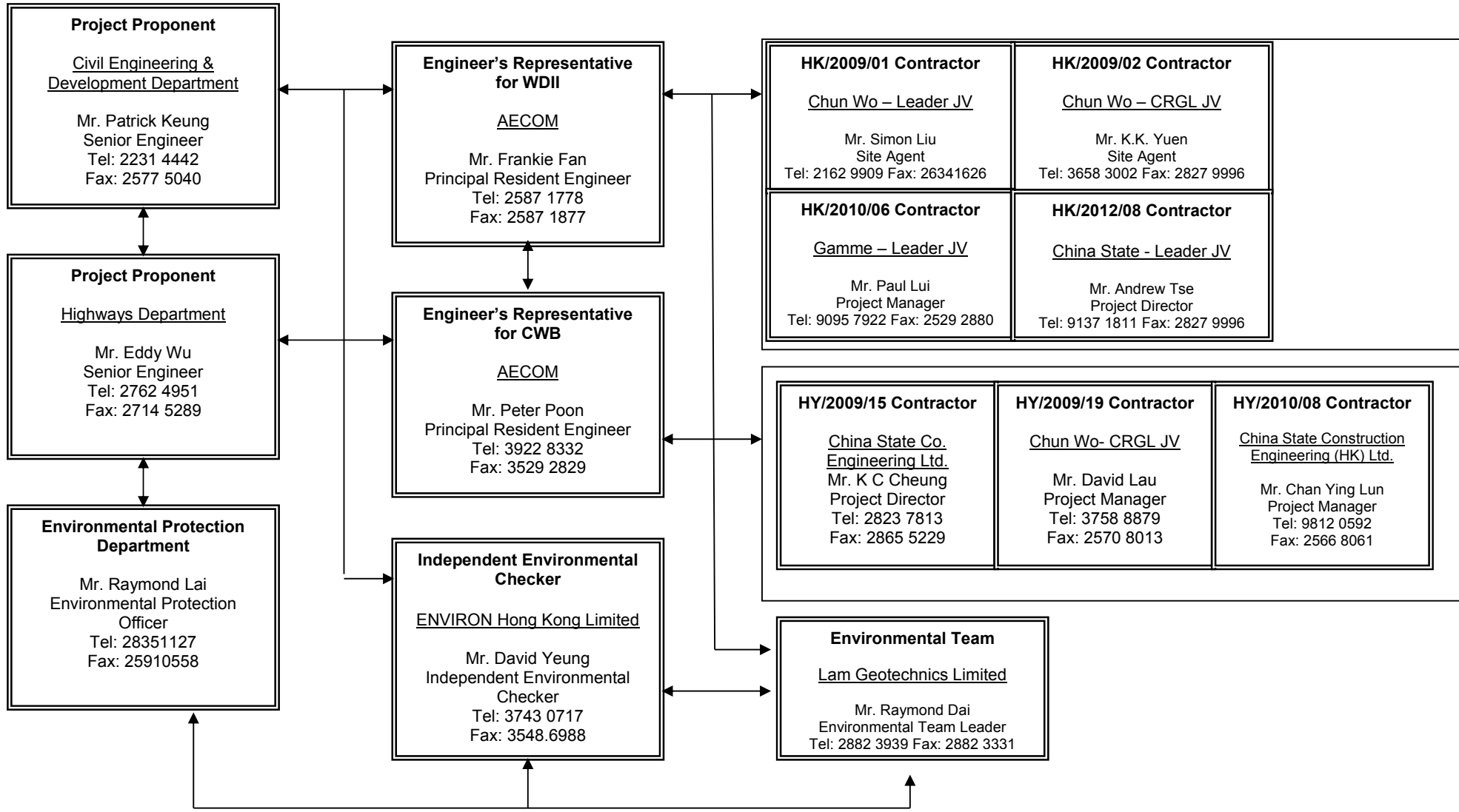
***Figure 2.2***

***Project Organization Chart***





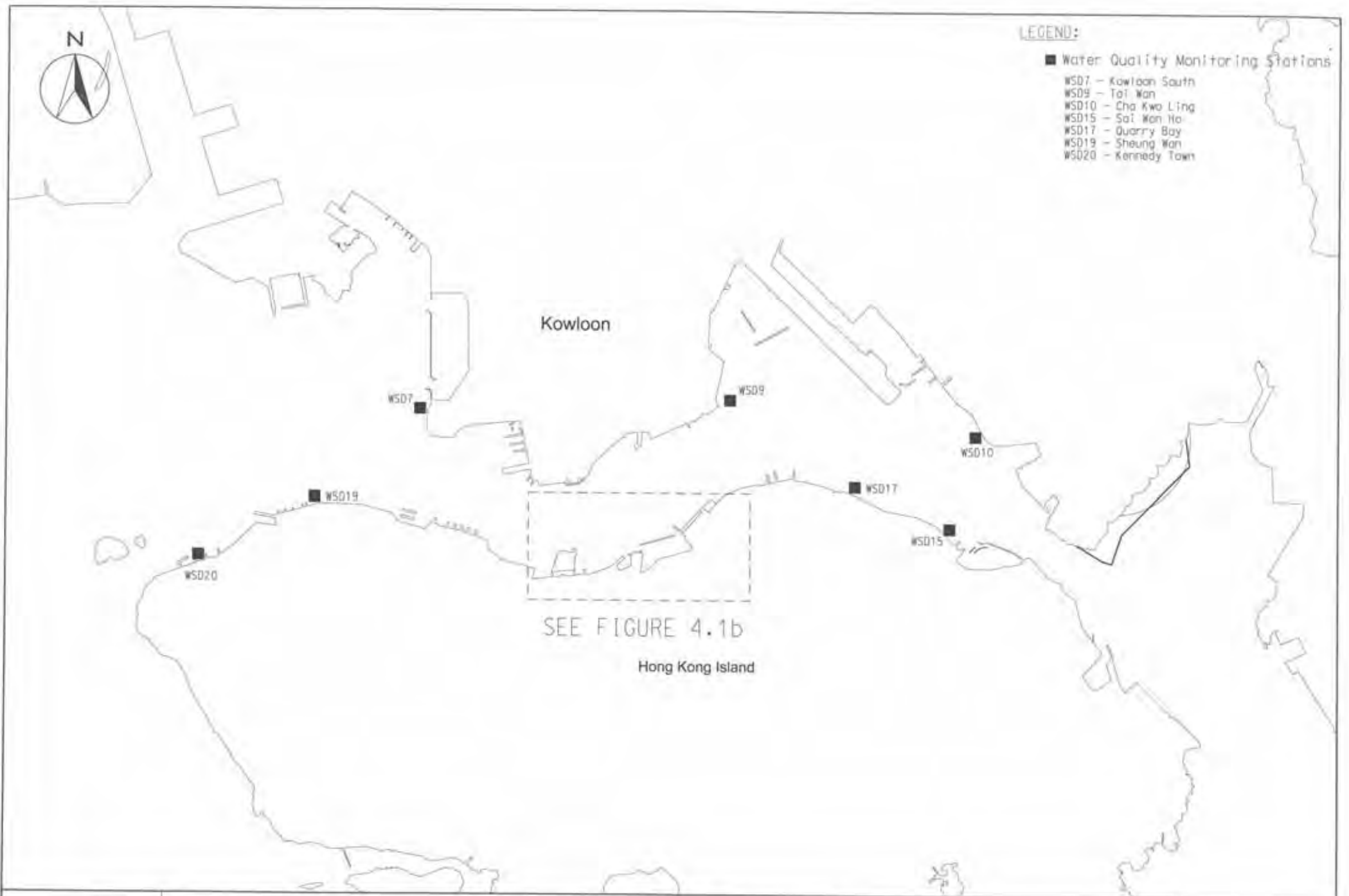
**Project Organization Chart**





***Figure 4.1***

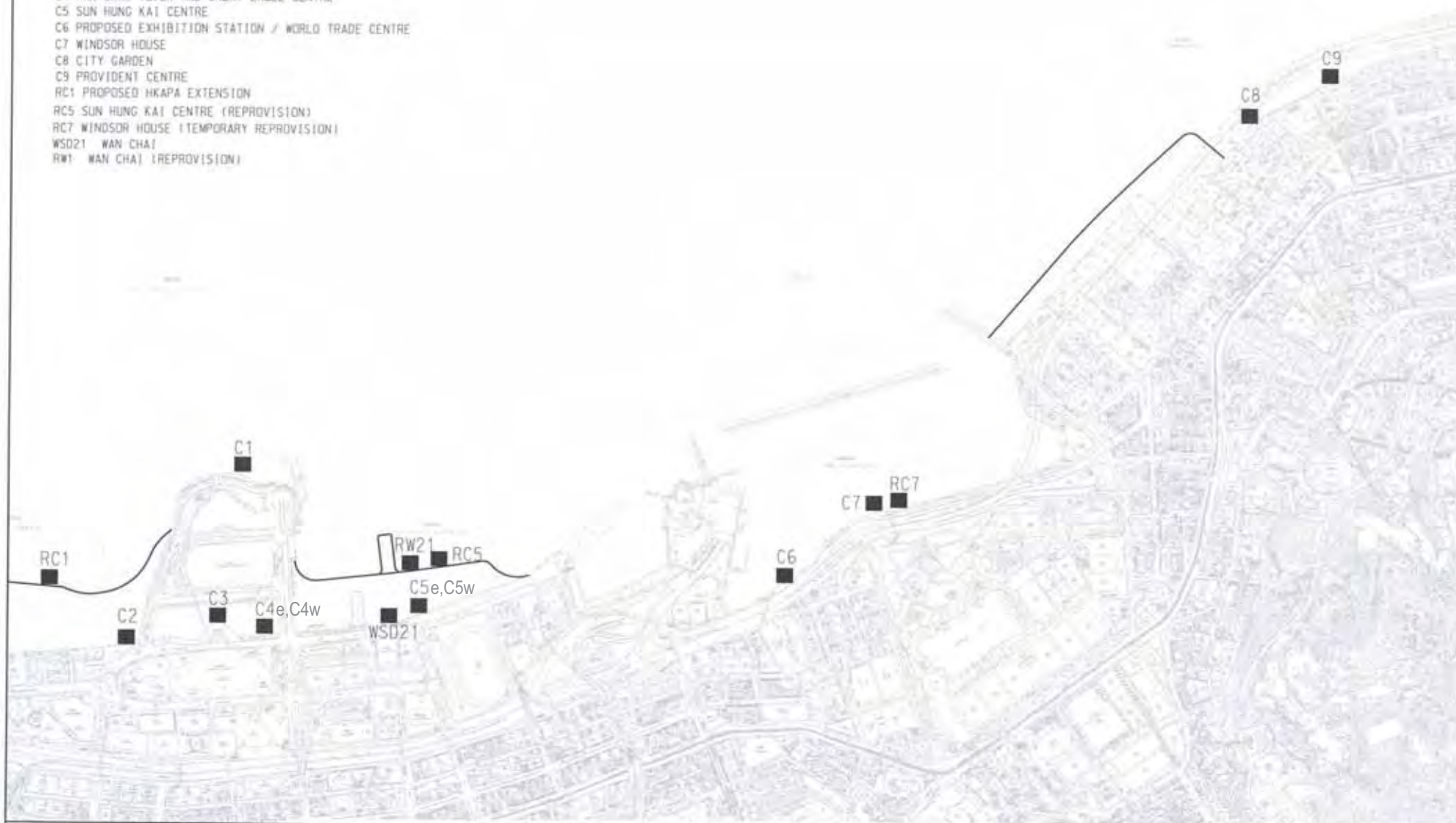
***Locations of Monitoring Stations***



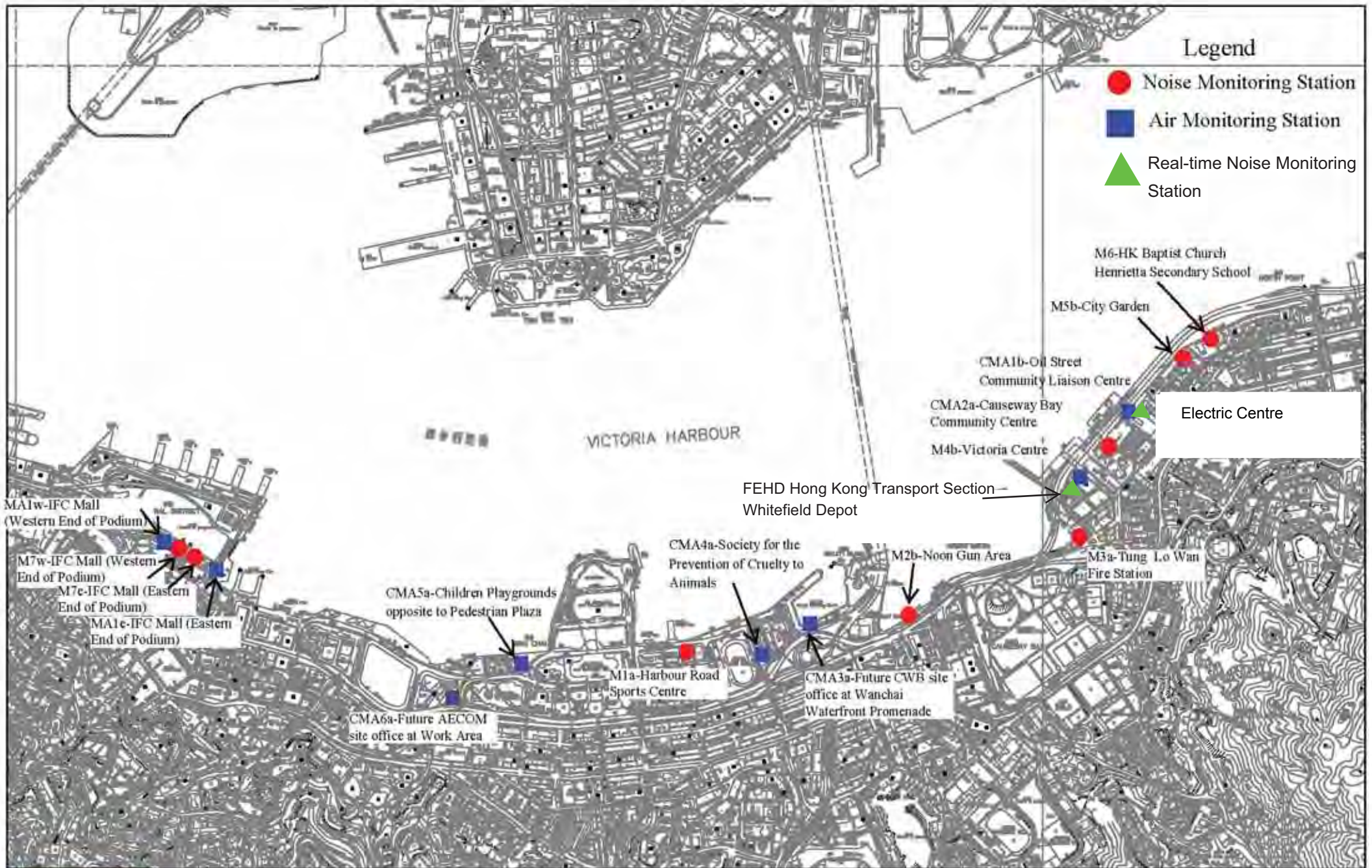
**LEGEND:**

**WATER QUALITY MONITORING STATIONS**

- C1 HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
- C2 TELECOM HOUSE/HK ACADEMY FOR PERFORMING/ SHUI ON CENTRE
- C3 HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE I
- C4 WAN CHAI TOWER AND GREAT EAGLE CENTRE
- C5 SUN HUNG KAI CENTRE
- C6 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
- C7 WINDSOR HOUSE
- C8 CITY GARDEN
- C9 PROVIDENT CENTRE
- RC1 PROPOSED HKAPA EXTENSION
- RC5 SUN HUNG KAI CENTRE (REPROVISION)
- RC7 WINDSOR HOUSE (TEMPORARY REPROVISION)
- WSD21 WAN CHAI
- RW1 WAN CHAI (REPROVISION)





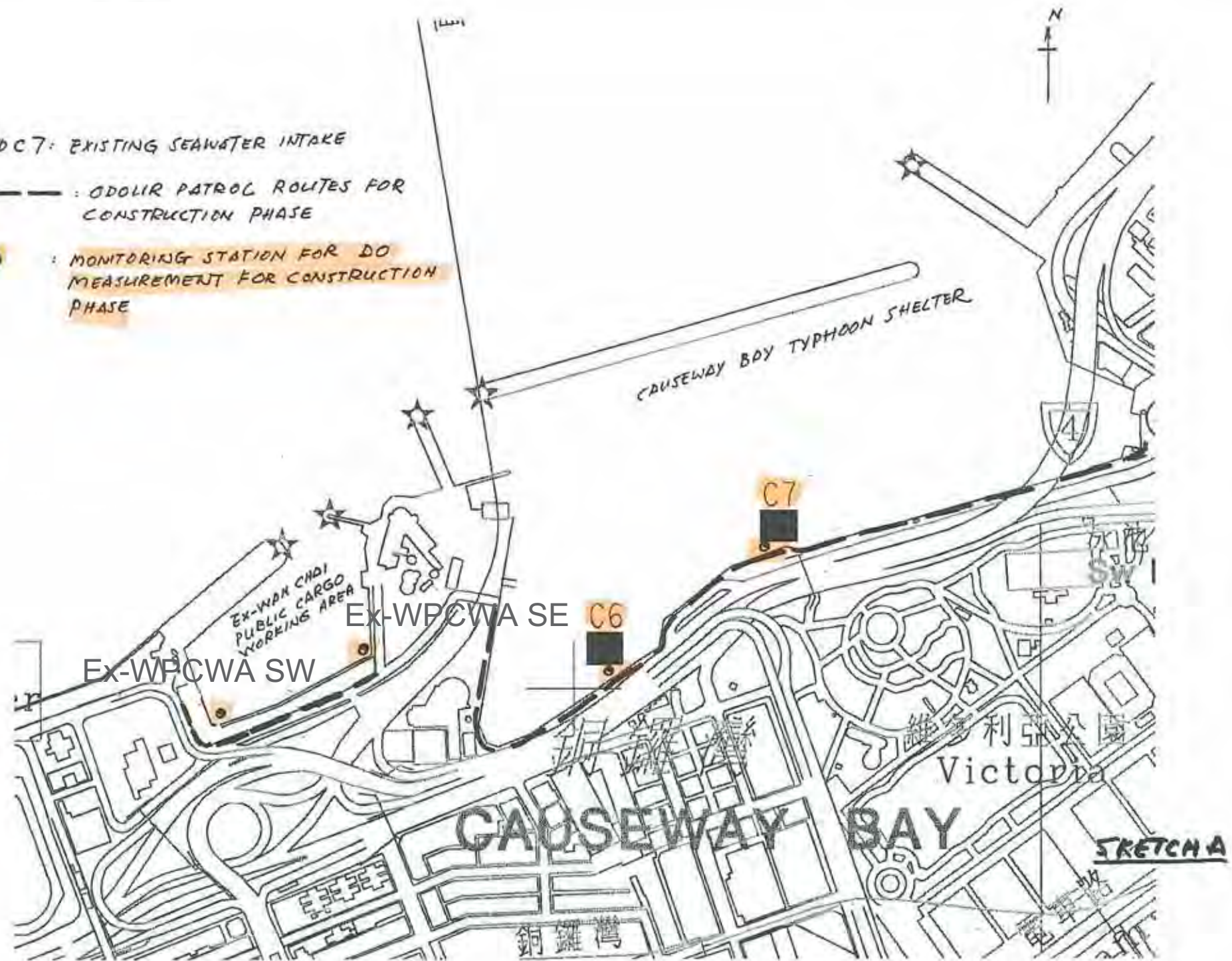




C6 AND C7: EXISTING SEAWATER INTAKE

— : ODOLIR PATROL ROUTES FOR CONSTRUCTION PHASE

● : MONITORING STATION FOR DO MEASUREMENT FOR CONSTRUCTION PHASE



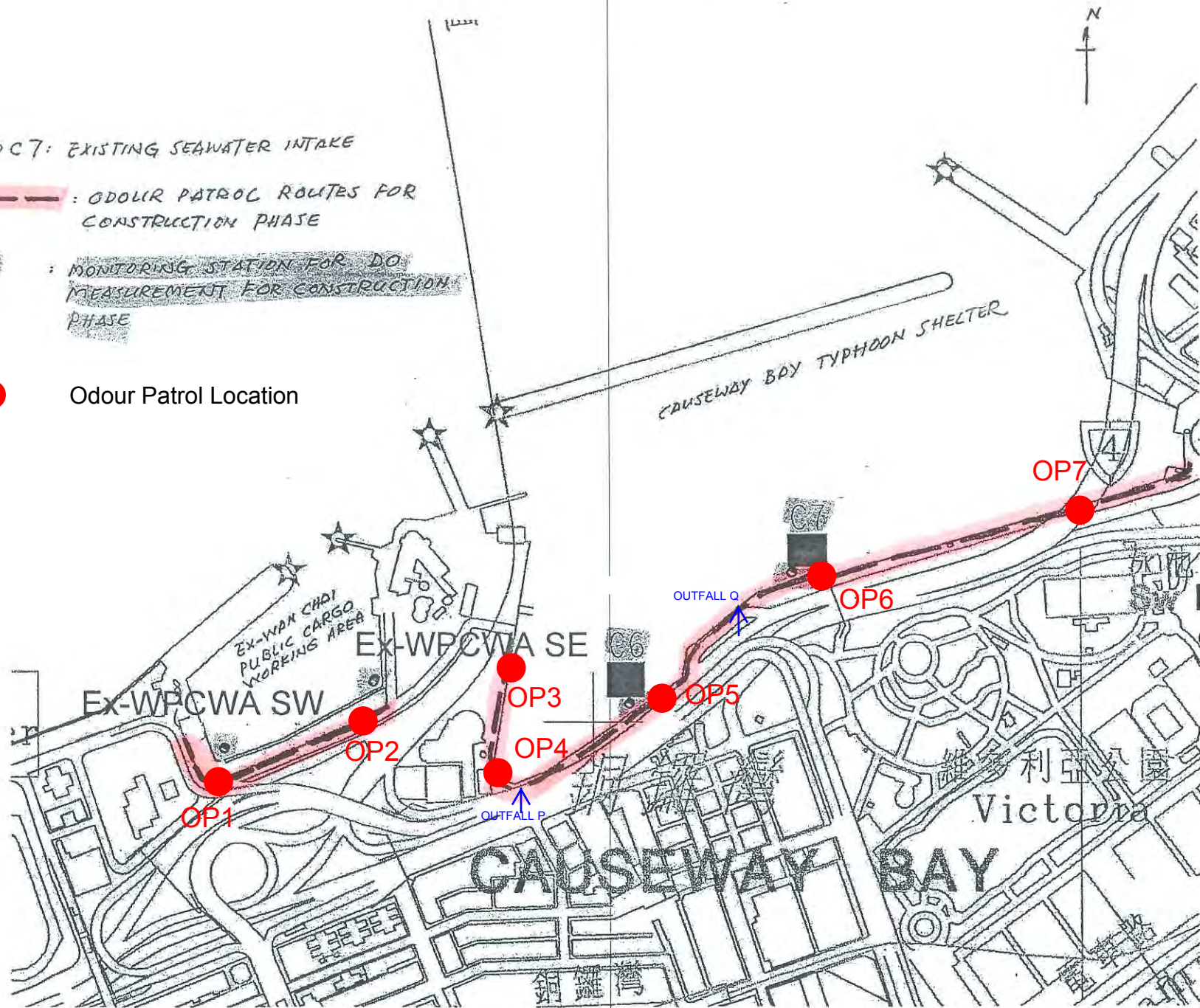


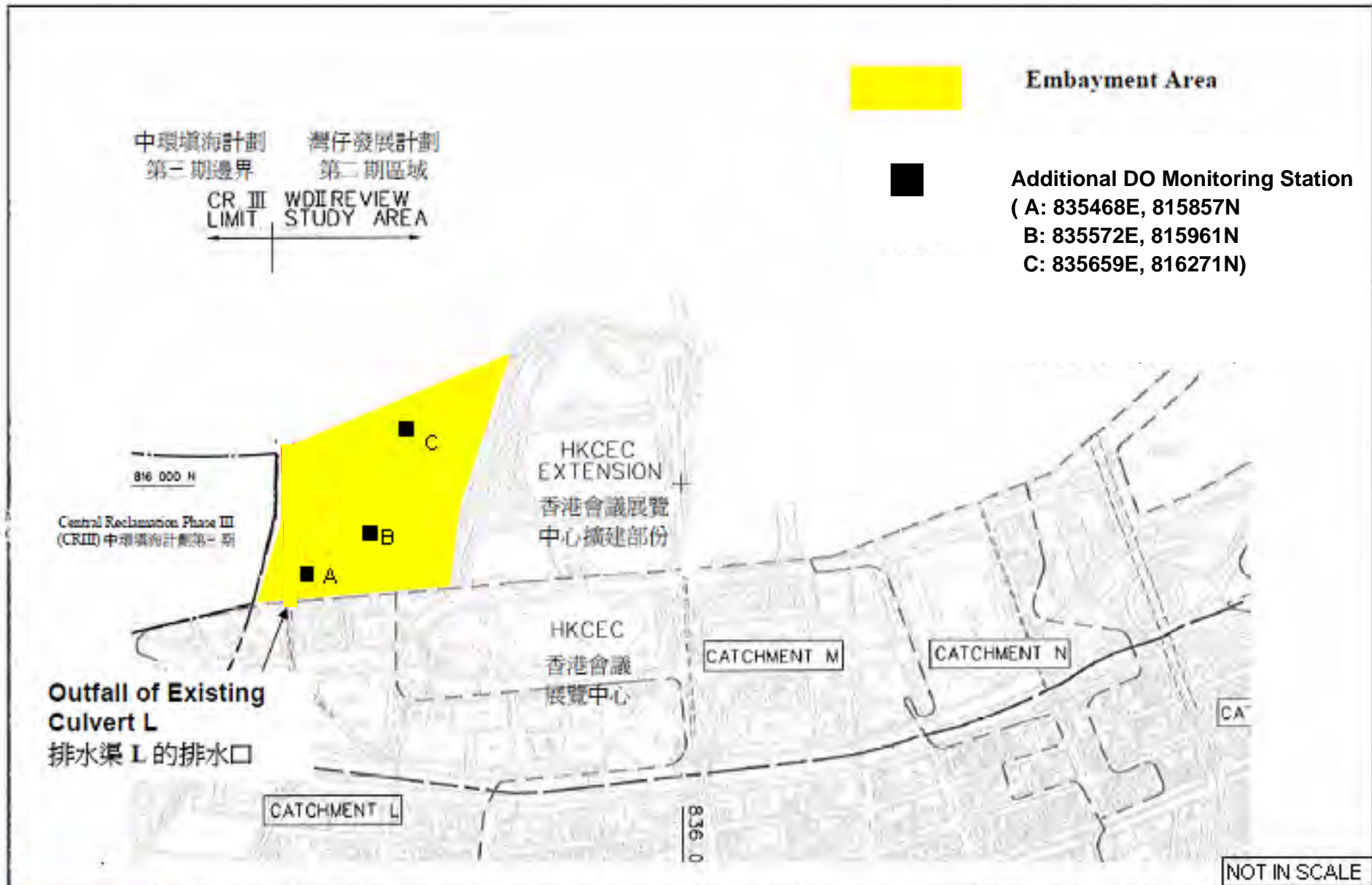
C6 AND C7: EXISTING SEAWATER INTAKE

--- : ODOR PATROL ROUTES FOR CONSTRUCTION PHASE

⊙ : MONITORING STATION FOR DO MEASUREMENT FOR CONSTRUCTION PHASE

● Odour Patrol Location



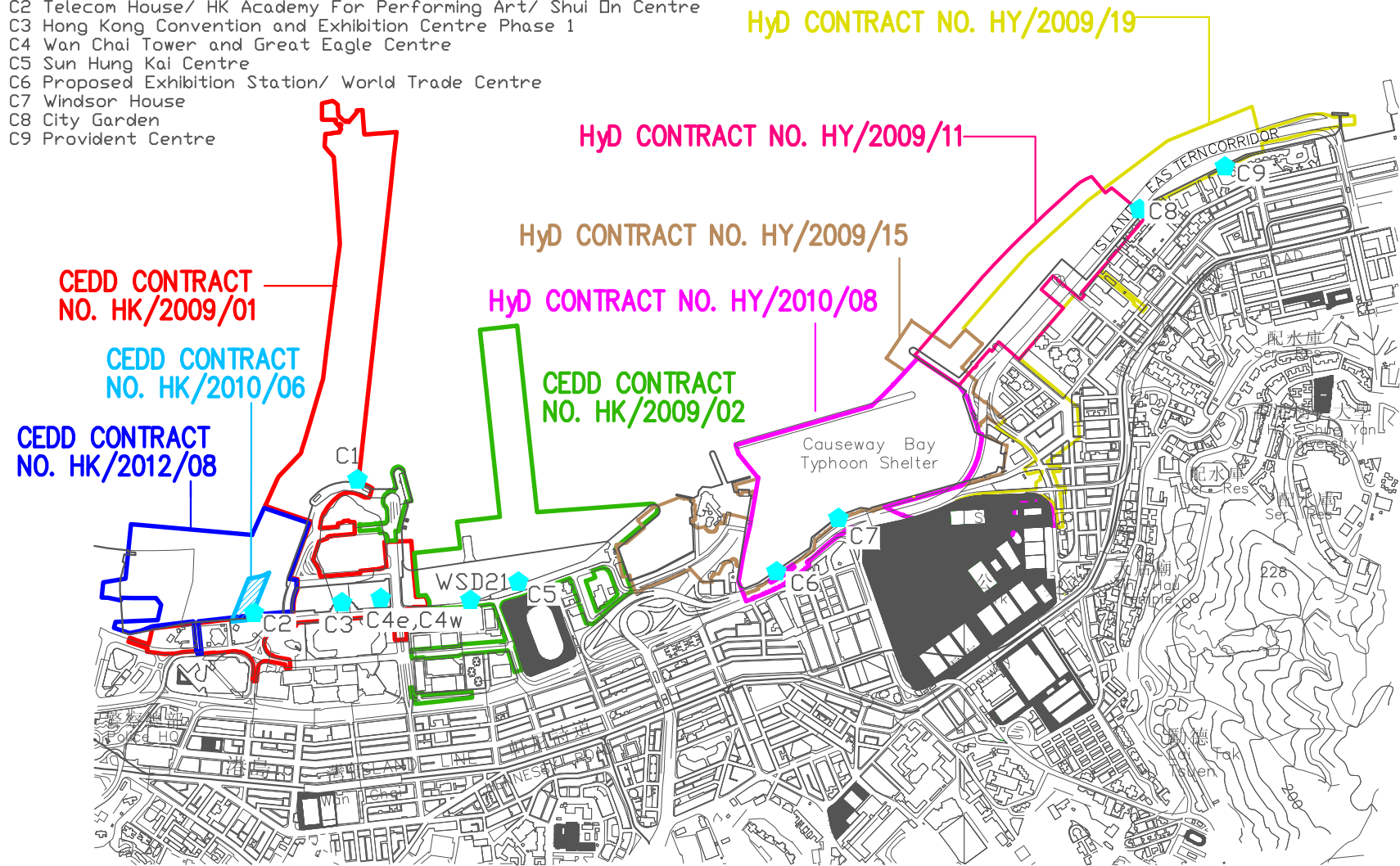


Location Plan of Additional Dissolved Oxygen Monitoring Stations for Culvert L Water Discharge Flow



**Legend**

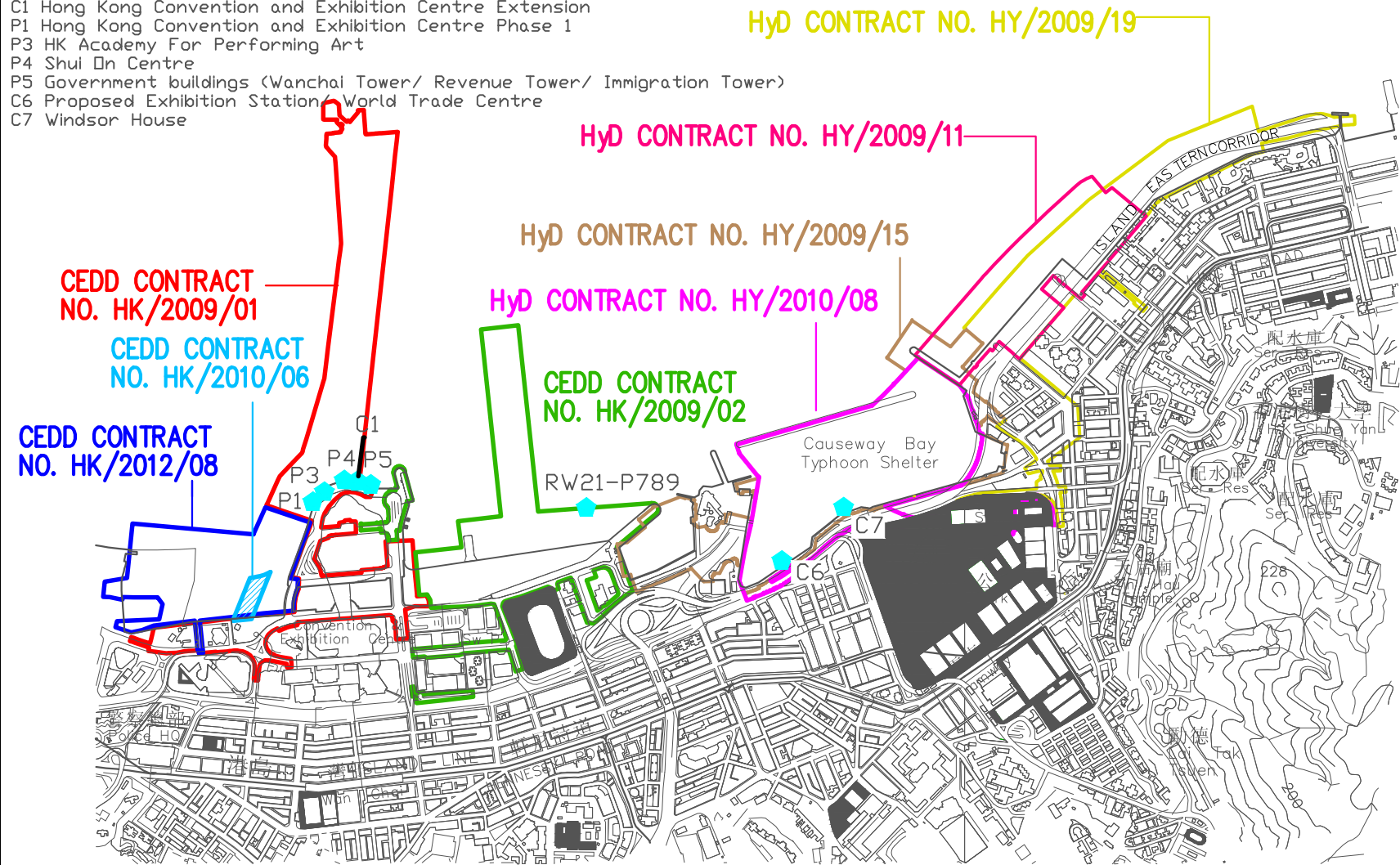
- ◆ Water Quality Monitoring Stations
- C1 Hong Kong Convention and Exhibition Centre Extension
- C2 Telecom House/ HK Academy For Performing Art/ Shui On Centre
- C3 Hong Kong Convention and Exhibition Centre Phase 1
- C4 Wan Chai Tower and Great Eagle Centre
- C5 Sun Hung Kai Centre
- C6 Proposed Exhibition Station/ World Trade Centre
- C7 Windsor House
- C8 City Garden
- C9 Provident Centre



# LOCATIONS OF WATER QUALITY MONITORING STATIONS

**Legend**

- ◆ Water Quality Monitoring Stations
- RW21-P789 (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)
- C1 Hong Kong Convention and Exhibition Centre Extension
- P1 Hong Kong Convention and Exhibition Centre Phase 1
- P3 HK Academy For Performing Art
- P4 Shui On Centre
- P5 Government buildings (Wanchai Tower/ Revenue Tower/ Immigration Tower)
- C6 Proposed Exhibition Station/ World Trade Centre
- C7 Windsor House



# LOCATIONS OF WATER QUALITY MONITORING STATIONS





**Legend**

- Additional □ Monitoring Station

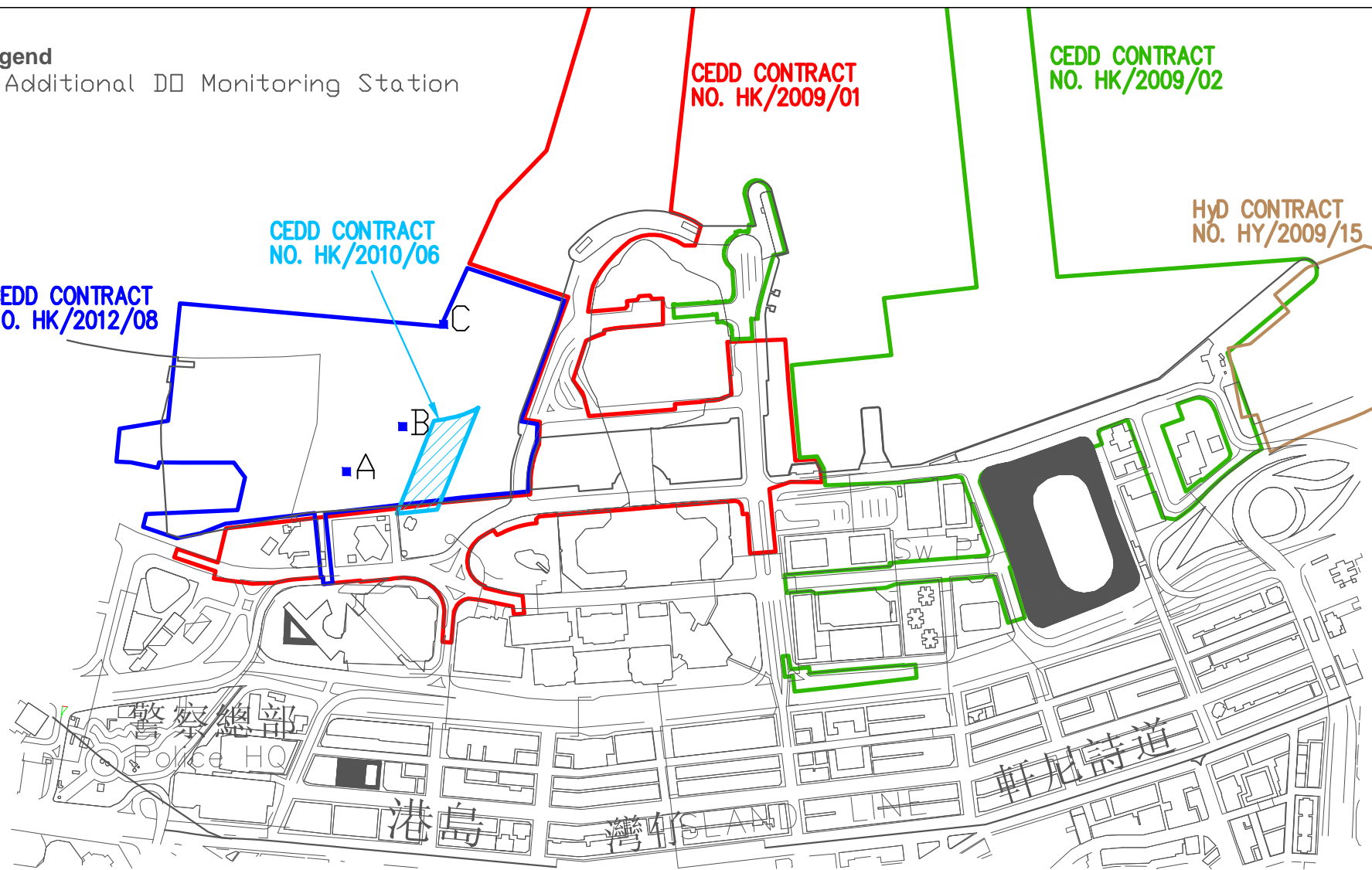
CEDD CONTRACT  
NO. HK/2012/08

CEDD CONTRACT  
NO. HK/2010/06

CEDD CONTRACT  
NO. HK/2009/01

CEDD CONTRACT  
NO. HK/2009/02

HyD CONTRACT  
NO. HY/2009/15



**LOCATIONS OF ADDITIONAL DISSOLVED OXYGEN MONITORING STATIONS FOR CULVERT L WATER DISCHARGE FLOW**



***Appendix 3.1***

***Environmental Mitigation Implementation Schedule***

## Environmental Mitigation Implementation Schedule

## Implementation Schedule for Air Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<i>For the Whole Project</i>								
S3.6.5	Four times a day watering of the work site with active operations.	Work site / during construction	Contractor		√			EIAO-TM
S3.8.1	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts. <ul style="list-style-type: none"> <li>Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition;</li> <li>Watering during excavation and material handling;</li> <li>Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and</li> <li>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> </ul>	Work site / during construction	Contractor		√			

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S3.5.6	For the dredging activities carried out in the vicinity of Police Officers' Club, the dredging operation will be restricted to only 1 small close grab dredger to minimise the odour impact during the dredging activity. The dredging rate should be reduced as much as practicable for the area in close proximity to the Police Officers' Club. The sediments contain highly contaminated mud which may be disposed with the use of geosynthetic containers (details shall refer to Section 6), grab dredger has to be used for filling up the geosynthetic containers on barges. the dredging rate for the removal of the sediments at the south-west corner of the typhoon shelter shall be slowed down or restricted to specific non-popular hours in weekdays when it is necessary during construction.	Corner of CBTS/implementation of harbour-front enhancement	CEDD <sup>1</sup>		√			EIAO-TM
S3.8.8	Carry out dredging at the corner of CBTS to remove the sediment and clean the slime attached on the CBTS shoreline seawall	Corner of CBTS & CBTS shoreline seawall/implementation of harbour-front enhancement	CEDD <sup>2</sup>		√			EIAO-TM
<b>Operation Phase</b>								
<i>For the Whole Project</i>								

<sup>1</sup> CEDD will identify an implementation agent.<sup>2</sup> CEDD will identify an implementation agent.

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S3.10.2	Monthly (from July to September) monitoring of odour impacts, for a period of 5 years, is proposed during the operational phase of the Project to ascertain the effectiveness of the Enhancement Package over time, and to monitor any on-going odour impacts at the ASRs.	Planned ASRs (CBTS Breakwater)/First 5-year period of operation phase	CEDD <sup>1</sup>			√		EIAO-TM
<b>For DPI – CWB (Within the Project Boundary)</b>								
S3.6.53 – S3.6.54	The design parameters of the East and Central Ventilation Buildings as set in Tables 3.10 and 3.11	East and Central Ventilation Buildings / During operation of the Trunk Road	HyD			√		
S3.10.2	Air quality monitoring for the operation performance of the East Ventilation Building and associated East Vent Shaft will be conducted.	East Vent Shaft / During operation of the East Ventilation Building and associated East Vent Shaft	HyD			√		EIAO-TM

- Des - Design, C - Construction, O – Operation, and Dec – Decommissioning

**Table A13.2 Implementation Schedule for Noise Control**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<b>For the Whole Project</b>								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.9.4	<p>Good Site Practice:</p> <ul style="list-style-type: none"> <li>Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.</li> <li>Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.</li> <li>Mobile plant, if any, shall be sited as far away from NSRs as possible.</li> <li>Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.</li> <li>Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.</li> <li>Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.</li> </ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP1 – CWB (Within the Project Boundary)</i>								

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.8.3 – S4.8.5	<p>Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:</p> <ul style="list-style-type: none"> <li>Slip road 8 tunnel</li> <li>Construction of diaphragm wall and substructures of the tunnel approach ramp</li> <li>Excavation</li> <li>Construction of slabs</li> <li>Backfill</li> <li>Demolition and construction of substructures for the IEC</li> <li>Demolition works of existing piers and crossheads of the marine section of the existing IEC</li> </ul> <p>Use of PME grouping for the following tasks:</p> <ul style="list-style-type: none"> <li>At-grade road construction</li> <li>Substructure for IECL connection</li> </ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP2 – WDII Major Roads (Road P2)</i>								
S4.8.3 – S4.8.4	<p>Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:</p> <ul style="list-style-type: none"> <li>Temporary road diversion</li> <li>Resurfacing</li> <li>At-grade roadwork</li> </ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP3 – Reclamation Works</i>								
S4.8.3 – S4.8.4	<p>Use of quiet powered mechanical equipment for the following task:</p> <ul style="list-style-type: none"> <li>Filling behind seawall</li> <li>Seawall construction</li> </ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

Appendix 3.1



EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>For DP5 – Wan Chai East Sewage Outfall</b>								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: <ul style="list-style-type: none"> <li>Submarine pipelines (marine section)</li> </ul> Use of quiet powered mechanical equipment and movable noise barrier for the following tasks: <ul style="list-style-type: none"> <li>Installation of a new pipeline (land section)</li> </ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<b>For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui</b>								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: <ul style="list-style-type: none"> <li>Submarine pipelines (marine section)</li> </ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Operation Phase</b>								
<b>For DP1 – CWB (Within the Project Boundary)</b>								

Appendix 3.1



**Table A13.3 Implementation Schedule for Water Quality Control**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<i>For DP3 – Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui), DP1 – CWB (within the Project Boundary)</i>								
S5.8	A phased reclamation approach is planned for the WDII. Containment of fill within each of the reclamation phases by seawalls is proposed, with the seawall constructed first (above high water mark) with filling carried out behind the completed seawalls. Any gaps that may need to be provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site. Filling for seawall construction should be carried out behind the silt curtain	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	Dredging shall be carried out by closed grab dredger for the following works: <ul style="list-style-type: none"> <li>• Seawall construction in all the reclamation areas;</li> <li>• Construction of the CWB Tunnel</li> <li>• Construction of the proposed WSD water mains; and</li> <li>• Construction of the proposed Wan Chai East sewage outfall pipelines.</li> </ul>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Dredging for the Wan Chai East sewage outfall pipelines shall not be carried out concurrently with the following activities: <ul style="list-style-type: none"> <li>• Dredging along the proposed cross-harbour water mains;</li> <li>• Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA).</li> </ul>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines																								
				Des	C	O	Dec																									
S5.8	The water body behind the temporary reclamations within the Causeway Bay typhoon shelter shall not be fully enclosed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																								
S5.8	As a mitigation measure, to avoid the accumulation of water borne pollutants within the temporary embayment between CR111 and HKCEC1, an impermeable barrier, suspended from a floating boom on the water surface and extending down to the seabed, will be erected by the contractor before the HKCEC1 commences. The barrier will channel the stormwater discharge flows from Culvert L to the outside of the embayment. The contractor will maintain this barrier until the reclamation works in HKCEC2W are carried out and the new Culvert L extension is constructed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																								
S5.8, Figure 5.3	The total dredging rates in each of the marine works zones shall not be more than the maximum production rates stated in the table below. These are the production rates without considering the effect of silt curtain.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Reclamation Area</th> <th colspan="2">Maximum Dredging Rate</th> <th rowspan="2">Maximum Dredging Rate (m<sup>3</sup> per week)</th> </tr> <tr> <th>m<sup>3</sup> per day</th> <th>m<sup>3</sup> per hour (for 16 hrs per day)</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Dredging along seawall or breakwater</b></td> </tr> <tr> <td>North Point Shoreline Zone (NPR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>Causeway Bay</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Shoreline Zone</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>PCWA Zone</td> <td>5,000</td> <td>313</td> <td>35,000</td> </tr> </tbody> </table>		Reclamation Area	Maximum Dredging Rate		Maximum Dredging Rate (m <sup>3</sup> per week)	m <sup>3</sup> per day	m <sup>3</sup> per hour (for 16 hrs per day)	<b>Dredging along seawall or breakwater</b>				North Point Shoreline Zone (NPR)	6,000	375	42,000	Causeway Bay	1,500	94	10,500	Shoreline Zone	6,000	375	42,000	PCWA Zone	5,000	313	35,000					
Reclamation Area	Maximum Dredging Rate		Maximum Dredging Rate (m <sup>3</sup> per week)																													
	m <sup>3</sup> per day	m <sup>3</sup> per hour (for 16 hrs per day)																														
<b>Dredging along seawall or breakwater</b>																																
North Point Shoreline Zone (NPR)	6,000	375	42,000																													
Causeway Bay	1,500	94	10,500																													
Shoreline Zone	6,000	375	42,000																													
PCWA Zone	5,000	313	35,000																													

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures				Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines																		
							Des	C	O	Dec																			
	<table border="1"> <tr> <td>Wan Chai Shoreline Zone (WCR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>HKCEC Shoreline Zone (HKCEC)</td> <td>HKCEC Stage 1 &amp; 3</td> <td>1,500</td> <td>94</td> </tr> <tr> <td></td> <td>HKCEC Stage 2</td> <td>6,000</td> <td>375</td> </tr> <tr> <td>Cross Harbour Water Mains</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Wan Chai East Submarine Sewage Pipeline</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> </table> <p>Note: 1,500 m<sup>3</sup> per day shall be applied for construction of the western seawall of WCR1.</p>	Wan Chai Shoreline Zone (WCR)	6,000	375	42,000	HKCEC Shoreline Zone (HKCEC)	HKCEC Stage 1 & 3	1,500	94		HKCEC Stage 2	6,000	375	Cross Harbour Water Mains	1,500	94	10,500	Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500								
Wan Chai Shoreline Zone (WCR)	6,000	375	42,000																										
HKCEC Shoreline Zone (HKCEC)	HKCEC Stage 1 & 3	1,500	94																										
	HKCEC Stage 2	6,000	375																										
Cross Harbour Water Mains	1,500	94	10,500																										
Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500																										
S5.8, Figure 5.3	Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m <sup>3</sup> per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities.	Work site / During the construction period	Contractor		√					EIAO-TM, WPCO																			
S5.8, Figure 5.3	For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawalls shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary.	Work site / During the construction period	Contractor		√					EIAO-TM, WPCO																			
S5.8, Figure 5.3	Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP.	Work site / During the construction period	Contractor		√					EIAO-TM, WPCO																			
S5.8, Figure 5.3	<p>Silt screens shall be applied to seawater intakes at interim construction stages as stated below:</p> <table border="1"> <thead> <tr> <th>Interim Construction Stage</th> <th>Location of Applications</th> </tr> </thead> <tbody> <tr> <td>Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,</td> <td>WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong</td> </tr> </tbody> </table>	Interim Construction Stage	Location of Applications	Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,	WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong	Work site / During the construction period	Contractor		√					EIAO-TM, WPCO															
Interim Construction Stage	Location of Applications																												
Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,	WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong																												

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines						
					Des	C	O	Dec							
	<table border="1"> <tr> <td>TBW, NP and Water Mains Zone</td> <td>Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre</td> </tr> <tr> <td>Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.</td> <td>WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.</td> </tr> <tr> <td>Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.</td> <td>WSD saltwater intakes at Sheung Wan and Re-provisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel &amp; World Trade Centre and re-provisioned Windsor House.</td> </tr> </table>	TBW, NP and Water Mains Zone	Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre	Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.	WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.	Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.	WSD saltwater intakes at Sheung Wan and Re-provisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and re-provisioned Windsor House.								
TBW, NP and Water Mains Zone	Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre														
Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.	WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.														
Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.	WSD saltwater intakes at Sheung Wan and Re-provisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and re-provisioned Windsor House.														
S5.8	<p>Other mitigation measures include:</p> <ul style="list-style-type: none"> <li>mechanical grabs, if used, shall be designed and maintained to avoid spillage and sealed tightly while being lifted. For dredging of any contaminated mud, closed watertight grabs must be used;</li> <li>all vessels shall be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash;</li> <li>all hopper barges and dredgers shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material;</li> <li>construction activities shall not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds;</li> <li>loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water. Barges or hoppers shall not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; and</li> </ul>	Work site / During the construction period	Contractor		√				ProPECC PN 1/94; WPCO (TM-DSS)						

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> <li>before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the silt curtain.</li> </ul>							
S5.8	<p>Silt screens are recommended to be deployed at the seawater intakes during the reclamation works period. Installation of silt screens at the seawater intake points may cause a potential for accumulation and trapping of pollutants, floating debris and refuse behind the silt screens and may lead to potential water quality deterioration at the seawater intake points. Major sources of pollutants and floating refuse include the runoff and storm water discharges from the nearby coastal areas. As a mitigation measure to avoid the pollutant and refuse entrapment problems and to ensure that the impact monitoring results are representative, regular maintenance of the silt screens and refuse collection shall be performed at the monitoring stations at regular intervals on a daily basis. The Contractor shall be responsible for keeping the water behind the silt screen free from floating rubbish and debris during the impact monitoring period.</p>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	<p>Dredging of contaminated mud is recommended as a mitigation measures for control of operational odour impact from the Causeway Bay typhoon shelter. In recognition of the potential impacts caused by dredging activities close to the seawater intakes, only 1 small close grab dredger shall be operated within the typhoon shelter (for the dredging to mitigate odour impact) at any time to minimize the potential impact. Double silt curtains shall be deployed to fully enclose the closed grab dredger during the dredging operation. In addition, an impermeable barrier, suspended from a floating boom on the water surface and extended down to the seabed, shall be erected to isolate the adjacent intakes as much as possible from dredging activities. For example, if dredging is to be carried out at the southwest corner of the typhoon shelter, physical barriers shall be erected to west of the cooling water intake for Excelsior Hotel so that the intake would be shielded from most of the SS generated from the dredging operation to the west of the intake. For area in close proximity of the cooling water intake point, the dredging rate shall be reduced as much as practicable. Site audit and water quality monitoring shall be carried out at the seawater intakes during the dredging operations. Daily monitoring of SS at the cooling water intake shall be carried out, and 24 hour monitoring of turbidity at the intakes shall be implemented during the dredging activities. If the monitoring results indicate that the dredging operation has caused significant changes in water quality conditions at the seawater intakes, appropriate actions shall be taken to stop the dredging and mitigation measures such as slowing down the dredging rate shall be implemented.</p>	Causeway Bay typhoon shelter/Implementation of harbour-front enhancement.	CEDD <sup>3</sup>		√			WPCO

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	
				Des	C	O	Dec		
<b>For the Whole Project</b>									
S5.8	<ul style="list-style-type: none"> <li>Construction Runoff and Drainage</li> <li>use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow;</li> <li>Permanent drainage channels shall incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities shall be based on the guidelines in Appendix A1 of ProPECC PN 1/94;</li> <li>a sediment tank constructed from pre-formed individual cells of approximately 6 - 8 m3 capacity can be used for settling ground water prior to disposal;</li> <li>oil interceptors shall be provided in the drainage system for the tunnels and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor shall have a bypass to prevent flushing during periods of heavy rain;</li> <li>precautions and actions to be taken when a rainstorm is imminent or forecast, and during or after rainstorms. Particular attention shall be paid to the control of any silty surface runoff during storm events;</li> <li>on-site drainage system shall be installed prior to the commencement of other construction activities. Sediment traps shall be installed in order to minimise the sediment loading of the effluent prior to discharge;</li> <li>All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge shall be adequately designed for the controlled release of storm flows. All sediment control measures shall be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage shall be reinstated to its original condition when the construction work is finished or the temporary diversion is no longer</li> </ul>	<ul style="list-style-type: none"> <li>Work site / During the construction period</li> </ul>	Contractor		√				ProPECC PN 1/94; WPCO (TM-DSS)

<sup>3</sup> CEDD will identify an implementation agent.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p>required.</p> <ul style="list-style-type: none"> <li>All fuel tanks and store areas shall be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity.</li> </ul>							
	<ul style="list-style-type: none"> <li>Minimum distances of 100 m shall be maintained between the storm water discharges and the existing or planned WSD flushing water intakes during construction phase.</li> </ul>							
S5.8	<p><i>Sewage from Construction Work Force</i></p> <p>Construction work force sewage discharges on site shall be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage shall be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.</p>	Work site / During the construction period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)
S5.8	<p><i>Floating Debris and Refuse</i></p> <p>Collection and removal of floating refuse shall be performed at regular intervals on a daily basis. The contractor shall be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.</p>	Work site and adjacent water / During the construction period.	Contractor		√			WPCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	<p><i>Storm Water Discharges</i></p> <p>Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.</p>	Work site and adjacent water / During the design and construction period.	Contractor	√	√			WPCO
<b>Operation Phase</b>								
<i>DPI – CWB (within the Project Boundary)</i>								
S5.8	<p>For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO:</p> <ul style="list-style-type: none"> <li>The drainage from tunnel sections shall be directed through petrol interceptors to remove oil and grease before being discharged to the nearby foul water manholes.</li> <li>Petrol interceptors shall be regularly cleaned and maintained in good working condition.</li> <li>Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance.</li> <li>Sewage arising from ancillary facilities of CWB (for examples, car park,</li> </ul>	CWB/During design and operational period	HyD/TD <sup>3</sup>	√		√		WPCO

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p>control room, ventilation and administration buildings and tunnel portals) shall be connected to public sewerage system. Sufficient capacity in public sewerage shall be made available to the proposed facilities.</p> <ul style="list-style-type: none"> <li>Road drainage shall also be provided with adequately designed silt trap to minimize discharge of silty runoff.</li> <li>The design of the operational stage mitigation measures for CWB shall take into account the guidelines published in ProPECC PN 5/93 "Drainage Plans subject to Comment by the EPD." All operational discharges from the CWB into drainage or sewerage systems are required to be licensed by EPD under the WPCO.</li> </ul>							

\* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

<sup>3</sup> if employ Management, Operation and Maintenance (MOM) Contract

Appendix 3.1

**Table A13.4 Implementation Schedule for Waste Management**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<i>For DP3 – Reclamation Works</i>								
	<b>Marine Sediments</b>							
S6.7.2	The dredged marine sediments would be loaded onto barges, transported to and disposed of at the designated disposal sites at South of Cheung Chau, East of Ninepin, East of Tung Lung Chau, South of Tsing Yi or East of Sha Chau to be allocated by the MFC depending on their level of contamination or at other disposal sites after consultation with the MFC and EPD. In accordance with the ETWB TCW No. 34/2002, the contaminated material must be dredged and transported with great care. The mitigation measures recommended in Section 5 of the EIA Report shall be incorporated. The dredged contaminated sediment must be effectively isolated from the environment upon final disposal and shall be disposed of at the Type 2 confined marine disposal contaminated mud pit.	Work site / During the construction period	Contractor		√			ETWB TCW No. 34/2002
S6.7.3	Based on the biological screening results, the Category H (>10xLCEL) sediment which failed the biological testing would require Type 3 special disposal. The volume of Category H sediment from the Causeway Bay typhoon shelter which would require special disposal arrangements is estimated to be approximately 0.05 Mm <sup>3</sup> . A feasible containment method is proposed whereby the dredged sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal.							

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.5	It will be the responsibility of the Contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, at least 3 months prior to the dredging contract being tendered							
S6.7.6	During transportation and disposal of the dredged marine sediments requiring Type 1 and Type 2 disposal, the following measures shall be taken to minimise potential impacts on water quality: <ul style="list-style-type: none"> <li>• Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material. Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.</li> </ul>							

Appendix 3.1



EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> <li>Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.</li> <li>Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.</li> </ul>							
S6.6.12	<p><b>Floating Refuse</b></p> <p>During the construction phase, the project proponent's contractor will be responsible for the collection of any refuse within their works area. Floating booms will be provided on the water surface to confine the refuse from the working barges as well as to avoid the accumulation of pollutants within temporary embayment as mentioned in Table 13.3.</p>	Work site / During the construction period	Contractor		√			
<b>For the Whole Project</b>								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.7	<p><b>Good Site Practices</b></p> <p>Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> <li>nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;</li> <li>training of site personnel in proper waste management and chemical waste handling procedures;</li> <li>provision of sufficient waste disposal points and regular collection for disposal;</li> <li>appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;</li> <li>regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and</li> <li>a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).</li> </ul>	Work site / During the construction period	Contractor		√			Waste Disposal Ordinance (Cap.354)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.8	<p><i>Waste Reduction Measures</i></p> <p>Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> <li>• segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>• to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force;</li> <li>• any unused chemicals or those with remaining functional capacity shall be recycled;</li> <li>• use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&amp;D material.</li> <li>• prior to disposal of C&amp;D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill;</li> <li>• proper storage and site practices to minimise the potential for damage or contamination of construction materials; and</li> <li>• plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>	Work site / During planning and design stage, and construction stage	Contractor	√	√			

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.10	<p><i>General Refuse</i></p> <p>General refuse shall be stored in enclosed bins or compaction units separate from C&amp;D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&amp;D material.</p> <p>A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material.</p>	Work site / During the construction period	Contractor		√			Public Health and Municipal Services Ordinance (Cap. 132)
S6.7.11	<p><i>Chemical Wastes</i></p> <p>After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.</p>	Work site / During the construction period	Contractor		√			Waste Disposal (Chemical Waste) (General) Regulation  Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S6.7.12	<p><i>Construction and Demolition Material</i></p> <p>C&amp;D material shall be sorted on-site into inert C&amp;D material (that is, public fill) and C&amp;D waste. All the suitable inert C&amp;D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&amp;D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.</p>	Work site / During the construction period	Contractor		√			ETWB TCW No. 33/2002, 31/2004, 19/2005

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.13	In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system.	Work site / During the construction period	Contractor and Independent Environmental Checker		√			ETWB TCW No. 31/2004
S6.7.14	<p><i>Bentonite Slurry</i></p> <p>The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows:</p> <ul style="list-style-type: none"> <li>If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.</li> <li>If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.</li> <li>If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.</li> </ul>	Work site / During the construction period	Contractor		√			ProPECC PN 1/94

\* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

**Table A13.5 Implementation Schedule for Land Contamination**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<i>For the Whole Project</i>								
S.12.6	<ul style="list-style-type: none"> <li>The contaminated site shall be cleaned up before commencement of site clearance and construction work at the concerned area which may disturb the ground.</li> </ul>	A King Marine / Before commencement of construction activities at A King Marine.	Project proponent for the re-provisioned Tin Hau Temple	√				<p>"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops" published by EPD, HKSAR</p> <p>EPD ProPECC Note No. 3/94</p>
S7.10	<p>During soil remediation works, the Contractor for the excavation works shall take note of the following points for excavation:</p> <ul style="list-style-type: none"> <li>Excavation profiles must be properly designed and executed;</li> <li>In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means;</li> <li>Quantities of soil to be excavated must be estimated;</li> <li>It maybe necessary to split quantities of soil according to soil type, degree and nature of contamination.</li> <li>Temporary storage of soil at intermediate depot or on-site</li> </ul>	A King Marine / During soil remediation works	Contractor	√				<p>Air Pollution Control Ordinance</p> <p>Noise Control Ordinance</p> <p>Waste Disposal Ordinance</p> <p>Waste Disposal (Chemical Waste) (General) Regulation</p>

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.							
	<ul style="list-style-type: none"> <li>Supply of suitable clean backfill materials is needed after excavation.</li> <li>Care must be taken of existing buildings and utilities.</li> <li>Precautions must be taken to control of ground settlement</li> <li>Speed controls for vehicles shall be imposed on dusty site areas.</li> <li>Vehicle wheel and body washing facilities at the site's exit points shall be established and used.</li> </ul> <p>The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities:</p>							Water Pollution Control Ordinance

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p><u>Air Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>The loading, unloading, handling, transfer or storage of cement shall be carried out in an enclosed system.</li> <li>The loading, unloading, handling, transfer or storage of other materials which may generate airborne dust emissions such as untreated soil and oversize materials sorted out from the screening plant and stabilized soil stockpiled in the designated handling area, shall be carried out in such a manner to prevent or minimise dust emissions. These materials shall be adequately wetted prior to and during the loading, unloading and handling operations.</li> <li>All practicable measures, including speed controls for vehicles, shall be taken to prevent or minimize the dust emission caused by vehicle movement.</li> <li>Tarpaulin or low permeable sheet shall be put on dusty vehicle loads transported between site locations.</li> </ul>							
	<p><u>Noise Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>The mixing facilities shall be sited as far as practicable to the nearby noise sensitive receivers.</li> <li>Simultaneous operation of mixing facilities and other equipment shall be avoided.</li> <li>Mixing process and other associated material handling activities shall be properly scheduled to minimise potential cumulative noise impact on the nearby noise sensitive receivers.</li> <li>Construction Noise Permit shall be applied for the operation of powered mechanical equipment during restricted hours (if any).</li> </ul>							

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p><u>Water Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>Stockpile of untreated soil shall be covered as far as practicable to prevent the contaminated material from leaching out. The leachate shall be discharged following the requirements of WPCO.</li> </ul> <p><u>Waste Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>Treated oversize materials will be used as filling material for backfilling within the site. Sorted materials of size smaller than 5 cm will be collected and transferred to the mixing plant for further decontamination treatment.</li> <li>Stabilized soils shall be broken into suitable size for backfilling or reuse on site.</li> <li>A high standard of housekeeping shall be maintained within the mixing plant area.</li> <li>If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials.</li> </ul>							

\* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

**Table A13.6 Implementation Schedule for Marine Ecology**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<i>For the Whole Project - Schedule 3 DP</i>								
S.9.7.2	Alternative design of the Trunk Road constructed in tunnel shall be adopted to avoid permanent reclamation in CBTS and ex-PWCA Basin.	-	CEDD/HyD	√				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
<i>For DP3 - Reclamation Works</i>								
S.9.7.3	Translocation of those potentially affected coral colonies to the nearby suitable habitats such as Junk Bay is recommended. A detailed translocation plan (including translocation methodology, monitoring of transplanted corals, etc.) should be drafted and approval by AFCD during the detailed design stage of the Project.	Ex-PCWA Basin and along seawall next to a public pier which is about 250 m away from the CBTS	CEDD/HyD	√				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S.9.7.4	<p>During dredging and filling operations, a number of mitigation measures to control water quality shall be adopted to confine sediment plume within reclamation area and protect marine fauna in proximity to the reclamation. The mitigation measures include the following:</p> <ul style="list-style-type: none"> <li>• Installation of silt curtains during dredging activities</li> <li>• Use of tightly-closed grab dredger</li> <li>• Reduction of dredging rate</li> <li>• Control of grab descending speed</li> <li>• Construction of leading edges of seawall in the early stages of the reclamation works</li> </ul>	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
	<ul style="list-style-type: none"> <li>• Adoption of multiple-phase construction schedule</li> </ul>							

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S.9.7.6	<p>To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended:</p> <ul style="list-style-type: none"> <li>• Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible.</li> <li>• Adoption of multiple-phase construction schedule.</li> <li>• General measures to reduce noise generated during the construction phase (see noise impact assessment) shall be effectively implemented.</li> </ul>	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.7	Seawalls shall be constructed in advance around the reclamation areas within the area of the CBTS to screen adjacent feeding ground from construction phase activities, reduce noise disturbance to the associated seabirds and also to restrict access to this habitat adjacent to works areas by ship traffic.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.8	Loss of artificial seawall habitats shall be reinstated by the construction of about 1 km vertical wave absorbing seawall along the coastlines of the new reclamation around the HKCEC and at North Point. The new seawalls are expected to provide large area of hard substrata for settlement and recruitment of intertidal fauna similar to those previously recorded from existing intertidal habitats.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

\*Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

**Table A13.7 Implementation Schedule for Landscape and Visual**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
<b>Construction Phase</b>								
<b>For the Whole Project</b>								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM2 Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
<b>For DP1 – CWB (Within the Project Boundary)</b>								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM2 Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
<b>For DP2 – WDII Major Roads (Road P2)</b>								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM2 Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
<b>For DP3 – Reclamation Works</b>								
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
<b>For DP5 – Wan Chai East Sewage Outfall</b>								
Refer to EIA-058/2001 Table 10.13	CM2 Minimisation of works areas.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM3 Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM

Appendix 3.1



EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Refer to EIA-058/2001 Table 10.13	CM4 Control night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM5 Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
<b>For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui</b>								
Refer to EIA-058/2001 Table 10.13	CM2 Minimisation of works areas.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM3 Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM4 Control night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM5 Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
<b>Operation Phase</b>								
<b>For the Whole Project - Schedule 3 DP</b>								
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM2 Shrub and Climbing Plants to soften proposed structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD/	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM4 Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD <sup>4</sup>	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
<b>For DP1 – CWB (Within the Project Boundary)</b>								
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM2 Shrub and Climbing Plants to soften proposed structures	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
<b>For DP2 – WDII Major Roads (Road P2)</b>								

<sup>4</sup> CEDD will identify an implementation agent

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
<b>For DP3 – Reclamation Works</b>								
Table 10.6, Figure 10.5.1-10.5.5	OM4 Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD <sup>5</sup>	√	√	√		ETWB TCW 2/2004

\*Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

<sup>5</sup> CEDD will identify an implementation agent



***Appendix 4.1***

***Action and Limit Level***

### Action and Limit Level

#### Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A) <sup>Note 1</sup>

Note 1:

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

#### Action and Limit Level for Air Monitoring

Monitoring Location	1-hour TSP Level in $\mu\text{g}/\text{m}^3$		24-hour TSP Level in $\mu\text{g}/\text{m}^3$	
	Action Level	Limit Level	Action Level	Limit Level
CMA1b <sup>Note 2</sup>	320.1	500	176.7	260
CMA2a	323.4	500	169.5	260
CMA3a <sup>Note 2</sup>	311.3	500	171.0	260
CMA4a	312.5	500	171.2	260
CMA5a <sup>Note 2</sup>	332.0	500	181.0	260
CMA6a <sup>Note 2</sup>	300.1	500	187.3	260

Note 2:

- As per facing owner's rejection in allowing the implementation of long-term air quality impact monitoring at their premises, alternative monitoring stations and justification were proposed for IEC verification and EPD approval.
- The established Action and Limit Levels from the baseline air monitoring will be adopted to the alternative monitoring stations.

#### Action and Limit Level for Water Monitoring

Parameters	Dry Season		Wet Season	
	Action	Limit	Action	Limit
<b>WSD Salt Water Intake</b>				
SS in $\text{mg L}^{-1}$	13.00	14.43	16.26	19.74
Turbidity in NTU	8.04	9.49	10.01	11.54
DO in mg/L	3.66	3.28	3.17	2.63
<b>Cooling Water Intake</b>				
SS in $\text{mg L}^{-1}$	15.00	22.13	18.42	27.54
Turbidity in NTU	9.10	10.25	11.35	12.71
DO in mg/L	3.36	2.73	3.02	2.44

Remarks:

- Action and Limit Level for the wet season are applied after the EPD approval of Updated EM&A Manual on 29 April 2011.

#### Action and Limit Levels for Odour Patrol

Parameters	Action	Limit
Odour Nuisance (from odour intensity analysis or odour patrol)	<ul style="list-style-type: none"> <li>• When two documented complaint are received; or</li> <li>• Odour Intensity of 2 is measured from odour intensity analysis.</li> </ul>	<ul style="list-style-type: none"> <li>• Five or more consecutive genuine documented complaints within a week; or</li> <li>• Odour Intensity of 3 or above is measured from odour intensity analysis.</li> </ul>



***Appendix 4.2***

***Copies of Calibration Certificates***



## CERTIFICATE OF CALIBRATION

Certificate No.: 14CA0529 01-01 Page 1 of 2

### Item tested

Description:	Sound Level Meter (Type 1)	,	Microphone
Manufacturer:	B & K	,	B & K
Type/Model No.:	2236	,	4188
Serial/Equipment No.:	2100736	,	2157055
Adaptors used:	-	,	-

### Item submitted by

Customer Name: Lam Geotechnics Limited  
Address of Customer: -  
Request No.: -  
Date of receipt: 29-May-2014

Date of test: 29-May-2014

### Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	22-Jun-2014	CIGISMEC
Signal generator	DS 360	33873	09-Apr-2015	CEPREI
Signal generator	DS 360	61227	09-Apr-2015	CEPREI

### Ambient conditions

Temperature:  $22 \pm 1$  °C  
Relative humidity:  $60 \pm 10$  %  
Air pressure:  $1000 \pm 10$  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  $\pm 20\%$ .
- 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 responses 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: 30-May-2014

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.





## CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 14CA0529 01-01 Page 2 of 2

### 1, Electrical Tests

The electrical tests were performed 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:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	1.0	2.1
	Lin	Pass	2.0	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
Time weightings	C	Pass	0.3	
	Lin	Pass	0.3	
	Single Burst Fast	Pass	0.3	
Peak response	Single Burst Slow	Pass	0.3	
	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
Time averaging	Repeated at frequency of 100 Hz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> 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	Expanded 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 expanded 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.

Calibrated by:

Date: 29-May-2014

Fung Chi Yip

- End -

Checked by:

Date: 30-May-2014

Lam Tze Wai

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.





Test Data for Sound Level Meter

Sound level meter type: 2236 Serial No. 2100736 Date 29-May-2014  
Microphone type: 4188 Serial No. 2157055  
Report: 14CA0529 01-01

7943.0	94.0	91.0	90.9	1.5	3.0	-0.1
12590.0	94.0	87.8	87.7	3.0	6.0	-0.1

Frequency weighting Lin:

Frequency Hz	Ref. level dB	Expected level dB	Actual level dB	Tolerance(dB)		Deviation dB
				+	-	
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	94.0	94.0	1.5	1.5	0.0
63.1	94.0	94.0	93.9	1.5	1.5	-0.1
125.9	94.0	94.0	94.0	1.0	1.0	0.0
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	94.0	94.0	1.0	1.0	0.0
3981.0	94.0	94.0	94.0	1.0	1.0	0.0
7943.0	94.0	94.0	94.1	1.5	3.0	0.1
12590.0	94.0	94.0	94.1	3.0	6.0	0.1

TIME WEIGHTING FAST TEST

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level dB	Expected level dB	Actual level dB	Tolerance(dB)		Deviation dB
			+	-	
109.0	108.0	108.0	1.0	1.0	0.0

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level dB	Expected level dB	Actual level dB	Tolerance(dB)		Deviation dB
			+	-	
109.0	104.9	105.2	1.0	1.0	0.3

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities: (Weighting C, set the generator signal to single, Lcpmax)

Ref. level dB	Response to 10 ms dB	Response to 100 us dB	Tolerance +/- dB	Deviation dB
112.0	112.0	111.7	2.0	-0.3

Negative polarities:

Ref. level dB	Response to 10 ms dB	Response to 100 us dB	Tolerance +/- dB	Deviation dB
112.0	112.0	111.7	2.0	-0.3

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency: 2000 Hz  
Amplitude: 2 dB below the upper limit of the primary indicator range.



Test Data for Sound Level Meter

Page 4 of 5

Sound level meter type: 2236 Serial No. 2100736 Date 29-May-2014  
Microphone type: 4188 Serial No. 2157055  
Report: 14CA0529 01-01

Burst repetition frequency:	40 Hz				
Tone burst signal:	11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)				
	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation
Time weighting	dB	dB	indication(dB)	+/- dB	dB
Slow	111.0+6.6	111.0	110.8	0.5	-0.2

TIME WEIGHTING IMPULSE TEST

Time weighting | is tested on the reference range (Set the SLM to LAImax)

Test frequency: 2000 Hz

Amplitude: The upper limit of the primary indicator range.

Single sinusoidal burst of duration 5 ms:

Ref. Level	Single burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
113.0	104.2	104.2	2.0	0.0

Repeated at 100 Hz

Ref. Level	Repeated burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
113.0	110.3	110.3	1.0	0.0

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst: 4000 Hz

Duration of tone burst: 1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks
msec	dB	dB	dB	+/- dB	dB	
1000	83.0	83.0	82.7	1.0	-0.3	60s integ.
10000	73.0	73.0	72.7	1.0	-0.3	6min. integ.

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz

Integration time: 10 sec

The integrating sound level meter set to Leq:

Duration	Rms level of tone burst (dB)	Expected	Actual	Tolerance	Deviation
msec	dB	dB	dB	+/- dB	dB
10	116.0	86.0	85.8	1.7	-0.2

The integrating sound level meter set to SEL:

Duration	Rms level of tone burst (dB)	Expected	Actual	Tolerance	Deviation
msec	dB	dB	dB	+/- dB	dB
10.0	116.0	96.0	95.9	1.7	-0.1

OVERLOAD INDICATION TEST

For SLM capable of operating in a non-integrating mode.

Test frequency: 2000 Hz





Test Data for Sound Level Meter

Sound level meter type: 2236 Serial No. 2100736 Date 29-May-2014  
Microphone type: 4188 Serial No. 2157055  
Report: 14CA0529 01-01

Amplitude: 2 dB below the upper limit of the primary indicator range.  
Burst repetition frequency: 40 Hz  
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
126.7	125.7	122.7	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following:  
The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz  
Integration time: 10 sec  
Single burst duration: 1 msec

Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
130.6	129.6	89.6	89.4	2.2	-0.2

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency Hz	Expected level dB	Actual level Measured (dB)	Tolerance (dB)		Deviation dB
			+	-	
1000	94.0	94.0	0.0	0.0	0.0
125	77.9	78.2	1.0	1.0	0.3
8000	92.9	92.8	1.5	3.0	-0.1

-----END-----



## CERTIFICATE OF CALIBRATION

Certificate No.: 14CA0529 01-02

Page: 1 of 2

### Item tested

Description: Acoustical Calibrator (Class 1)  
Manufacturer: Rion Co., Ltd.  
Type/Model No.: NC-73  
Serial/Equipment No.: 10465798  
Adaptors used: -

### Item submitted by

Customer: Lam Geotechnics Limited  
Address of Customer: -  
Request No.: -  
Date of receipt: 29-May-2014

Date of test: 30-May-2014

### Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2412857	13-May-2015	SCL
Preamplifier	B&K 2673	2239857	10-Apr-2015	CEPREI
Measuring amplifier	B&K 2610	2346941	08-Apr-2015	CEPREI
Signal generator	DS 360	61227	09-Apr-2015	CEPREI
Digital multi-meter	34401A	US36087050	17-Dec-2014	CEPREI
Audio analyzer	8903B	GB41300350	07-Apr-2015	CEPREI
Universal counter	53132A	MY40003662	11-Apr-2015	CEPREI

### Ambient conditions

Temperature:  $22 \pm 1$  °C  
Relative humidity:  $60 \pm 10$  %  
Air pressure:  $1000 \pm 10$  hPa

### Test specifications

- 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.
- The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- 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

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

Approved Signatory:

  
Huang Jian Min/Feng Jun Qi

Date: 30-May-2014

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.





## CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 14CA0529 01-02

Page: 2 of 2

### 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.

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	(Output level in dB re 20 $\mu$ Pa)
			Estimated Expanded Uncertainty dB
1000	94.00	94.57	0.10

### 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 = 0.001 dB**  
Estimated expanded 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 = 965.6 Hz**  
Estimated expanded 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 = 0.9 %**  
Estimated expanded uncertainty 0.7 %

The expanded 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.

Calibrated by:

Date: 30-May-2014

Fung Chi Yip

- End -

Checked by:

Date: 30-May-2014

Lam Tze Wai

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.





**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1410093****DATE OF ISSUE: 28<sup>th</sup> May, 2014****CLIENT: LAM GEOTECHNICS LIMITED**

<b>Equipment Type:</b>	Turbidimeter
<b>Brand Name:</b>	Xin Rui
<b>Model No.:</b>	WGZ-3B
<b>Serial No.:</b>	1203010
<b>Equipment No.:</b>	--
<b>Date of Calibration:</b>	28 May, 2014
<b>Date of next Calibration:</b>	28 August, 2014

**Parameters:****Turbidity**Method Ref: APHA 22<sup>nd</sup> ed. 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.02	---
4	4.16	+4.0
10	9.80	-2.0
40	38.5	-3.75
100	104	+4.0
400	420	+5.0
1000	970	-3.0
	Tolerance Limit ( $\pm\%$ )	10.0

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

---

This report may not be reproduced except with prior written approval from Pilot Testing Limited.

Address: Room 1503, 15/F, Wayson Commercial House, 68-70 Lockhart Road, Wanchai, Hong Kong  
Phone +852 2527 6691 | Email [info@pilot-testing.com](mailto:info@pilot-testing.com)

**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****Information supplied by customer:**

**CONTACT:** DEREK LO                      **WORK ORDER:** HK1410074  
**CLIENT:** LAM GEOTECHNICS LIMITED  
**DATE RECEIVED:** 30/04/2014  
**DATE OF ISSUE:** 04/05/2014  
**ADDRESS:** 11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD,  
WANCHAI, HONG KONG

**PROJECT:** ---**METHOD OF PERFORMANCE CHECK/ CALIBRATION:**

Ref: APHA22nd ed 2130B

**COMMENTS**

It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory. Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

<b>Scope of Test:</b>	Turbidity
<b>Equipment Type:</b>	Turbidimeter
<b>Brand Name:</b>	Xin Rui
<b>Model No.:</b>	WGZ-3B
<b>Serial No.:</b>	1203016
<b>Equipment No.:</b>	--
<b>Date of Calibration:</b>	04 May, 2014

**Remarks:**

This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Peter Lee  
Director

This report may not be reproduced except with prior written approval from Pilot Testing Limited.

Address: Room 1503, 15/F, Wayson Commercial House, 68-70 Lockhart Road, Wanchai, Hong Kong  
Phone +852 2527 6691 | Email info@pilot-testing.com



**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1410074****DATE OF ISSUE: 04<sup>th</sup> May, 2014****CLIENT: LAM GEOTECHNICS LIMITED**

<b>Equipment Type:</b>	Turbidimeter
<b>Brand Name:</b>	Xin Rui
<b>Model No.:</b>	WGZ-3B
<b>Serial No.:</b>	1203016
<b>Equipment No.:</b>	--
<b>Date of Calibration:</b>	04 May, 2014
<b>Date of next Calibration:</b>	04 August, 2014

**Parameters:****Turbidity**Method Ref: APHA 22<sup>nd</sup> ed. 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.02	---
4	3.90	-2.5
10	10.1	+1.0
40	41.0	+2.5
100	96.0	-4.0
400	414	+3.5
1000	970	-3.0
	Tolerance Limit ( $\pm\%$ )	10.0

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

---

This report may not be reproduced except with prior written approval from Pilot Testing Limited.

Address: Room 1503, 15/F, Wayson Commercial House, 68-70 Lockhart Road, Wanchai, Hong Kong  
Phone +852 2527 6691 | Email info@pilot-testing.com





**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1410073****DATE OF ISSUE: 04<sup>th</sup> May, 2014****CLIENT: LAM GEOTECHNICS LIMITED**

<b>Equipment Type:</b>	Turbidimeter
<b>Brand Name:</b>	Xin Rui
<b>Model No.:</b>	WGZ-3B
<b>Serial No.:</b>	1203025
<b>Equipment No.:</b>	--
<b>Date of Calibration:</b>	04 May, 2014
<b>Date of next Calibration:</b>	04 August, 2014

**Parameters:****Turbidity**Method Ref: APHA 22<sup>nd</sup> ed. 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.02	---
4	3.86	-3.5
10	10.3	+3.0
40	42.0	+5.0
100	97.0	-3.0
400	406	+1.5
1000	975	-2.5
	Tolerance Limit ( $\pm\%$ )	10.0

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

---

This report may not be reproduced except with prior written approval from Pilot Testing Limited.

Address: Room 1503, 15/F, Wayson Commercial House, 68-70 Lockhart Road, Wanchai, Hong Kong  
Phone +852 2527 6691 | Email info@pilot-testing.com



ALS Technichem (HK) Pty Ltd  
11/F, Chung Shun Knitting Centre  
1-3 Wing Yip Street  
Kwai Chung, N.T., Hong Kong  
T: +852 2610 1044  
F: +852 2610 2021  
www.alsglobal.com

## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**CONTACT:** MS PAULINE WONG  
**CLIENT:** LAM ENVIRONMENTAL SERVICES LTD  
**ADDRESS:** 11/F., CENTRE POINT,  
181-185 GLOUCESTER ROAD,  
WAN CHAI, HONG KONG  
**PROJECT:** --

**WORK ORDER:** HK1412271  
**LABORATORY:** HONG KONG  
**DATE RECEIVED:** 22/04/2014  
**DATE OF ISSUE:** 02/05/2014

### COMMENTS

It is certified that the item under calibration/checking has been calibrated/checked by corresponding calibrated equipment in the laboratory.  
Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of ALS will be followed.

Scope of Test: Dissolved Oxygen, pH, Salinity and Temperature  
Description: Multimeter  
Brand Name: YSI  
Model No.: PROFESSIONAL PLUS  
Serial No.: 11F100597  
Equipment No.: --  
Date of Calibration: 29 April, 2014

### NOTES

This is the Final Report and supersedes any preliminary report with this batch number.  
Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

  
Mr. Fung Lim Chee, Richard  
General Manager -  
Greater China & Hong Kong



TISCH ENVIRONMENTAL, INC.  
 145 SOUTH MIAMI AVE.  
 VILLAGE OF CLEVELAND, OH 45002  
 513.467.9000  
 877.263.7610 TOLL FREE  
 513.467.9009 FAX  
 WWW.TISCH-ENV.COM

**AIR POLLUTION MONITORING EQUIPMENT**  
 ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jul 15, 2013    Roots-meter S/N    0438320    Ta (K) -    300  
 Operator Tisch    Orifice I.D. -    0005    Pa (mm) -    759.46

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER	ORFICE
					DIFF Hg (mm)	DIFF H2O (in.)
1	NA	NA	1.00	1.3910	3.2	2.00
2	NA	NA	1.00	0.9830	6.4	4.00
3	NA	NA	1.00	0.8800	7.9	5.00
4	NA	NA	1.00	0.8380	8.8	5.50
5	NA	NA	1.00	0.6930	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
0.9884	0.7106	1.4090	0.9958	0.7159	0.8888
0.9843	1.0013	1.9926	0.9916	1.0087	1.2570
0.9822	1.1161	2.2278	0.9895	1.1244	1.4054
0.9811	1.1708	2.3365	0.9884	1.1795	1.4740
0.9760	1.4084	2.8180	0.9832	1.4188	1.7777
Qstd slope (m) = 2.01968			Qa slope (m) = 1.26469		
intercept (b) = -0.02746			intercept (b) = -0.01732		
coefficient (r) = 0.99999			coefficient (r) = 0.99999		
y axis = $\text{SQRT}[\text{H}_2\text{O}(\text{Pa}/760)(298/\text{Ta})]$			y axis = $\text{SQRT}[\text{H}_2\text{O}(\text{Ta}/\text{Pa})]$		

CALCULATIONS

$$\text{Vstd} = \text{Diff. Vol} [(\text{Pa} - \text{Diff. Hg}) / 760] (298 / \text{Ta})$$

$$\text{Qstd} = \text{Vstd} / \text{Time}$$

$$\text{Va} = \text{Diff Vol} [(\text{Pa} - \text{Diff Hg}) / \text{Pa}]$$

$$\text{Qa} = \text{Va} / \text{Time}$$

For subsequent flow rate calculations:

$$\text{Qstd} = 1/m \{ [\text{SQRT}(\text{H}_2\text{O}(\text{Pa}/760)(298/\text{Ta}))] - b \}$$

$$\text{Qa} = 1/m \{ [\text{SQRT}(\text{H}_2\text{O}(\text{Ta}/\text{Pa}))] - b \}$$



# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**Work Order:** HK1412271  
**Date of Issue:** 02/05/2014  
**Client:** LAM ENVIRONMENTAL SERVICES LTD



**Description:** Multimeter  
**Brand Name:** YSI  
**Model No.:** PROFESSIONAL PLUS  
**Serial No.:** 11F100597  
**Equipment No.:** --  
**Date of Calibration:** 29 April, 2014

**Date of next Calibration:** 29 July, 2014

**Parameters:**

**Dissolved Oxygen** Method Ref: APHA (21st edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.94	3.88	-0.06
6.10	5.90	-0.20
7.98	7.89	-0.09
Tolerance Limit (mg/L)		±0.20

**pH Value** Method Ref: APHA (21st edition), 4500H:B

Expected Reading (pH Unit)	Displayed Reading (pH Unit)	Tolerance (pH unit)
4.0	4.16	+0.16
7.0	7.13	+0.13
10.0	10.06	+0.06
Tolerance Limit (pH Unit)		±0.20

**Salinity** Method Ref: APHA (21st edition), 2520B

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)
0	0.00	--
10	9.12	-8.8
20	18.80	-6.0
30	27.70	-7.7
Tolerance Limit (%)		±10.0

**Temperature** Method Ref: Section 6 of International Accreditation New Zealand Technical

**Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.**

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)
10.5	10.2	-0.3
25.5	25.3	-0.2
37.5	37.5	0.0
Tolerance Limit (°C)		±2.0

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

  
 \_\_\_\_\_  
 Mr. Fung Lim Chee, Richard  
 General Manager -  
 Greater China & Hong Kong



ALS Technichem (HK) Pty Ltd  
11/F, Chung Shun Knitting Centre  
1-3 Wing Yip Street  
Kwai Chung, N.T., Hong Kong  
T: +852 2610 1044  
F: +852 2610 2021  
www.alsglobal.com

## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**CONTACT:** MS PAULINE WONG  
**CLIENT:** LAM GEOTECHNICS LIMITED  
**ADDRESS:** 11/F., CENTRE POINT,  
181-185 GLOUCESTER ROAD,  
WAN CHAI, HONG KONG

**WORK ORDER:** HK1411576  
**LABORATORY:** HONG KONG  
**DATE RECEIVED:** 14/04/2014  
**DATE OF ISSUE:** 17/04/2014

**PROJECT:** --

### COMMENTS

It is certified that the item under calibration/checking has been calibrated/checked by corresponding calibrated equipment in the laboratory.

Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of ALS will be followed.

Scope of Test: pH, Temperature, Salinity and Dissolved Oxygen  
Description: Multimeter  
Brand Name: YSI  
Model No.: Professional Plus  
Serial No.: 11F100420  
Equipment No.: --  
Date of Calibration: 17 April, 2014

### NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

  
Mr. Fung Lim Chee, Richard  
General Manager  
Greater China & Hong Kong



# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**Work Order:** HK1411576  
**Date of Issue:** 17/04/2014  
**Client:** LAM GEOTECHNICS LIMITED



**Description:** Multimeter  
**Brand Name:** YSI  
**Model No.:** Professional Plus  
**Serial No.:** 11F100420  
**Equipment No.:** --  
**Date of Calibration:** 17 April, 2014

**Date of next Calibration:** 17 July, 2014

**Parameters:**

**Dissolved Oxygen** Method Ref: APHA (21st edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.86	3.79	-0.07
5.65	5.76	+0.11
8.02	8.12	+0.10
Tolerance Limit (mg/L)		±0.20

**pH Value**

Method Ref: APHA (21st edition), 4500H:B

Expected Reading (pH Unit)	Displayed Reading (pH Unit)	Tolerance (pH unit)
4.0	3.97	-0.03
7.0	6.92	-0.08
10.0	9.97	-0.03
Tolerance Limit (pH Unit)		±0.20

**Salinity**

Method Ref: APHA (21st edition), 2520B

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)
0	0.00	--
10	9.57	-4.3
20	18.85	-5.7
30	30.14	+0.5
Tolerance Limit (%)		±10.0

**Temperature**

Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)
9.5	9.9	+0.4
22.0	22.1	+0.1
39.0	39.3	+0.3
Tolerance Limit (°C)		±2.0

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

Mr. Fung Lim Chee, Richard  
 General Manager -  
 Greater China & Hong Kong



ALS Technichem (HK) Pty Ltd  
11/F, Chung Shun Knitting Centre  
1-3 Wing Yip Street  
Kwai Chung, N.T., Hong Kong  
T: +852 2610 1044  
F: +852 2610 2021  
www.alsglobal.com

## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**CONTACT:** MS PAULINE WONG  
**CLIENT:** LAM GEOTECHNICS LIMITED  
**ADDRESS:** 11/F., CENTRE POINT,  
181-185 GLOUCESTER ROAD,  
WAN CHAI, HONG KONG

**WORK ORDER:** HK1418648  
**LABORATORY:** HONG KONG  
**DATE RECEIVED:** 13/06/2014  
**DATE OF ISSUE:** 24/06/2014

**PROJECT:** --

### COMMENTS

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the ALS Hong Kong laboratory or quoted from relevant international standards.

The "Next Calibration Date" is recommended according to best practice principals as practised by the ALS Hong Kong laboratory or quoted from relevant international standards.

Scope of Test: pH, Temperature, Salinity and Dissolved Oxygen  
Description: Multimeter  
Brand Name: YSI  
Model No.: Professional Plus  
Serial No.: 13A100242  
Equipment No.: --  
Date of Calibration: 19 June, 2014

### NOTES

This is the Final Report and supersedes any preliminary report with this batch number.  
Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

  
Mr. Fung Lim Chee, Richard  
General Manager -  
Greater China & Hong Kong

# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**Work Order:** HK1418648  
**Date of Issue:** 24/06/2014  
**Client:** LAM GEOTECHNICS LIMITED



**Description:** Multimeter  
**Brand Name:** YSI  
**Model No.:** Professional Plus  
**Serial No.:** 13A100242  
**Equipment No.:** --  
**Date of Calibration:** 19 June, 2014

**Date of next Calibration:** 19 September, 2014

**Parameters:**

**Dissolved Oxygen Method Ref: APHA (21st edition), 4500O: G**

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
4.38	4.52	+0.14
6.42	6.46	+0.04
7.95	7.87	-0.08
Tolerance Limit (mg/L)		±0.20

**pH Value**

**Method Ref: APHA (21st edition), 4500H:B**

Expected Reading (pH Unit)	Displayed Reading (pH Unit)	Tolerance (pH unit)
4.0	4.07	+0.07
7.0	7.02	+0.02
10.0	10.13	+0.13
Tolerance Limit (pH Unit)		±0.20

**Salinity**

**Method Ref: APHA (21st edition), 2520B**

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)
0	0.00	--
10	9.40	-6.0
20	18.81	-6.0
30	28.28	-5.7
Tolerance Limit (%)		±10.0

**Temperature**

**Method Ref: Section 6 of International Accreditation New Zealand Technical**

**Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.**

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)
12.2	12.1	-0.1
24.4	24.2	-0.2
33.7	33.6	-0.1
Tolerance Limit (°C)		±2.0

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

\_\_\_\_\_  
 Mr. Fung Lim Chee, Richard  
 General Manager  
 Greater China & Hong Kong





TISCH ENVIRONMENTAL, INC.  
 145 SOUTH MIAMI AVE.  
 VILLAGE OF CLEVELAND, OH 45002  
 513.467.9000  
 877.263.7610 TOLL FREE  
 513.467.9009 FAX  
 WWW.TISCH-ENV.COM

**AIR POLLUTION MONITORING EQUIPMENT**  
 ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jul 15, 2013 Rootsometer S/N 0438320 Ta (K) - 300  
 Operator Tisch Orifice I.D. - 0005 Pa (mm) - 759.46

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER	ORFICE
					DIFF Hg (mm)	DIFF H2O (in.)
1	NA	NA	1.00	1.3910	3.2	2.00
2	NA	NA	1.00	0.9830	6.4	4.00
3	NA	NA	1.00	0.8800	7.9	5.00
4	NA	NA	1.00	0.8380	8.8	5.50
5	NA	NA	1.00	0.6930	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
0.9884	0.7106	1.4090	0.9958	0.7159	0.8888
0.9843	1.0013	1.9926	0.9916	1.0087	1.2570
0.9822	1.1161	2.2278	0.9895	1.1244	1.4054
0.9811	1.1708	2.3365	0.9884	1.1795	1.4740
0.9760	1.4084	2.8180	0.9832	1.4188	1.7777
Qstd slope (m) = 2.01968			Qa slope (m) = 1.26469		
intercept (b) = -0.02746			intercept (b) = -0.01732		
coefficient (r) = 0.99999			coefficient (r) = 0.99999		
y axis = SQRT[H2O(Pa/760) (298/Ta)]			y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

$$Vstd = \text{Diff. Vol} [(Pa - \text{Diff. Hg}) / 760] (298 / Ta)$$

$$Qstd = Vstd / \text{Time}$$

$$Va = \text{Diff Vol} [(Pa - \text{Diff Hg}) / Pa]$$

$$Qa = Va / \text{Time}$$

For subsequent flow rate calculations:

$$Qstd = 1/m \{ [\text{SQRT}(\text{H2O}(\text{Pa}/760) (298/\text{Ta}))] - b \}$$

$$Qa = 1/m \{ [\text{SQRT}(\text{H2O}(\text{Ta}/\text{Pa}))] - b \}$$



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA1b Calibration Date : 13-May-14  
 Equipment no. : EL452 Calibration Due Date : 13-Jul-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	300	Kelvin	Pressure, P <sub>a</sub>
			1007 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.2	6.2	12.4	1.7459	61	60.6070
2	5.1	5.1	10.2	1.5847	51	50.6715
3	4.1	4.1	8.2	1.4223	43	42.7230
4	2.5	2.5	5.0	1.1136	27	26.8261
5	1.4	1.4	2.8	0.8368	14	13.9098

By Linear Regression of Y on X

Slope, m = 50.9704 Intercept, b = -29.3862  
 Correlation Coefficient\* = 0.9991  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Derek Lo  
 Date : 13-May-14 Date : 13-May-14





Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : CMA1b  
 Equipment no. : EL452

Calibration Date : 2-Jul-14  
 Calibration Due Date : 2-Sep-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	302	Kelvin	Pressure, P <sub>a</sub>
			1009 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.3	6.3	12.6	1.7557	60	59.4747
2	5.0	5.0	10.0	1.5656	49	48.5710
3	4.0	4.0	8.0	1.4018	40	39.6498
4	2.7	2.7	5.4	1.1541	26	25.7724
5	1.2	1.2	2.4	0.7739	12	11.8949

By Linear Regression of Y on X

Slope, m = 48.8251      Intercept, b = -27.8761  
 Correlation Coefficient\* = 0.9947  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Henry Lau  
 Date : 2-Jul-14

Checked by : Pauline Wong  
 Date : 2-Jul-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA2a Calibration Date : 13-May-14  
 Equipment no. : EL449 Calibration Due Date : 13-Jul-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	300	Kelvin	Pressure, P <sub>a</sub>
			1007 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$\left( \frac{H \times P_a}{1013.3 \times 298 / T_a} \right)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ Y-axis
	(up)	(down)	(difference)			
1	6.1	6.1	12.2	1.7319	61	60.6070
2	5.2	5.2	10.4	1.6000	53	52.6586
3	4.0	4.0	8.0	1.4050	43	42.7230
4	2.4	2.4	4.8	1.0914	26	25.8325
5	1.4	1.4	2.8	0.8368	14	13.9098

By Linear Regression of Y on X

Slope, m = 52.1379 Intercept, b = -30.3543

Correlation Coefficient\* = 0.9995

Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Derek Lo  
 Date : 13-May-14 Date : 13-May-14



Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : CMA2a  
 Equipment no. : EL449

Calibration Date : 2-Jul-14  
 Calibration Due Date : 2-Sep-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	302	Kelvin	Pressure, P <sub>a</sub>
			1009 mmHg

Orifice Transfer Standard Information					
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968	Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	15-Jul-14				

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.1	6.1	12.2	1.7279	60	59.4747
2	4.7	4.7	9.4	1.5183	54	53.5273
3	3.7	3.7	7.4	1.3487	48	47.5798
4	2.3	2.3	4.6	1.0662	40	39.6498
5	1.4	1.4	2.8	0.8349	30	29.7374

By Linear Regression of Y on X

Slope, m = 32.7993      Intercept, b = 3.3810  
 Correlation Coefficient\* = 0.9971  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Henry Lau  
 Date : 2-Jul-14

Checked by : Pauline Wong  
 Date : 2-Jul-14



Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : CMA3a Calibration Date : 21-Jun-14  
 Equipment no. : EL333 Calibration Due Date : 21-Aug-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	301	Kelvin	Pressure, P <sub>a</sub>
			1003 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	5.5	5.5	11.0	1.6392	61	60.3860
2	4.4	4.4	8.8	1.4676	52	51.4766
3	3.7	3.7	7.4	1.3469	43	42.5672
4	2.4	2.4	4.8	1.0874	26	25.7383
5	1.5	1.5	3.0	0.8626	14	13.8591

By Linear Regression of Y on X

Slope, m = 61.3367 Intercept, b = -39.7515  
 Correlation Coefficient\* = 0.9987  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Pauline Wong  
 Date : 21-Jun-14 Date : 21-Jun-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a Calibration Date : 13-May-14  
 Equipment no. : EL390 Calibration Due Date : 13-Jul-14

#### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T <sub>a</sub>	300	Kelvin	Pressure, P <sub>a</sub>
			1007 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.0	6.0	12.0	1.7177	62	61.6006
2	5.1	5.1	10.2	1.5847	53	52.6586
3	4.0	4.0	8.0	1.4050	43	42.7230
4	2.6	2.6	5.2	1.1354	27	26.8261
5	1.5	1.5	3.0	0.8657	13	12.9163

By Linear Regression of Y on X

Slope, m = 56.9672 Intercept, b = -37.0880  
 Correlation Coefficient\* = 0.9993  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Derek Lo  
 Date : 13-May-14 Date : 13-May-14





Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : CMA4a Calibration Date : 2-Jul-14  
 Equipment no. : EL390 Calibration Due Date : 2-Sep-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	302	Kelvin	Pressure, P <sub>a</sub>
			1009 mmHg

Orifice Transfer Standard Information					
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968	Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	15-Jul-14				

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.2	6.2	12.4	1.7419	60	59.4747
2	5.3	5.3	10.6	1.6115	52	51.5448
3	4.1	4.1	8.2	1.4190	43	42.6236
4	2.7	2.7	5.4	1.1541	24	23.7899
5	1.4	1.4	2.8	0.8349	12	11.8949

By Linear Regression of Y on X

Slope, m = 53.7477 Intercept, b = -34.8156  
 Correlation Coefficient\* = 0.9945  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Pauline Wong  
 Date : 2-Jul-14 Date : 2-Jul-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5a  
 Equipment no. : EL380  
 Calibration Date : 21-Jun-14  
 Calibration Due Date : 21-Aug-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	301	Kelvin	Pressure, P <sub>a</sub>
			1003 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	5.6	5.6	11.2	1.6539	61	60.3860
2	4.8	4.8	9.6	1.5323	52	51.4766
3	3.5	3.5	7.0	1.3104	42	41.5772
4	2.3	2.3	4.6	1.0648	26	25.7383
5	1.2	1.2	2.4	0.7729	13	12.8691

By Linear Regression of Y on X

Slope, m = 53.8279      Intercept, b = -29.7835

Correlation Coefficient\* = 0.9974

Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li      Checked by : Pauline Wong  
 Date : 21-Jun-14      Date : 21-Jun-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a Calibration Date : 13-May-14  
 Equipment no. : EL448 Calibration Due Date : 13-Jul-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	300	Kelvin	Pressure, P <sub>a</sub>
			1007 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ Y-axis
	(up)	(down)	(difference)			
1	6.1	6.1	12.2	1.7319	62	61.6006
2	5.0	5.0	10.0	1.5692	52	51.6650
3	4.0	4.0	8.0	1.4050	42	41.7294
4	2.4	2.4	4.8	1.0914	25	24.8389
5	1.5	1.5	3.0	0.8657	13	12.9163

By Linear Regression of Y on X

Slope, m = 55.9776 Intercept, b = -36.0474  
 Correlation Coefficient\* = 0.9995  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Derek Lo  
 Date : 13-May-14 Date : 13-May-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a Calibration Date : 2-Jul-14  
 Equipment no. : EL448 Calibration Due Date : 2-Sep-14

#### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T <sub>a</sub>	302	Kelvin	Pressure, P <sub>a</sub>
			1009 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.2	6.2	12.4	1.7419	60	59.4747
2	5.1	5.1	10.2	1.5811	52	51.5448
3	4.3	4.3	8.6	1.4529	42	41.6323
4	2.3	2.3	4.6	1.0662	23	22.7986
5	1.6	1.6	3.2	0.8916	12	11.8949

By Linear Regression of Y on X

Slope, m = 55.4756 Intercept, b = -37.2410  
 Correlation Coefficient\* = 0.9984  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Henry Lau Checked by : Pauline Wong  
 Date : 2-Jul-14 Date : 2-Jul-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : MA1e Calibration Date : 13-May-14  
 Equipment no. : EL455 Calibration Due Date : 13-Jul-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	300	Kelvin	Pressure, P <sub>a</sub>
			1007 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$\left( \frac{H \times P_a}{1013.3 \times 298 / T_a} \right)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ Y-axis
	(up)	(down)	(difference)			
1	6.2	6.2	12.4	1.7459	62	61.6006
2	5.1	5.1	10.2	1.5847	52	51.6650
3	4.1	4.1	8.2	1.4223	43	42.7230
4	2.5	2.5	5.0	1.1136	26	25.8325
5	1.6	1.6	3.2	0.8936	15	14.9034

By Linear Regression of Y on X

Slope, m = 54.6458 Intercept, b = -34.5374

Correlation Coefficient\* = 0.9995

Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Derek Lo  
 Date : 13-May-14 Date : 13-May-14





Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : MA1e  
 Equipment no. : EL455

Calibration Date : 21-Jun-14  
 Calibration Due Date : 21-Aug-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	301	Kelvin	Pressure, P <sub>a</sub>
			1003 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.5	6.5	13.0	1.7808	57	56.4262
2	4.2	4.2	8.4	1.4342	48	47.5168
3	3.3	3.3	6.6	1.2728	42	41.5772
4	2.1	2.1	4.2	1.0181	32	31.6779
5	1.4	1.4	2.8	0.8338	28	27.7182

By Linear Regression of Y on X

Slope, m = 31.5589      Intercept, b = 0.9687  
 Correlation Coefficient\* = 0.9958  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li  
 Date : 21-Jun-14

Checked by : Pauline Wong  
 Date : 21-Jun-14



Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : MA1w  
 Equipment no. : EL080

Calibration Date : 21-Jun-14  
 Calibration Due Date : 21-Aug-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	301	Kelvin	Pressure, P <sub>a</sub>
			1003 mmHg

Orifice Transfer Standard Information			
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968
		Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	15-Jul-14		

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.3	6.3	12.6	1.7534	53	52.4665
2	5.1	5.1	10.2	1.5790	48	47.5168
3	4.2	4.2	8.4	1.4342	40	39.5974
4	2.6	2.6	5.2	1.1313	30	29.6980
5	1.8	1.8	3.6	0.9436	24	23.7584

By Linear Regression of Y on X

Slope, m = 36.2029      Intercept, b = -10.9288  
 Correlation Coefficient\* = 0.9965  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li  
 Date : 21-Jun-14

Checked by : Pauline Wong  
 Date : 21-Jun-14



Lam Geotechnics Limited

**Calibration Data for High Volume Sampler (TSP Sampler)**

Location : ACL1 Calibration Date : 21-Jun-14  
 Equipment no. : EL222 Calibration Due Date : 21-Aug-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	301	Kelvin	Pressure, P <sub>a</sub>
			1003 mmHg

Orifice Transfer Standard Information					
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968	Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	15-Jul-14				

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	5.8	5.8	11.6	1.6830	56	55.4363
2	4.4	4.4	8.8	1.4676	48	47.5168
3	3.7	3.7	7.4	1.3469	43	42.5672
4	2.2	2.2	4.4	1.0417	34	33.6578
5	1.5	1.5	3.0	0.8626	26	25.7383

By Linear Regression of Y on X

Slope, m = 35.2472 Intercept, b = -4.1457  
 Correlation Coefficient\* = 0.9981  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient &lt; 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Felix Li Checked by : Pauline Wong  
 Date : 21-Jun-14 Date : 21-Jun-14



Lam Geotechnics Limited

### Calibration Data for High Volume Sampler (TSP Sampler)

Location : ACL2a Calibration Date : 3-Jun-14  
 Equipment no. : EL111 Calibration Due Dat : 3-Aug-14

**CALIBRATION OF CONTINUOUS FLOW RECORDER**

Ambient Condition			
Temperature, T <sub>a</sub>	303	Kelvin	Pressure, P <sub>a</sub>
			1004 mmHg

Orifice Transfer Standard Information					
Equipment No.	EL086	Slope, m <sub>c</sub>	2.01968	Intercept, b <sub>c</sub>	-0.02746
Last Calibration Date	15-Jul-13	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	15-Jul-14				

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31) Y-axis
	(up)	(down)	(difference)			
1	6.2	6.2	12.4	1.7347	61	60.2164
2	5.1	5.1	10.2	1.5746	53	52.3191
3	4.2	4.2	8.4	1.4302	46	45.4091
4	2.6	2.6	5.2	1.1282	33	32.5761
5	1.6	1.6	3.2	0.8879	23	22.7045

By Linear Regression of Y on X

Slope, m = 44.0592 Intercept, b = -16.8841

Correlation Coefficient\* = 0.9993

Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : \_\_\_\_\_

Calibrated by : Henry Checked by : Derek Lo  
 Date : 3-Jun-14 Date : 3-Jun-14



***Appendix 5.1***

***Monitoring Schedules for Reporting Month and Coming Reporting Month***



**Contract No. HK/2011/07  
Wan Chai Development Phase II and Central-Wan Chai Bypass  
Sampling, Field Measurement and Testing Works (Stage 2)**

**Environmental Monitoring Schedule  
July 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						28-Jun
						24hr TSP
<b>29-Jun</b>	30-Jun	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
	24hr TSP (CMA1b) 1hr TSP  Impact WQM Mid-flood 7:16 Mid-ebb 14:14		24hr TSP (CMA3a) 1hr TSP (CMA3a) Noise (Daytime) (M1a, M3a) Impact WQM Mid-flood 8:23 Mid-ebb 15:13	Noise (Daytime) (M4b, M5b, M6)	24hr TSP  Noise (Daytime) (M2b) Impact WQM Mid-flood 9:39 Mid-ebb 16:14	1hr TSP
<b>6-Jul</b>	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
	Noise (Daytime) (M1a) Impact WQM Mid-flood 1:08 Mid-ebb 7:54	Noise (Daytime) (M2b, M3a, M4b, M5b, M6)	Impact WQM Mid-ebb 9:45 Mid-flood 16:47	24hr TSP	1hr TSP  Impact WQM Mid-ebb 11:17 Mid-flood 18:28	
<b>13-Jul</b>	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
	Impact WQM Mid-flood 6:56 Mid-ebb 13:41	Noise (Daytime) (M1a, M2b, M3a, M4)	24hr TSP  Impact WQM Mid-flood 8:40 Mid-ebb 15:13	1hr TSP Noise (Daytime) (M5b, M6)	Impact WQM Mid-flood 10:36 Mid-ebb 16:52	
<b>20-Jul</b>	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
	Noise (Daytime) (M1a, M2b, M3a) Impact WQM Mid-flood 1:15 Mid-ebb 8:34	24hr TSP  Noise (Daytime) (M4b, M5b, M6)	24hr TSP (CMA5a) 1hr TSP  Impact WQM Mid-ebb 10:23 Mid-flood 17:26		Impact WQM Mid-ebb 11:40 Mid-flood 18:40	

**Contract No. HK/2011/07  
Wan Chai Development Phase II and Central-Wan Chai Bypass  
Sampling, Field Measurement and Testing Works (Stage 2)**

**Tentative Environmental Monitoring Schedule  
August 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug
	24hr TSP Noise (Daytime) Impact WQM Mid-ebb 13:19 Mid-flood 20:01	1hr TSP Noise (Daytime)	Impact WQM Mid-ebb 14:21 Mid-flood 20:56		Impact WQM Mid-ebb 15:25 Mid-flood 22:04	24hr TSP
3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug
Impact WQM Mid-flood 23:25	1hr TSP Noise (Daytime) Impact WQM Mid-ebb 6:00	Noise (Daytime)	Impact WQM Mid-flood 0:58 Mid-ebb 8:22		24hr TSP Impact WQM Mid-ebb 10:12 Mid-flood 17:30	1hr TSP
10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
	Noise (Daytime) Impact WQM Mid-ebb 12:38 Mid-flood 19:28	Noise (Daytime)	Impact WQM Mid-ebb 13:24 Mid-flood 20:06	24hr TSP	1hr TSP Impact WQM Mid-flood 9:24 Mid-ebb 15:34	
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug
Impact WQM Mid-flood 23:37	Noise (Daytime) Impact WQM Mid-ebb 6:50	Noise (Daytime)	24hr TSP Impact WQM Mid-ebb 9:12 Mid-flood 16:39	1hr TSP	Impact WQM Mid-ebb 10:42 Mid-flood 17:45	
24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug
	Noise (Daytime) Impact WQM Mid-ebb 12:24 Mid-flood 18:56	24hr TSP Noise (Daytime)	1hr TSP Impact WQM Mid-ebb 13:26 Mid-flood 19:43		Impact WQM Mid-ebb 14:32 Mid-flood 20:41	



***Appendix 5.2***

***Noise Monitoring Results and Graphical Presentations***



### Noise Monitoring Result

#### Day Time (0700 - 1900hrs on normal weekdays)

Location: M1a - Harbour Road Sports Centre

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30-min)								
02/07/14	14:42	Fine	72.1	74.5	67.0	72	72	75
07/07/14	13:04	Fine	72.5	74.5	68.0	72	61	75
15/07/14	14:05	Fine	72.4	75.0	68.0	72	59	75
21/7/2014	14:10	Fine	72.9	75.0	68.5	72	65	75

Location: M2b - Noon-day gun area

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30-min)								
04/07/14	11:20	Fine	69.5	74.6	66.0	68	65	75
08/07/14	9:20	Fine	73.8	76.5	69.5	68	73	75
15/07/14	16:54	Fine	75.4	78.0	69.0	68	75	75
21/7/2014	9:00	Fine	75.4	78.5	69.0	68	75	75

Location: M3a - Tung Lo Wan Fire Station

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30-min)								
02/07/14	16:41	Fine	66.7	68.0	65.0	69	67	75
08/07/14	10:04	Fine	67.6	69.0	65.5	69	68	75
15/07/14	15:49	Fine	66.4	67.5	65.0	69	66	75
21/07/14	15:40	Sunny	68.1	69.5	66.0	69	68	75

Location: M4b - Victoria Centre

Date	Time	Weather	Measurement Noise Level			Baseline Noise Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30min)								
03/07/14	9:21	Fine	67.6	68.5	66.0	67	56	75
08/07/14	10:45	Fine	69.6	71.0	67.5	67	66	75
15/07/14	15:03	Fine	70.9	73.0	67.5	67	68	75
22/07/14	13:07	Fine	67.6	68.5	66.0	67	56	75

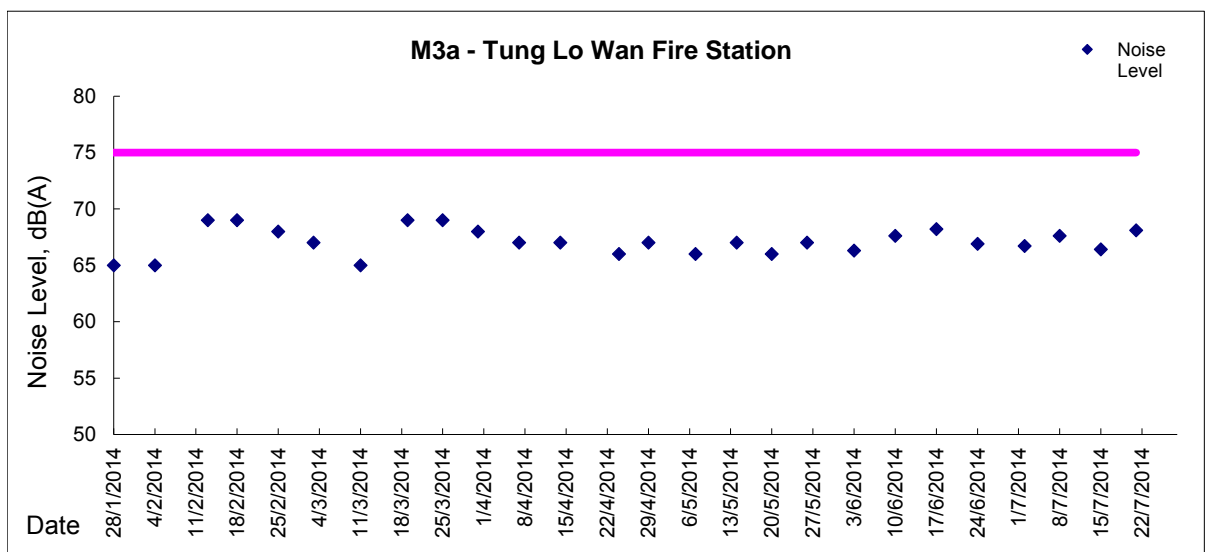
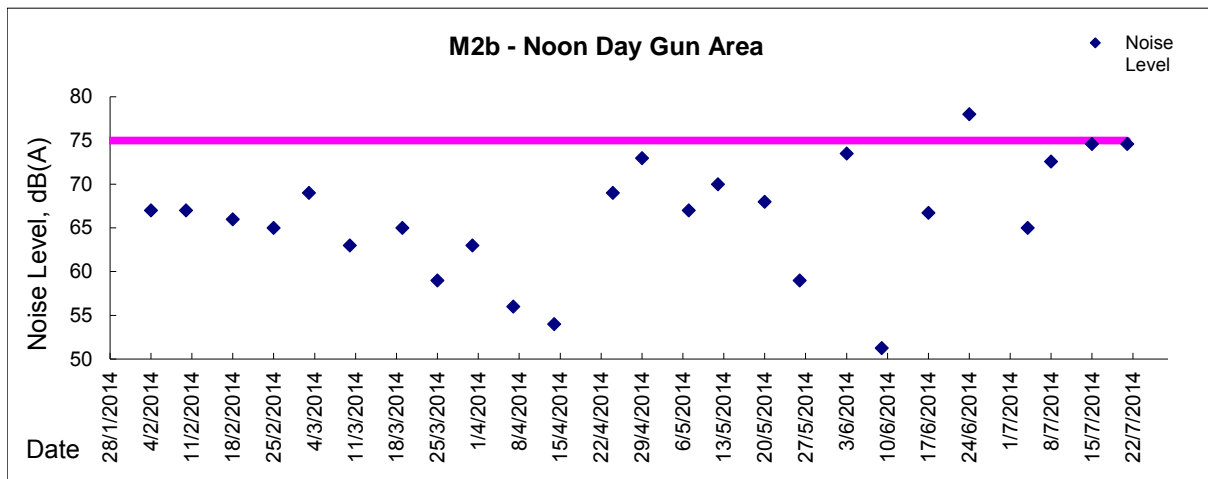
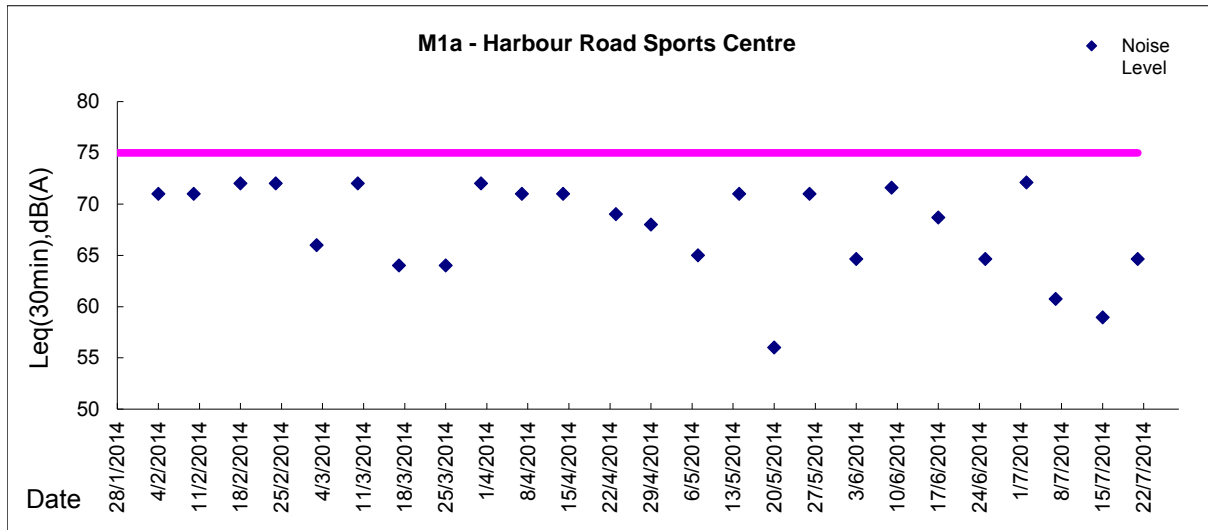
Location: M5b - City Garden

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30min)								
03/07/14	10:48	Fine	71.2	73.5	68.5	68	68	75
08/07/14	13:03	Fine	70.6	72.0	68.5	68	67	75
17/07/14	15:28	Fine	70.1	71.0	68.5	68	66	75
22/07/14	9:54	Fine	71.8	73.5	69.0	68	69	75

Location: M6 - HK Baptist Church Henrietta Secondary School

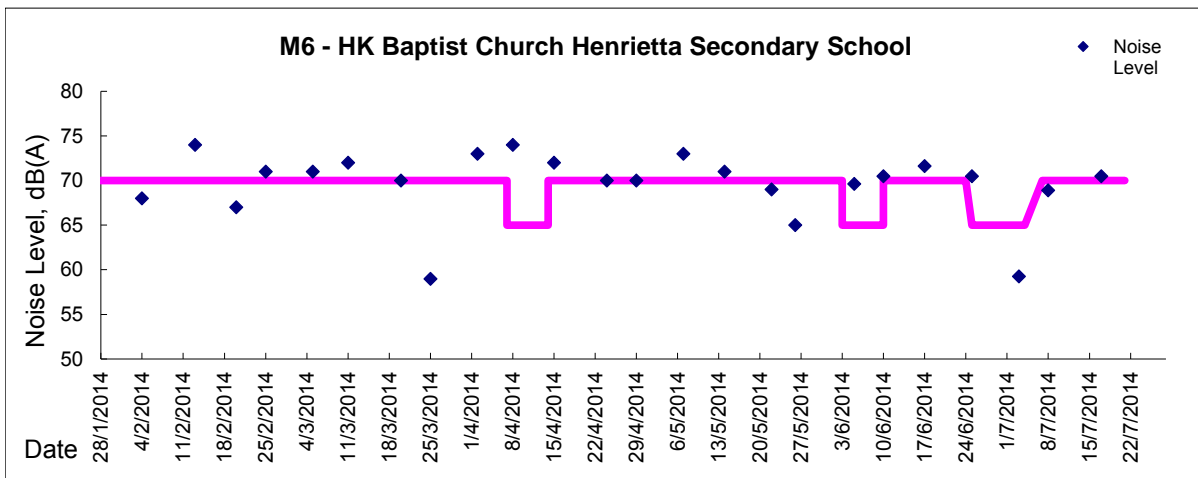
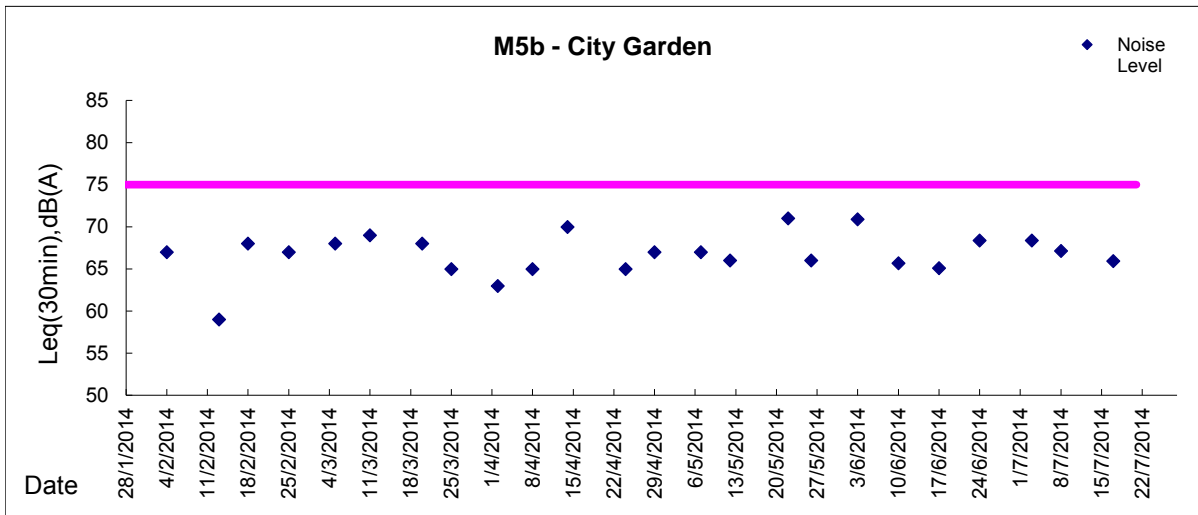
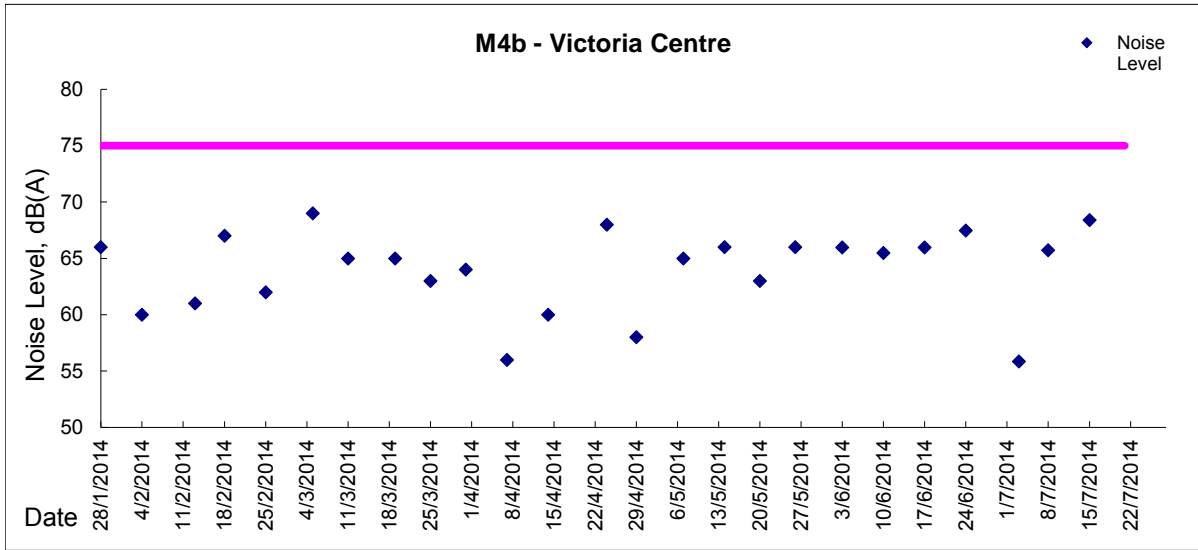
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30-min)								
03/07/14	10:10	Fine	71.0	72.0	69.0	71	59	65
08/07/14	14:04	Fine	72.9	74.0	71.0	71	69	70
17/07/14	16:47	Fine	73.6	75.0	71.5	71	70	70
22/07/14	10:49	Fine	71.5	73.0	68.5	71	64	70

**Graphic Presentation of Noise Monitoring Result**  
**Day Time (0700 - 1900hrs on normal weekdays)**





**Graphic Presentation of Noise Monitoring Result**  
**Day Time (0700 - 1900hrs on normal weekdays)**





***Appendix 5.3***

***Air Quality Monitoring Results and Graphical Presentations, and odour Patrol Results***



Location: CMA1b - Oil Street Site Office

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 176.7

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
30-Jun-14	11:23	Rainy	009099	2.8131	2.9004	4788.86	4812.86	24.00	1.38	1.38	1.38	1987	44
4-Jul-14	8:00	Fine	009126	2.8668	2.9631	4812.86	4836.86	24.00	1.38	1.38	1.38	1981	49
10-Jul-14	8:00	Rainy	009135	2.8548	2.9473	4839.87	4863.87	24.00	1.38	1.38	1.38	1984	47
16-Jul-14	8:00	Rainy	009112	2.8215	2.9487	4866.88	4890.88	24.00	1.41	1.41	1.41	2028	63
22-Jul-14	8:00	Rainy	009242	2.8569	3.1129	4893.88	4917.88	24.00	1.35	1.35	1.35	1940	132

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 28 June 2014 to 30 June 2014.

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 320.1

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
30-Jun-14	8:00	Rainy	008996	2.8250	2.8312	4785.86	4786.86	1.00	1.32	1.32	1.32	79	78
30-Jun-14	9:07	Rainy	008916	2.8426	2.8441	4786.86	4787.86	1.00	1.32	1.32	1.32	79	19
30-Jun-14	10:15	Rainy	009097	2.8132	2.8174	4787.86	4788.86	1.00	1.32	1.32	1.32	79	53
5-Jul-14	8:09	Rainy	009130	2.8581	2.8657	4836.86	4837.86	1.00	1.38	1.38	1.38	83	92
5-Jul-14	9:17	Rainy	009132	2.8466	2.8559	4837.86	4838.86	1.00	1.38	1.38	1.38	83	113
5-Jul-14	10:26	Rainy	009134	2.8555	2.8625	4838.86	4839.86	1.00	1.38	1.38	1.38	83	85
11-Jul-14	10:30	Rainy	009141	2.8611	2.8711	4863.87	4864.87	1.00	1.38	1.38	1.38	83	121
11-Jul-14	13:00	Rainy	009108	2.8116	2.8171	4864.87	4865.87	1.00	1.38	1.38	1.38	83	66
11-Jul-14	14:10	Rainy	009110	2.8192	2.8243	4865.87	4866.87	1.00	1.38	1.38	1.38	83	62
17-Jul-14	9:05	Rainy	009268	2.8320	2.8535	4890.88	4891.88	1.00	1.41	1.41	1.41	84	254
17-Jul-14	10:16	Rainy	009270	2.8301	2.8528	4891.88	4892.88	1.00	1.41	1.41	1.41	84	269
17-Jul-14	13:00	Rainy	009272	2.8401	2.8663	4892.88	4893.88	1.00	1.41	1.41	1.41	84	310
23-Jul-14	10:20	Fine	009361	2.8417	2.8518	4917.88	4918.88	1.00	1.40	1.40	1.40	84	120
23-Jul-14	13:00	Fine	009363	2.8624	2.8756	4918.88	4919.88	1.00	1.40	1.40	1.40	84	157
23-Jul-14	14:10	Fine	009365	2.8773	2.8906	4919.88	4920.88	1.00	1.40	1.40	1.40	84	158



Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring  
Action Level ( $\mu\text{g}/\text{m}^3$ ) - 169.5  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
28-Jun-14	8:00	Fine	008995	2.8315	2.9456	14496.37	14520.37	24.00	1.36	1.37	1.37	1966	58
4-Jul-14	8:00	Fine	009100	2.8155	2.8862	14523.37	14547.37	24.00	1.36	1.27	1.32	1898	37
10-Jul-14	8:00	Rainy	009136	2.8441	2.9253	14550.37	14574.37	24.00	1.36	1.27	1.32	1900	43
16-Jul-14	8:00	Rainy	009113	2.8255	2.9432	14577.37	14601.37	24.00	1.14	1.14	1.14	1646	71
22-Jul-14	8:00	Rainy	009241	2.8471	3.0224	14604.37	14628.37	24.00	1.14	1.02	1.08	1557	113

Report on 1-hour TSP monitoring  
Action Level ( $\mu\text{g}/\text{m}^3$ ) - 323.4  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
30-Jun-14	8:07	Rainy	009026	2.8453	2.8509	14520.37	14521.37	1.00	1.28	1.28	1.28	77	73
30-Jun-14	9:13	Rainy	009096	2.8278	2.8362	14521.37	14522.37	1.00	1.28	1.28	1.28	77	110
30-Jun-14	10:17	Rainy	009098	2.8074	2.8153	14522.37	14523.37	1.00	1.28	1.28	1.28	77	103
5-Jul-14	8:07	Rainy	009129	2.8569	2.8661	14547.37	14548.37	1.00	1.36	1.36	1.36	82	112
5-Jul-14	9:13	Rainy	009131	2.8366	2.8491	14548.37	14549.37	1.00	1.36	1.36	1.36	82	153
5-Jul-14	10:17	Rainy	009133	2.8405	2.8523	14549.37	14550.37	1.00	1.36	1.36	1.36	82	144
11-Jul-14	10:40	Rainy	009107	2.8311	2.8368	14574.37	14575.37	1.00	1.27	1.27	1.27	76	75
11-Jul-14	13:00	Rainy	009109	2.8175	2.8229	14575.37	14576.37	1.00	1.31	1.29	1.30	78	69
11-Jul-14	14:05	Rainy	009111	2.8243	2.8324	14576.37	14577.37	1.00	1.29	1.29	1.29	78	104
17-Jul-14	8:50	Rainy	009267	2.8403	2.8465	14601.37	14602.37	1.00	1.06	1.03	1.04	63	99
17-Jul-14	9:54	Rainy	009269	2.8381	2.8453	14602.37	14603.37	1.00	1.03	1.03	1.03	62	116
17-Jul-14	13:00	Rainy	009271	2.8342	2.8414	14603.37	14604.37	1.00	1.03	1.03	1.03	62	117
23-Jul-14	10:30	Fine	009362	2.8663	2.8771	14828.37	14829.37	1.00	1.14	1.14	1.14	68	158
23-Jul-14	13:00	Fine	009364	2.8677	2.8799	14829.37	14830.37	1.00	1.14	1.14	1.14	68	179
23-Jul-14	14:10	Fine	009366	2.8577	2.8710	14830.37	14831.37	1.00	1.14	1.14	1.14	68	195



Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring  
Action Level ( $\mu\text{g}/\text{m}^3$ ) - 171  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
2-Jul-14	15:37	Rainy	009204	2.8457	2.9621	1918.39	1942.39	24.00	1.29	1.32	1.30	1876	62
4-Jul-14	8:00	Fine	009128	2.8579	3.0430	1942.39	1966.39	24.00	1.37	1.37	1.37	1971	94
10-Jul-14	8:00	Rainy	009288	2.8445	2.9638	1969.38	1993.38	24.00	1.37	1.37	1.37	1973	60
16-Jul-14	8:00	Rainy	009191	2.8607	2.9931	1996.38	2020.38	24.00	1.41	1.41	1.41	2028	65
22-Jul-14	8:00	Rainy	009234	2.8531	3.0795	2023.38	2047.38	24.00	1.41	1.40	1.41	2024	112

Remarks: Due to interruption of electricity, the 24hr was rescheduled from 28 June 2014 to 2 July 2014.

Report on 1-hour TSP monitoring  
Action Level ( $\mu\text{g}/\text{m}^3$ ) - 311.3  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
2-Jul-14	10:00	Rainy	009145	2.8647	2.8827	1915.39	1916.39	1.00	1.31	1.31	1.31	79	228
2-Jul-14	13:00	Rainy	009127	2.8545	2.8678	1916.39	1917.39	1.00	1.31	1.31	1.31	79	169
2-Jul-14	14:18	Rainy	009203	2.8579	2.8627	1917.39	1918.39	1.00	1.24	1.27	1.25	75	64
5-Jul-14	9:15	Rainy	008971	2.8237	2.8337	1966.39	1967.39	1.00	1.31	1.31	1.31	79	127
5-Jul-14	10:20	Rainy	009291	2.8337	2.8381	1967.39	1968.39	1.00	1.31	1.31	1.31	79	56
5-Jul-14	13:00	Rainy	009289	2.8507	2.8575	1968.39	1969.39	1.00	1.31	1.31	1.31	79	86
11-Jul-14	10:25	Rainy	009285	2.8413	2.8480	1993.38	1994.38	1.00	1.31	1.31	1.31	79	85
11-Jul-14	13:00	Rainy	009188	2.8511	2.8580	1994.38	1995.38	1.00	1.31	1.31	1.31	79	87
11-Jul-14	14:10	Rainy	009190	2.8442	2.8508	1995.38	1996.38	1.00	1.31	1.31	1.31	79	84
17-Jul-14	8:50	Rainy	009193	2.8516	2.8581	2020.38	2021.38	1.00	1.31	1.31	1.31	79	82
17-Jul-14	9:57	Rainy	009236	2.8473	2.8561	2021.38	2022.38	1.00	1.31	1.31	1.31	79	112
17-Jul-14	13:00	Rainy	009238	2.8636	2.8725	2022.38	2023.38	1.00	1.31	1.31	1.31	79	113
23-Jul-14	9:45	Fine	009218	2.8546	2.8621	2047.38	2048.38	1.00	1.31	1.31	1.31	79	95
23-Jul-14	10:55	Fine	009250	2.8732	2.8834	2048.38	2049.38	1.00	1.31	1.31	1.31	79	130
23-Jul-14	13:00	Fine	009253	2.8574	2.8673	2049.38	2050.38	1.00	1.31	1.31	1.31	79	126

Remarks: Due to interruption of electricity, the 24hr was rescheduled from 30 June 2014 to 2 July 2014.



Location: CMA4a - SPCA

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 171.2

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
28-Jun-14	8:00	Fine	009092	2.8199	2.9067	18722.99	18746.99	24.00	1.32	1.32	1.32	1901	46
4-Jul-14	8:00	Fine	009152	2.8515	2.9195	18749.98	18773.98	24.00	1.32	1.32	1.32	1899	36
10-Jul-14	8:00	Rainy	009287	2.8477	2.9019	18776.98	18800.98	24.00	1.29	1.29	1.29	1853	29
16-Jul-14	8:00	Rainy	009192	2.8593	2.9383	18803.98	18827.98	24.00	1.32	1.32	1.32	1901	42
22-Jul-14	8:00	Rainy	009194	2.8528	3.0105	18830.98	18854.98	24.00	1.32	1.32	1.32	1898	83

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 312.5

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
30-Jun-14	13:00	Rainy	009148	2.8534	2.8618	18746.99	18747.99	1.00	1.32	1.32	1.32	79	106
30-Jun-14	14:09	Rainy	009149	2.8539	2.8625	18747.99	18748.99	1.00	1.32	1.32	1.32	79	108
30-Jun-14	15:15	Rainy	009150	2.8563	2.8641	18748.99	18749.99	1.00	1.32	1.32	1.32	79	98
5-Jul-14	9:05	Rainy	008970	2.8186	2.8252	18773.98	18774.98	1.00	1.29	1.29	1.29	77	86
5-Jul-14	10:13	Rainy	009292	2.8477	2.8507	18774.98	18775.98	1.00	1.29	1.29	1.29	77	39
5-Jul-14	13:00	Rainy	009290	2.8335	2.8365	18775.98	18776.98	1.00	1.29	1.29	1.29	77	39
11-Jul-14	10:10	Rainy	009286	2.8503	2.8533	18800.98	18801.98	1.00	1.29	1.29	1.29	77	39
11-Jul-14	13:00	Rainy	009219	2.8447	2.8486	18801.98	18802.98	1.00	1.29	1.29	1.29	77	50
11-Jul-14	14:15	Rainy	009189	2.8494	2.8531	18802.98	18803.98	1.00	1.29	1.29	1.29	77	48
17-Jul-14	8:40	Rainy	009233	2.8549	2.8586	18827.98	18828.98	1.00	1.32	1.32	1.32	79	47
17-Jul-14	9:46	Rainy	009235	2.8390	2.8464	18828.98	18829.98	1.00	1.32	1.32	1.32	79	93
17-Jul-14	11:00	Rainy	009237	2.8518	2.8604	18829.98	18830.98	1.00	1.32	1.32	1.32	79	109
23-Jul-14	9:55	Fine	009217	2.8418	2.8498	18854.98	18855.98	1.00	1.32	1.32	1.32	79	101
23-Jul-14	11:00	Fine	009249	2.8462	2.8550	18855.95	18856.98	1.03	1.32	1.32	1.32	81	108
23-Jul-14	13:00	Fine	009252	2.8548	2.8644	18856.98	18857.98	1.00	1.32	1.32	1.32	79	122





Location: CMA5a - Children Garden opposite to Pedestrian Plaza

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 181  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
28-Jun-14	8:00	Fine	009001	2.8301	2.9728	19704.04	19728.04	24.00	1.38	1.38	1.38	1990	72
4-Jul-14	8:00	Fine	009151	2.8460	2.9525	19731.03	19755.03	24.00	1.29	1.29	1.29	1863	57
10-Jul-14	8:00	Rainy	009282	2.8603	2.9462	19758.03	19782.03	24.00	1.26	1.26	1.26	1813	47
16-Jul-14	8:00	Rainy	009266	2.8378	2.9760	19785.03	19809.03	24.00	1.26	1.26	1.26	1814	76
23-Jul-14	16:10	Fine	009404	2.8574	2.9761	19823.88	19847.88	24.00	1.31	1.31	1.31	1885	63

Remarks: Due to interruption of electricity, the 24hr was rescheduled from 22 July 2014 to 23 July 2014.

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 332  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
30-Jun-14	8:26	Rainy	008550	2.8546	2.8627	19728.04	19729.04	1.00	1.38	1.38	1.38	83	98
30-Jun-14	9:36	Rainy	009012	2.8310	2.8400	19729.04	19730.04	1.00	1.38	1.38	1.38	83	108
30-Jun-14	10:45	Rainy	009013	2.8206	2.8284	19730.04	19731.04	1.00	1.38	1.38	1.38	83	94
5-Jul-14	8:36	Rainy	009153	2.8513	2.8612	19755.03	19756.03	1.00	1.38	1.38	1.38	83	120
5-Jul-14	9:40	Rainy	009154	2.8428	2.8512	19756.03	19757.03	1.00	1.38	1.38	1.38	83	101
5-Jul-14	10:44	Rainy	009147	2.8654	2.8762	19757.03	19758.03	1.00	1.38	1.38	1.38	83	130
11-Jul-14	9:29	Rainy	009182	2.8528	2.8637	19782.03	19783.03	1.00	1.26	1.26	1.26	76	144
11-Jul-14	10:58	Rainy	009185	2.8496	2.8554	19783.03	19784.03	1.00	1.26	1.26	1.26	76	77
11-Jul-14	13:00	Rainy	009263	2.8662	2.8730	19784.03	19785.03	1.00	1.26	1.26	1.26	76	90
17-Jul-14	9:45	Rainy	009116	2.8599	2.8740	19809.03	19810.03	1.00	1.31	1.31	1.31	79	179
17-Jul-14	10:45	Rainy	009119	2.8512	2.8670	19810.03	19811.03	1.00	1.31	1.31	1.31	79	201
17-Jul-14	13:00	Rainy	009122	2.8591	2.8686	19811.03	19812.03	1.00	1.31	1.31	1.31	79	121
23-Jul-14	9:58	Fine	009374	2.8539	2.8621	19820.88	19821.88	1.00	1.31	1.31	1.31	79	104
23-Jul-14	13:00	Fine	009376	2.8517	2.8616	19821.88	19822.88	1.00	1.31	1.31	1.31	79	126
23-Jul-14	14:41	Fine	009380	2.8575	2.8667	19822.88	19823.88	1.00	1.31	1.31	1.31	79	117



Location: CMA6a - WD2 PRE Office

Report on 24-hour TSP monitoring

Action Level - 187.3  $\mu\text{g}/\text{m}^3$   
Limit Level - 260  $\mu\text{g}/\text{m}^3$

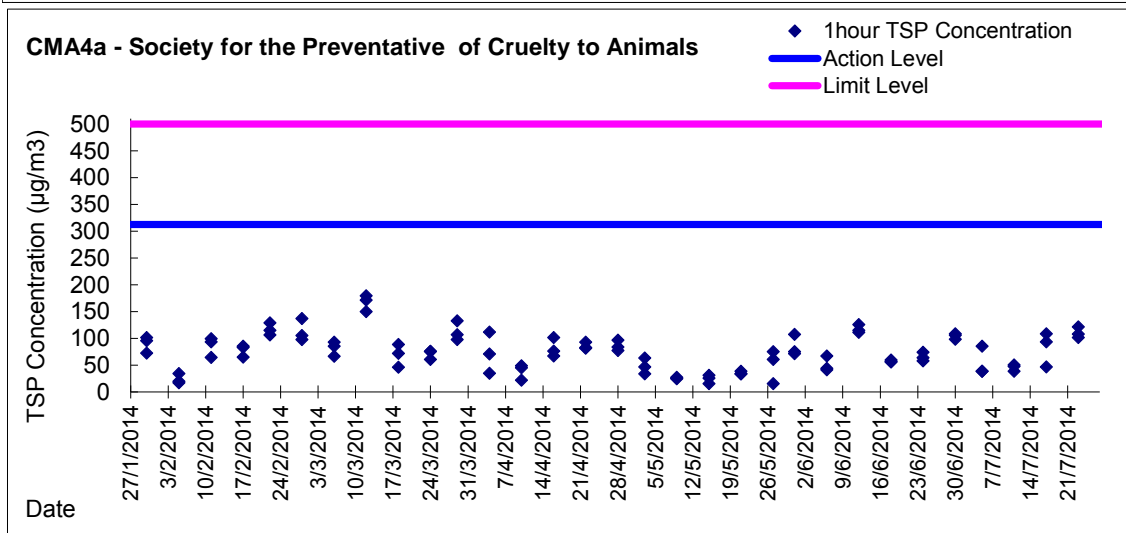
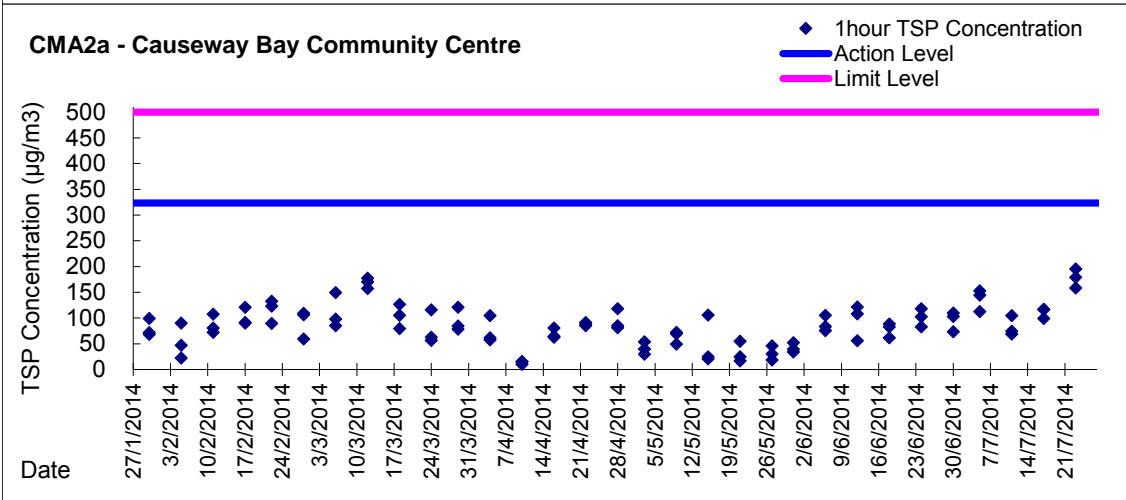
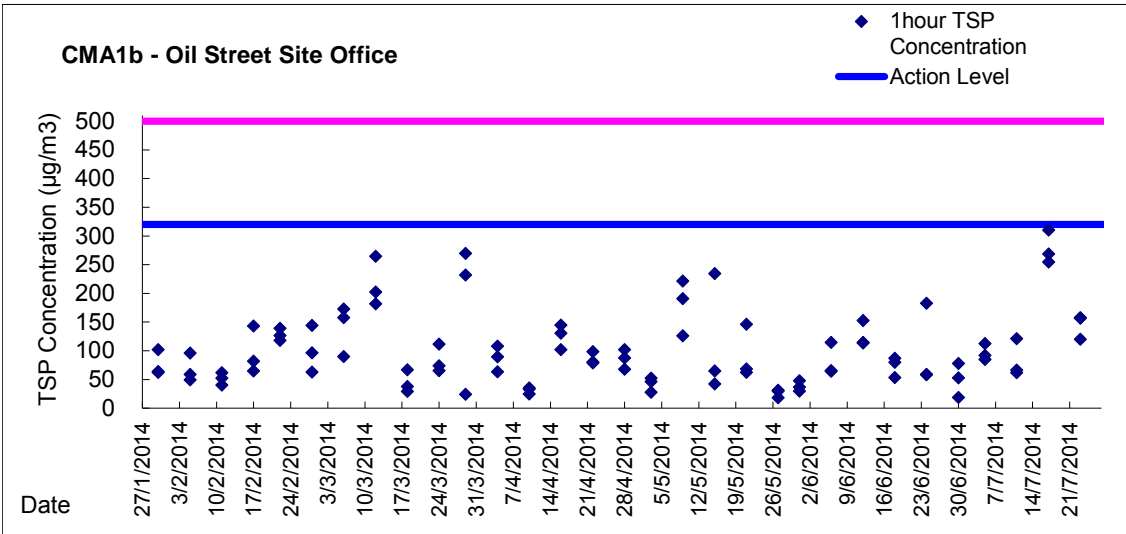
Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
28-Jun-14	8:00	Fine	009003	2.8314	2.9335	18055.62	18079.62	24.00	1.33	1.33	1.33	1915	53
4-Jul-14	8:00	Fine	009146	2.8636	2.9656	18082.61	18106.61	24.00	1.35	1.35	1.35	1938	53
10-Jul-14	8:00	Rainy	009283	2.8423	2.9358	18109.61	18133.61	24.00	1.32	1.34	1.33	1917	49
16-Jul-14	8:00	Rainy	009264	2.8523	2.9745	18136.61	18160.61	24.00	1.34	1.34	1.34	1929	63
22-Jul-14	8:00	Rainy	009123	2.8533	3.0321	18163.61	18187.61	24.00	1.41	1.40	1.41	2024	88

Report on 1-hour TSP monitoring

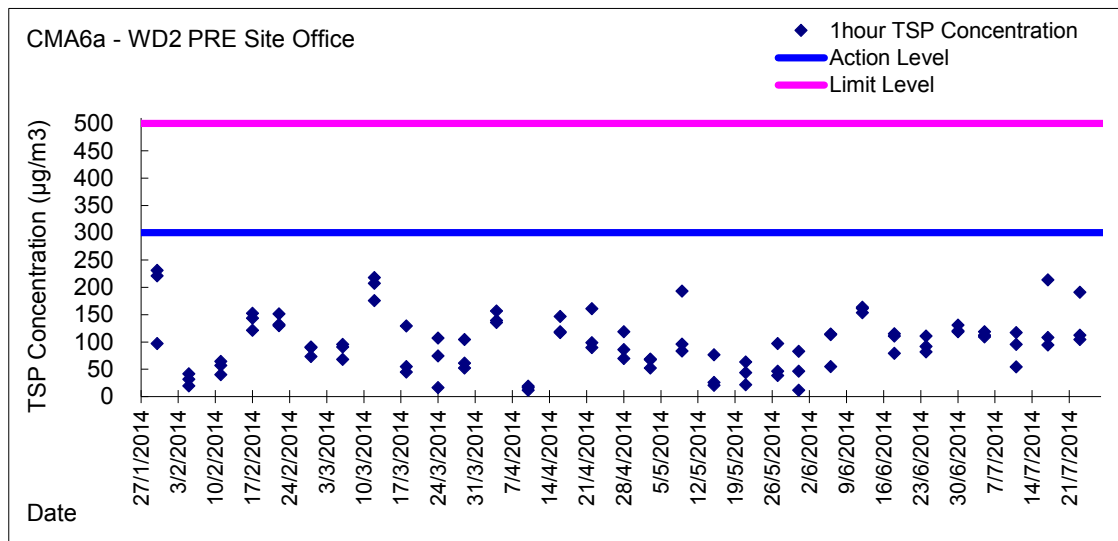
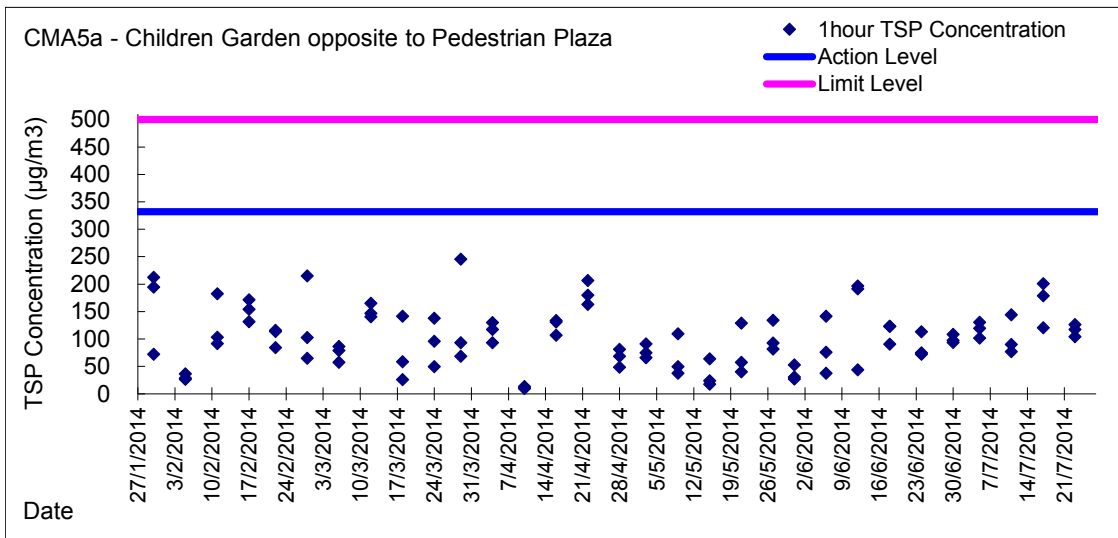
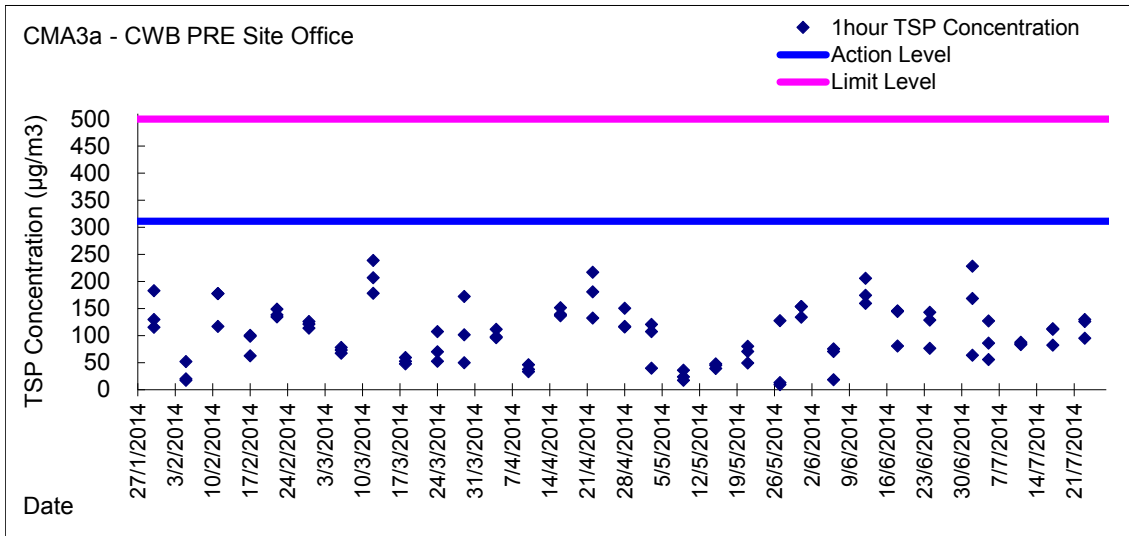
Action Level - 300.1  $\mu\text{g}/\text{m}^3$   
Limit Level - 500  $\mu\text{g}/\text{m}^3$

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
30-Jun-14	8:46	Rainy	008552	2.8492	2.8589	18079.62	18080.62	1.00	1.36	1.32	1.34	80	121
30-Jun-14	9:50	Rainy	009143	2.8709	2.8813	18080.62	18081.62	1.00	1.32	1.32	1.32	79	131
30-Jun-14	10:54	Rainy	009144	2.8522	2.8615	18081.62	18082.62	1.00	1.32	1.29	1.31	78	119
5-Jul-14	8:50	Rainy	009169	2.8476	2.8570	18106.61	18107.61	1.00	1.32	1.32	1.32	79	119
5-Jul-14	9:54	Rainy	009170	2.8444	2.8533	18107.61	18108.61	1.00	1.32	1.32	1.32	79	112
5-Jul-14	10:58	Rainy	009171	2.8536	2.8626	18108.61	18109.61	1.00	1.37	1.37	1.37	82	109
11-Jul-14	9:10	Rainy	009180	2.8388	2.8481	18133.61	18134.61	1.00	1.32	1.32	1.32	79	117
11-Jul-14	10:30	Rainy	009183	2.8497	2.8571	18134.61	18135.61	1.00	1.29	1.29	1.29	77	96
11-Jul-14	13:00	Rainy	009186	2.8460	2.8502	18135.61	18136.61	1.00	1.29	1.29	1.29	77	54
17-Jul-14	9:30	Rainy	009114	2.8626	2.8800	18160.61	18161.61	1.00	1.36	1.36	1.36	81	214
17-Jul-14	10:36	Rainy	009117	2.8665	2.8753	18161.61	18162.61	1.00	1.36	1.36	1.36	81	108
17-Jul-14	13:00	Rainy	009120	2.8484	2.8561	18162.61	18163.61	1.00	1.36	1.36	1.36	81	95
23-Jul-14	9:38	Fine	009247	2.8546	2.8703	18187.61	18188.61	1.00	1.37	1.37	1.37	82	191
23-Jul-14	13:00	Fine	009375	2.8523	2.8613	18188.61	18189.61	1.00	1.34	1.34	1.34	80	112
23-Jul-14	14:27	Fine	009378	2.8518	2.8603	18189.61	18190.61	1.00	1.35	1.35	1.35	81	105

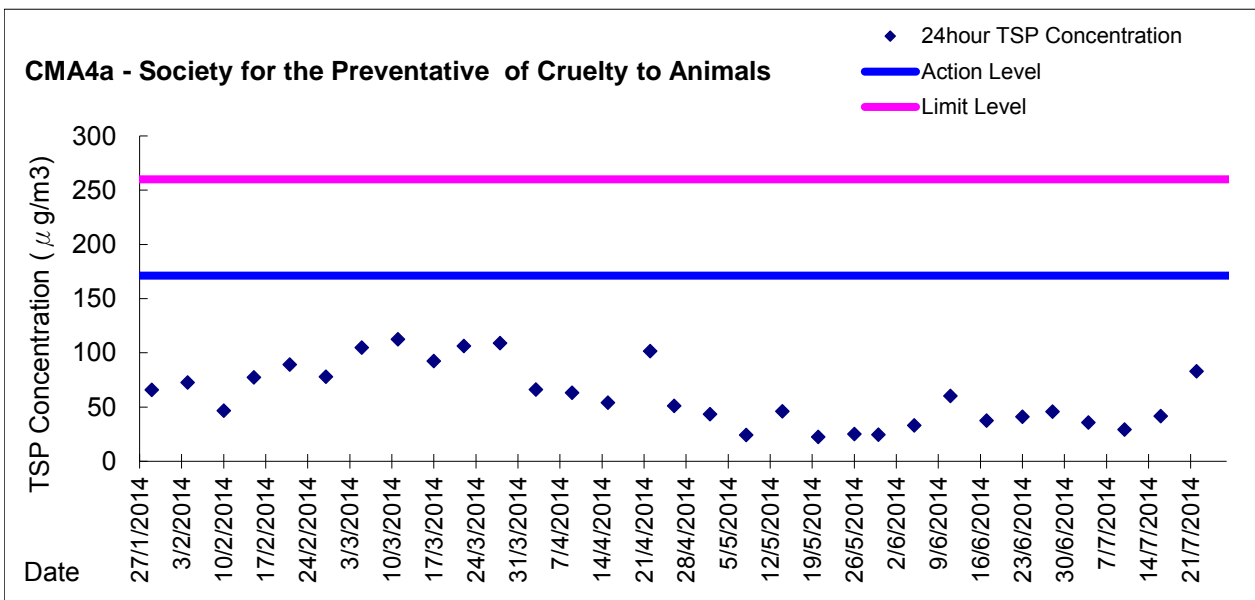
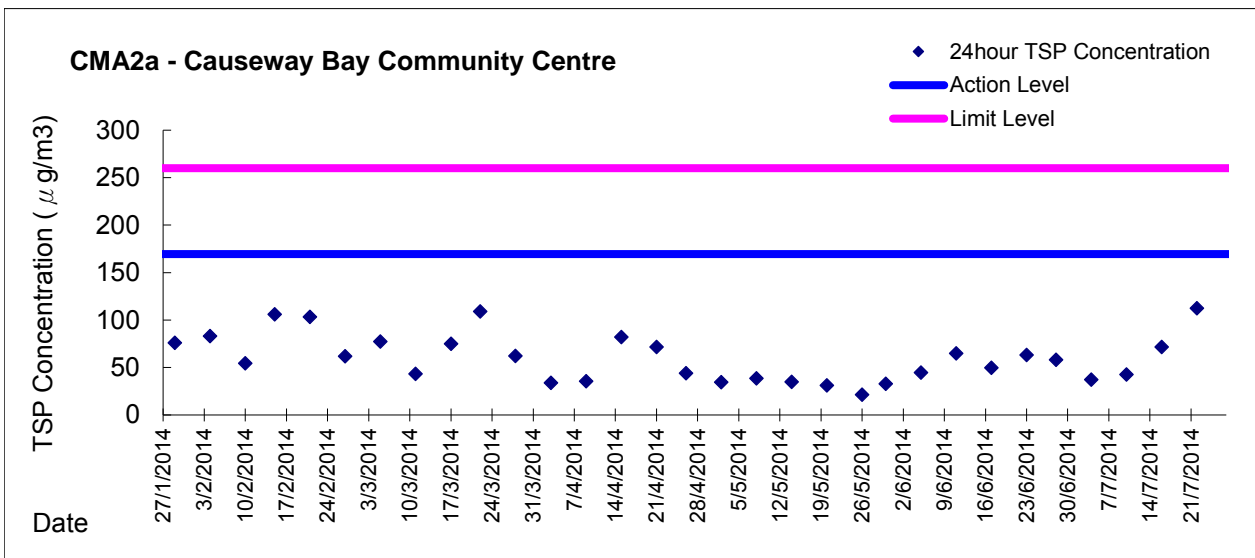
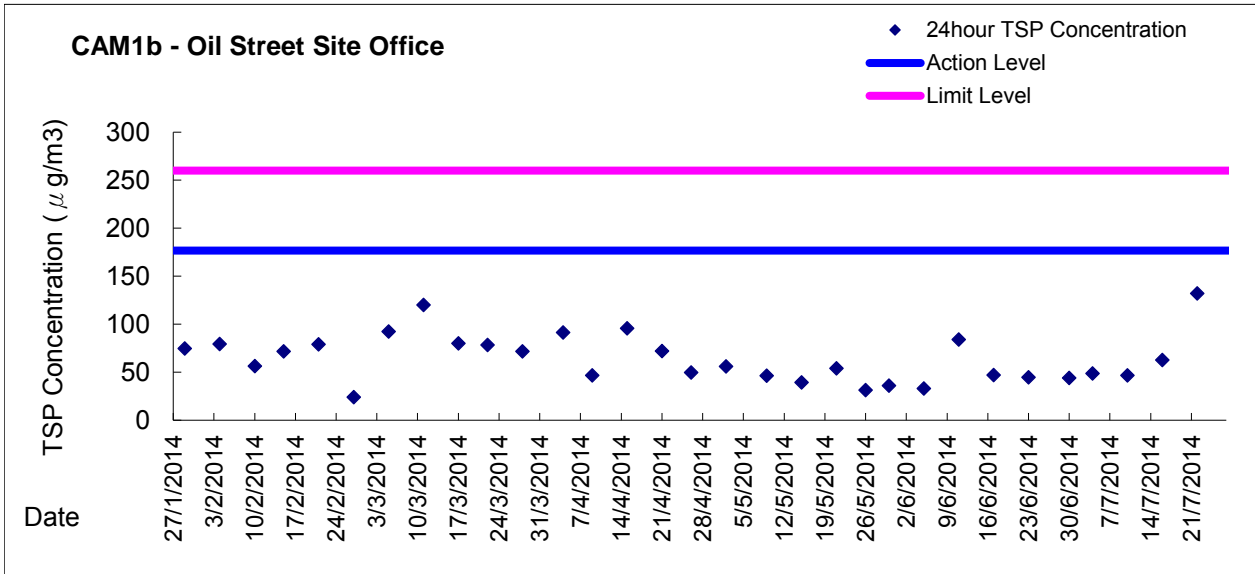
Graphic Presentation of 1 hour TSP Result



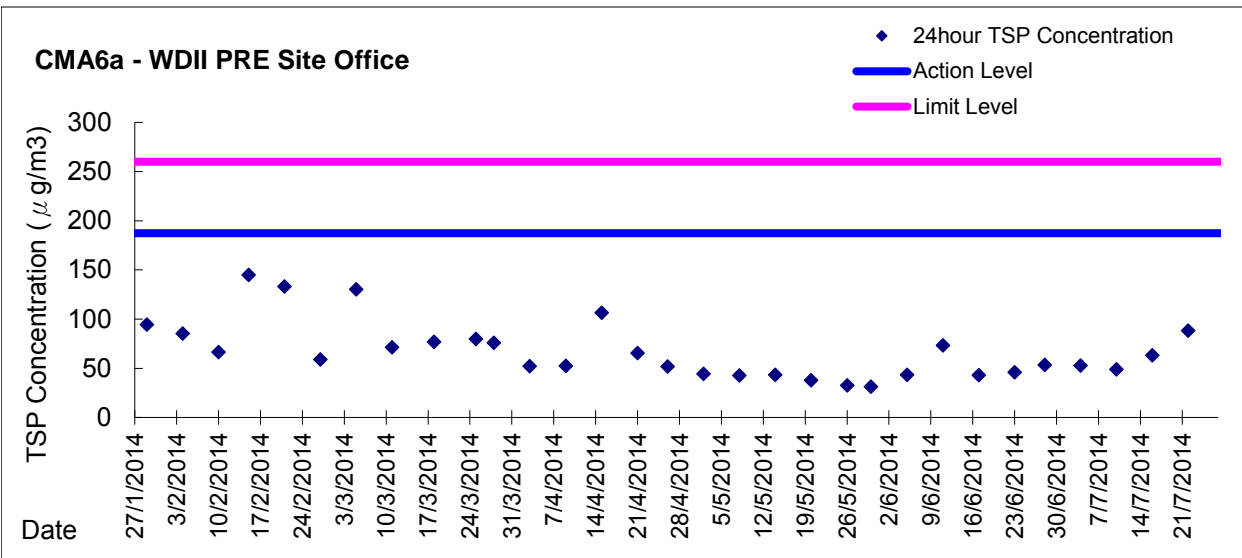
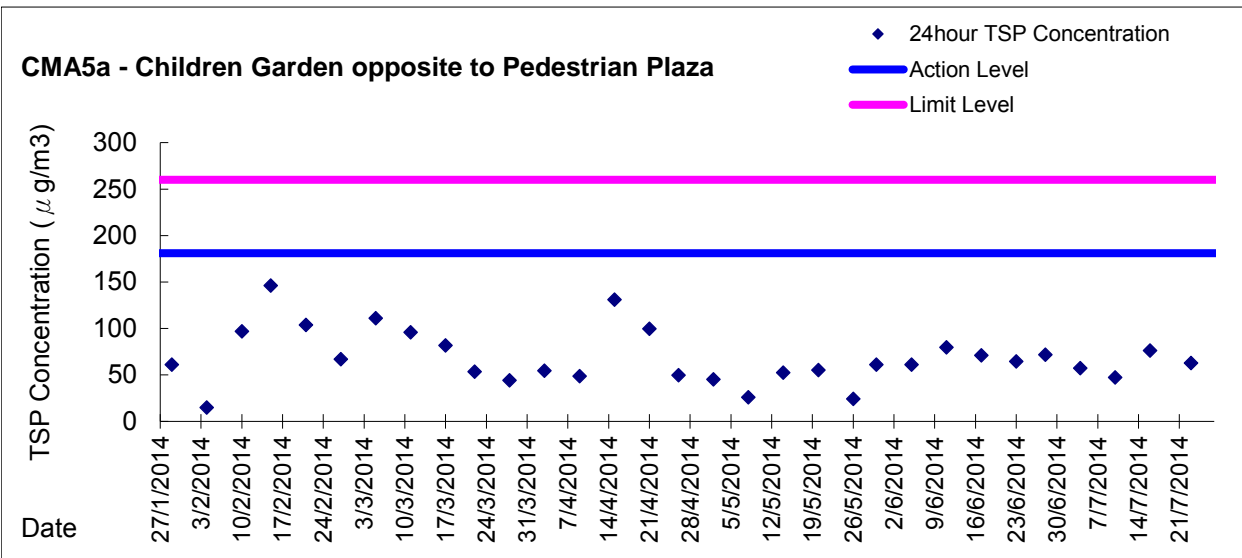
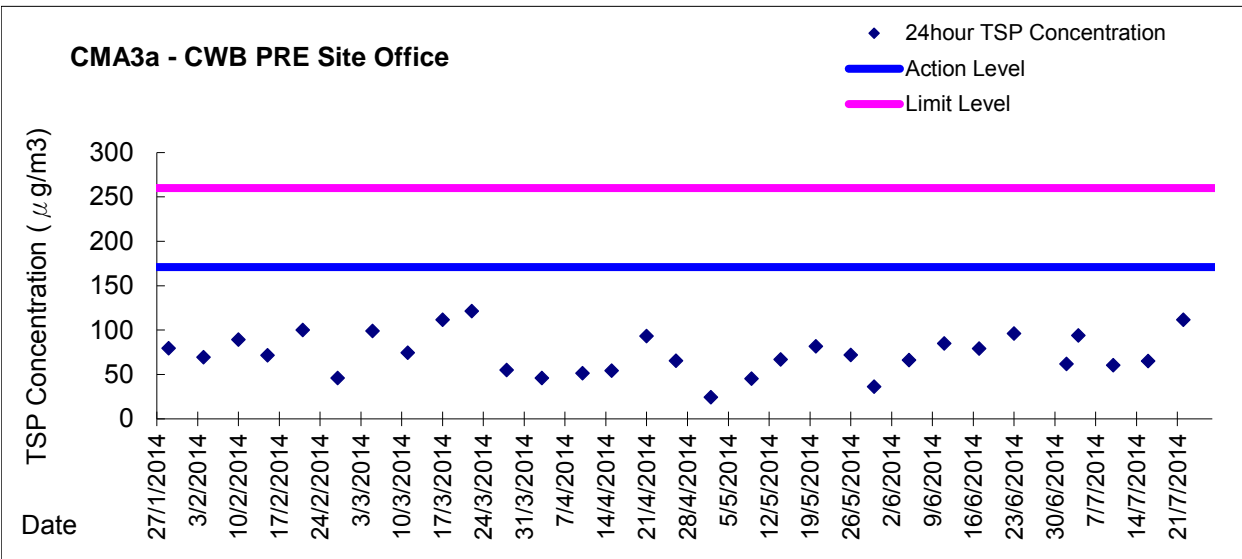
Graphic Presentation of 1 hour TSP Result



**Graphic Presentation of 24 hour TSP Result**



**Graphic Presentation of 24 hour TSP Result**







**Field Data Record Sheet**

Monitoring Date: 8 July 2014 Weather Condition: Sunny Tidal Condition: Ebb  
 Temperature: 36.7°C – 32.4°C Relative Humidity: 52.4%-72.6%

Location	Time	Temperature (°C)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:33	32.4	72.6	0-1	Culvert Discharge	Sea	Persistent	2.4	NW	
OP6	13:41	33.4	69.1	0-1	Culvert Discharge	Sea	Persistent	1.6	NW	
OP5	14:00	32.8	67.7	0-1	Barge exhaust	Barge	Intermittent	2.9	W	
OP4	13:54	36.7	59.2	0	/	/	/	2.0	NW	
OP3	14:07	35.4	52.4	0	/	/	/	1.0	ENE	
OP2	14:12	36.6	54.9	0-1	Seawater	Sea	Persistent	0.8	NNW	
OP1	14:17	33.8	61.6	0-1	Culvert Discharge	Sea	Persistent	1.6	N	

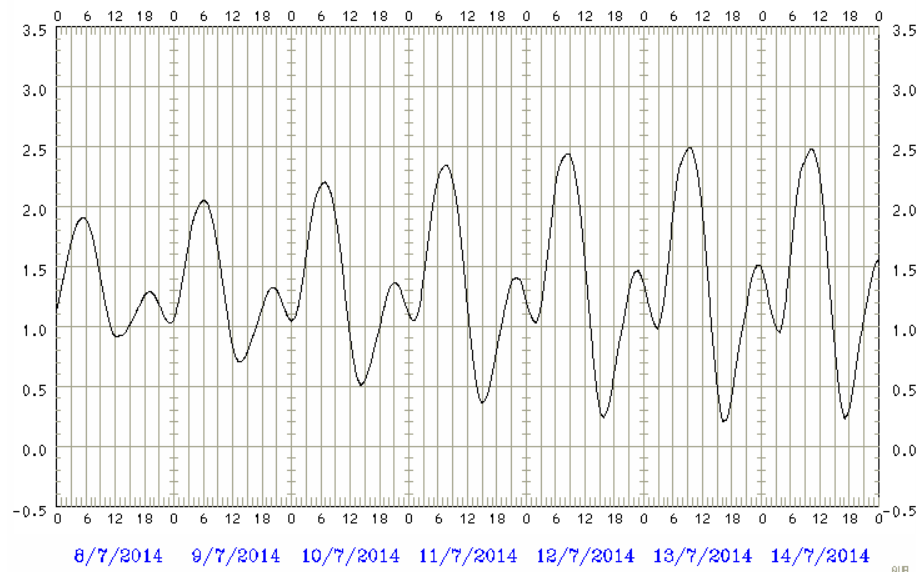
Remarks for Odour Intensity: The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:  
 0 – Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;  
 1 – Slight Identifiable odour, and slight chance to have odour nuisance;  
 2 – Moderate Identifiable odour, and moderate chance to have odour nuisance  
 3 – Strong Identifiable, likely to have odour nuisance;  
 4 – Extreme Severe odour, and unacceptable level



**Meteorological Conditions on 08 July 2014**

- **Hong Kong Observatory Weather Station at Hong Kong Observatory**  
Air Temperature: **28.0-33.0 °C**      Relative humidity: **65-90%**
- **Hong Kong Observatory Weather Station at Hong Kong Park**  
Air Temperature: **33.0 °C**
- **The tidal data at Quarry Bay Station**

Tide Time	Tide Height (m)
05:24	1.9
12:25	0.9
18:57	1.3
23:14	1.0





**Field Data Record Sheet**

Monitoring 22 July 2014 Weather Condition: Sunny Tidal Condition: Flood  
 Date: \_\_\_\_\_  
 Temperature: 31.9°C – 36.2°C Relative Humidity: 51.9% - 68.7%

Location	Time	Temperature (°C)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:23	31.9	68.7	0	/	/	/	1.8	NNW	
OP6	13:30	33.1	64.4	0	/	/	/	2.4	NW	
OP5	13:34	32.8	63.2	0	/	/	/	3.7	W	
OP4	13:37	36.2	53.6	0	/	/	/	2.3	WNW	
OP3	13:43	34.7	59.1	0-1	Sea water	Site	Intermittent	1.9	N	
OP2	13:47	36.1	51.9	0	/	/	/	1.5	WNW	
OP1	13:51	34.0	60.8	0-1	Culvert discharge	Sea	Intermittent	0.8	NNE	

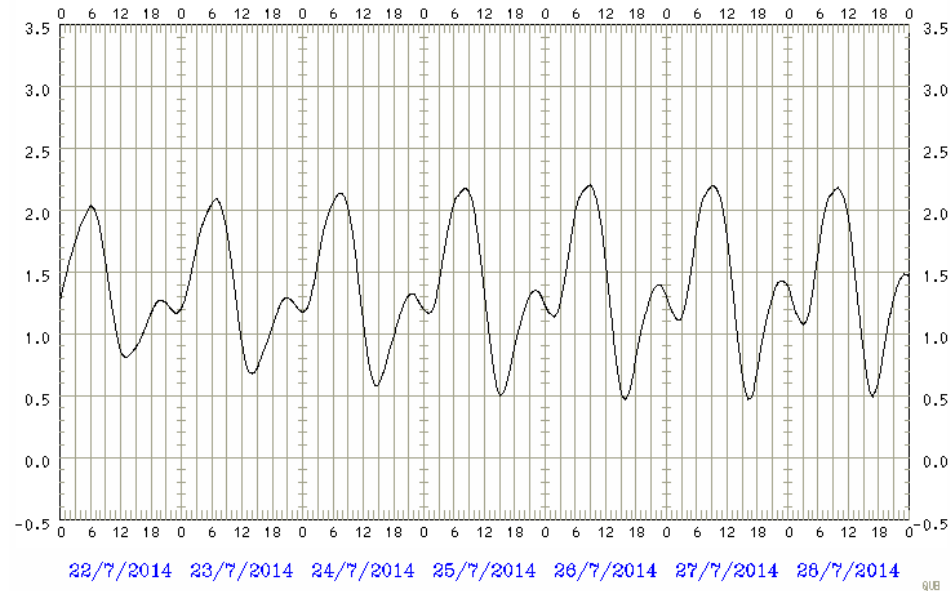
Remarks for Odour Intensity: The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:  
 0 – Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;  
 1 – Slight Identifiable odour, and slight chance to have odour nuisance;  
 2 – Moderate Identifiable odour, and moderate chance to have odour nuisance  
 3 – Strong Identifiable, likely to have odour nuisance;  
 4 – Extreme Severe odour, and unacceptable level



**Meteorological Conditions on 22 July 2014**

- **Hong Kong Observatory Weather Station at Hong Kong Observatory**  
Air Temperature: 27.5-33.6 °C      Relative humidity: 71%
- **Hong Kong Observatory Weather Station at Hong Kong Park**  
Air Temperature: 32.0 °C
- **The tidal data at Quarry Bay Station**

Tide Time	Tide Height (m)
06:11	2.0
13:00	0.8
19:57	1.3
22:58	1.2





***Appendix 5.4***

***Water Quality Monitoring Results and Graphical Presentations***



**Water Monitoring Result at WSD9 - Tai Wan  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH		Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C			-		ppt		%		mg/L		NTU		mg/L						
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
30/6/2014	4:15	Cloudy	Middle	2.0	29.00	29.00	29.00	7.93	7.93	7.93	30.70	30.72	30.71	84.9	83.5	83.6	5.54	5.42	5.42	2.73	2.78	2.77	4	3.50
	4:16		Middle	2.0	29.00	29.00	29.00	7.94	7.93	7.93	30.70	30.72	30.71	83.1	82.8	83.6	5.33	5.37	5.42	2.65	2.92	2.77	3	
2/7/2014	7:10	Fine	Middle	3.0	28.50	28.50	28.50	8.32	8.32	8.35	27.17	27.17	27.17	85.3	86.5	85.6	5.69	5.78	5.70	2.42	2.43	2.48	5	4.50
	7:12		Middle	3.0	28.50	28.50	28.50	8.37	8.37	8.35	27.17	27.17	27.17	84.4	86.0	85.6	5.64	5.70	5.70	2.51	2.56	2.48	4	
4/7/2014	8:50	Fine	Middle	2.5	29.00	29.00	29.10	8.32	8.32	8.32	27.25	27.25	27.26	108.5	108.7	107.2	7.16	7.18	7.10	3.72	3.72	3.73	3	3.00
	8:52		Middle	2.5	29.20	29.20	29.10	8.32	8.32	8.32	27.26	27.26	27.26	107.1	104.4	107.2	7.07	6.98	7.10	3.73	3.74	3.73	3	
7/7/2014	0:23	Cloudy	Middle	2.5	28.90	28.90	28.80	8.18	8.18	8.20	27.99	27.99	27.99	93.7	94.3	93.5	6.20	6.24	6.19	5.08	5.06	5.07	6	6.00
	0:24		Middle	2.5	28.70	28.70	28.80	8.22	8.22	8.20	27.98	27.98	27.99	92.8	93.1	93.5	6.14	6.16	6.19	5.10	5.02	5.07	6	
9/7/2014	17:05	Fine	Middle	2.5	29.30	29.30	29.35	8.21	8.21	8.22	28.84	28.84	28.86	100.0	100.2	100.4	6.54	6.55	6.56	4.00	4.00	4.02	5	4.50
	17:07		Middle	2.5	29.40	29.40	29.35	8.23	8.23	8.22	28.87	28.87	28.86	100.2	101.0	100.4	6.55	6.59	6.56	4.02	4.04	4.02	4	
11/7/2014	18:41	Fine	Middle	2.5	27.40	27.40	27.45	8.25	8.25	8.27	30.11	30.11	30.11	86.2	84.6	85.7	5.80	5.69	5.76	4.14	4.14	4.15	5	5.00
	18:43		Middle	2.5	27.50	27.50	27.45	8.28	8.28	8.27	30.11	30.11	30.11	85.9	86.1	85.7	5.77	5.79	5.76	4.15	4.17	4.15	5	
14/7/2014	5:00	Cloudy	Middle	2.0	27.60	27.60	27.55	7.99	7.99	7.99	30.54	30.54	30.55	71.0	72.0	71.4	4.81	4.88	4.84	2.07	2.09	2.04	5	4.50
	5:01		Middle	2.0	27.50	27.50	27.55	7.99	7.99	7.99	30.56	30.56	30.55	70.1	72.3	71.4	4.75	4.90	4.84	2.02	1.98	2.04	4	
16/7/2014	7:17	Fine	Middle	2.5	27.10	27.10	27.10	8.24	8.24	8.24	30.12	30.12	30.16	77.8	78.3	77.2	5.22	5.25	5.17	1.99	1.98	1.99	5	5.00
	7:19		Middle	2.5	27.10	27.10	27.10	8.24	8.24	8.24	30.20	30.20	30.16	77.9	74.8	77.2	5.19	5.01	5.17	1.99	1.98	1.99	5	
21/7/2014	0:02	Fine	Middle	2.5	28.20	28.20	28.25	7.94	7.94	7.94	30.69	30.69	30.69	78.7	78.5	78.3	5.17	5.16	5.14	2.88	2.90	2.85	6	5.00
	0:03		Middle	2.5	28.30	28.30	28.25	7.94	7.94	7.94	30.69	30.69	30.69	77.9	78.0	78.3	5.11	5.12	5.14	2.84	2.77	2.85	4	
23/7/2014	17:40	Fine	Middle	3.0	29.20	29.20	29.20	8.26	8.26	8.26	28.22	28.22	28.46	80.1	80.2	79.7	5.22	5.23	5.21	1.61	1.61	1.61	0	0.00
	17:42		Middle	3.0	29.20	29.20	29.20	8.25	8.25	8.26	28.69	28.69	28.46	78.5	80.1	79.7	5.15	5.22	5.21	1.62	1.60	1.61	0	
25/7/2014	18:00	Cloudy	Middle	2.0	27.30	27.30	27.30	7.84	7.84	7.85	30.68	30.68	30.79	80.2	81.3	81.0	5.44	5.52	5.50	2.97	2.70	2.79	0	0.00
	18:01		Middle	2.0	27.30	27.30	27.30	7.85	7.85	7.85	30.90	30.90	30.79	81.4	81.2	81.0	5.52	5.51	5.50	2.73	2.75	2.79	0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





**Water Monitoring Result at WSD17 - Quarry Bay  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids				
			m		°C		-		ppt		%		mg/L		NTU		mg/L							
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average						
30/6/2014	6:52	Cloudy	Middle	3.5	29.50	29.50	29.50	8.11	8.11	8.11	30.14	30.17	30.12	70.7	71.1	70.7	4.76	4.77	4.79	7.32	7.21	7.26	3	3.50
	6:53		Middle	3.5	29.50	29.50	29.50	8.11	8.11	8.11	30.09	30.09	30.12	70.4	70.5	70.7	4.74	4.87	4.79	7.19	7.30	7.26	4	
2/7/2014	9:00	Fine	Middle	2.5	28.70	28.70	28.80	8.34	8.34	8.36	26.72	26.72	26.71	85.9	85.8	85.7	5.72	5.71	5.71	2.03	2.03	2.02	3	3.50
	9:02		Middle	2.5	28.90	28.90	28.80	8.38	8.38	8.36	26.70	26.70	26.71	84.3	86.9	85.7	5.61	5.78	5.71	2.01	2.00	2.02	4	
4/7/2014	10:00	Fine	Middle	3.0	29.10	29.10	29.20	8.43	8.43	8.45	26.80	26.80	26.80	108.8	112.0	109.7	7.19	7.40	7.25	3.10	3.09	3.08	4	3.50
	10:02		Middle	3.0	29.30	29.30	29.20	8.47	8.47	8.45	26.79	26.79	26.80	109.1	108.8	109.7	7.21	7.18	7.25	3.08	3.06	3.08	3	
7/7/2014	4:20	Cloudy	Middle	3.5	28.70	28.70	28.60	7.92	7.92	7.93	26.49	26.49	26.50	86.3	87.9	86.9	5.78	5.89	5.82	7.91	8.02	8.06	4	4.00
	4:21		Middle	3.5	28.50	28.50	28.60	7.94	7.94	7.93	26.50	26.50	26.50	86.5	86.7	86.9	5.80	5.81	5.82	8.11	8.19	8.06	4	
9/7/2014	15:25	Fine	Middle	2.5	28.80	28.80	28.90	8.40	8.40	8.40	27.73	27.73	27.73	136.8	134.5	134.5	9.04	8.89	8.89	3.50	3.50	3.52	3	3.50
	15:27		Middle	2.5	29.00	29.00	28.90	8.40	8.40	8.40	27.73	27.73	27.73	133.7	133.1	134.5	8.83	8.79	8.89	3.50	3.56	3.52	4	
11/7/2014	15:20	Fine	Middle	2.5	27.90	27.90	27.90	8.25	8.25	8.26	29.99	29.99	30.00	82.5	84.1	82.7	5.48	5.59	5.50	3.72	3.77	3.77	7	6.50
	15:22		Middle	2.5	27.90	27.90	27.90	8.26	8.26	8.26	30.00	30.00	30.00	82.2	82.1	82.7	5.46	5.45	5.50	3.79	3.81	3.77	6	
14/7/2014	7:28	Cloudy	Middle	3.5	27.90	27.90	27.85	7.79	7.79	7.81	30.41	30.41	30.42	71.8	73.0	72.2	4.84	4.92	4.87	4.96	5.00	4.93	6	6.00
	7:29		Middle	3.5	27.80	27.80	27.85	7.82	7.82	7.81	30.43	30.43	30.42	72.7	71.1	72.2	4.90	4.80	4.87	4.80	4.94	4.93	6	
16/7/2014	7:55	Fine	Middle	2.5	27.70	27.70	27.90	8.24	8.24	8.24	29.06	29.06	29.05	91.4	93.8	91.8	6.09	6.25	6.12	2.10	2.12	2.12	6	5.50
	7:57		Middle	2.5	28.10	28.10	27.90	8.23	8.23	8.24	29.04	29.04	29.05	91.3	90.8	91.8	6.08	6.04	6.12	2.12	2.14	2.12	5	
21/7/2014	4:21	Fine	Middle	3.5	27.90	27.90	27.90	8.09	8.09	8.09	30.52	30.52	30.53	73.5	73.6	72.6	4.85	4.87	4.80	3.00	2.98	3.10	4	4.00
	4:22		Middle	3.5	27.90	27.90	27.90	8.09	8.09	8.09	30.53	30.53	30.53	72.3	71.1	72.6	4.78	4.69	4.80	3.21	3.19	3.10	4	
23/7/2014	14:40	Fine	Middle	2.5	30.30	30.30	30.40	8.21	8.21	8.21	29.35	29.35	29.34	91.6	90.3	90.9	5.85	5.77	5.80	2.49	2.44	2.44	0	0.00
	14:42		Middle	2.5	30.50	30.50	30.40	8.21	8.21	8.21	29.33	29.33	29.34	90.1	91.4	90.9	5.75	5.82	5.80	2.42	2.40	2.44	0	
25/7/2014	19:03	Cloudy	Middle	3.0	27.50	27.50	27.45	7.95	7.95	7.96	31.32	31.32	31.32	80.7	79.4	79.3	5.45	5.37	5.35	1.22	1.20	1.25	0	0.00
	19:04		Middle	3.0	27.40	27.40	27.45	7.96	7.96	7.96	31.32	31.32	31.32	79.1	77.8	79.3	5.32	5.26	5.35	1.26	1.31	1.25	0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C7 - Windsor House  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature		pH		Salinity		DO Saturation		DO		Turbidity		Suspended Solids							
			m		°C		-		ppt		%		mg/L		NTU		mg/L							
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average						
30/6/2014	6:23	Cloudy	Middle	1.5	29.30	29.30	29.30	8.11	8.11	8.11	28.68	28.68	28.68	63.6	62.6	62.9	4.16	4.09	4.11	1.74	1.67	1.71	3	3.00
	6:24		Middle	1.5	29.30	29.30	29.30	8.10	8.10	8.11	28.67	28.67	28.68	61.2	64.2	62.9	4.00	4.19	4.11	1.65	1.76	1.71	3	
2/7/2014	11:00	Fine	Middle	1.5	29.30	29.30	29.40	8.28	8.28	8.28	26.18	26.18	26.18	60.0	60.3	60.5	3.97	3.99	4.00	1.79	1.79	1.78	4	3.50
	11:02		Middle	1.5	29.50	29.50	29.40	8.27	8.27	8.28	26.17	26.17	26.18	61.2	60.3	60.5	4.05	3.99	4.00	1.79	1.74	1.78	3	
4/7/2014	11:27	Fine	Middle	1.5	29.80	29.80	29.80	8.41	8.41	8.41	25.80	25.80	25.81	91.5	91.8	91.0	6.04	6.04	6.02	3.01	3.02	3.02	3	3.00
	11:29		Middle	1.5	29.80	29.80	29.80	8.41	8.41	8.41	25.81	25.81	25.81	91.1	89.7	91.0	6.00	5.98	6.02	3.02	3.02	3.02	3	
7/7/2014	4:00	Cloudy	Middle	1.5	29.00	28.90	28.93	8.06	8.06	8.06	26.19	26.19	26.19	75.9	76.0	75.4	5.07	5.07	5.03	1.44	1.75	1.55	3	3.50
	4:01		Middle	1.5	28.90	28.90	28.93	8.06	8.06	8.06	26.19	26.19	26.19	74.3	75.3	75.4	4.96	5.03	5.03	1.46	1.56	1.55	4	
9/7/2014	15:09	Fine	Middle	1.5	28.80	28.80	28.85	8.32	8.32	8.32	27.03	27.03	27.03	74.8	79.8	77.7	4.97	5.30	5.16	4.35	4.42	4.36	6	6.00
	15:11		Middle	1.5	28.90	28.90	28.85	8.31	8.31	8.32	27.03	27.03	27.03	78.3	77.9	77.7	5.20	5.17	5.16	4.33	4.35	4.36	6	
11/7/2014	17:12	Fine	Middle	1.5	28.40	28.40	28.40	8.31	8.31	8.31	27.43	27.43	27.43	70.1	70.7	70.2	4.68	4.72	4.69	5.33	5.38	5.36	4	4.50
	17:14		Middle	1.5	28.40	28.40	28.40	8.31	8.31	8.31	27.43	27.43	27.43	70.6	69.3	70.2	4.71	4.63	4.69	5.37	5.35	5.36	5	
14/7/2014	7:10	Cloudy	Middle	1.5	27.70	27.70	27.70	8.05	8.05	8.05	28.32	28.32	28.32	72.0	72.6	71.8	5.06	5.09	5.03	1.51	1.55	1.49	2	2.50
	7:11		Middle	1.5	27.70	27.70	27.70	8.04	8.04	8.05	28.32	28.32	28.32	71.7	70.9	71.8	5.02	4.93	5.03	1.47	1.44	1.49	3	
16/7/2014	9:52	Fine	Middle	1.5	27.00	27.00	27.00	8.15	8.15	8.14	28.09	28.09	28.09	58.1	59.0	56.5	3.90	3.96	3.96	5.19	5.17	5.16	6	6.00
	9:54		Middle	1.5	27.00	27.00	27.00	8.13	8.13	8.14	28.08	28.08	28.09	50.1	58.6	56.5	4.03	3.93	3.96	5.15	5.13	5.16	6	
21/7/2014	3:40	Fine	Middle	1.5	27.70	27.70	27.75	8.09	8.09	8.09	29.86	29.85	29.86	52.0	52.3	51.8	3.46	3.48	3.45	1.27	1.13	1.16	5	4.50
	3:41		Middle	1.5	27.80	27.80	27.75	8.08	8.08	8.09	29.86	29.86	29.86	52.0	51.0	51.8	3.46	3.39	3.45	1.09	1.16	1.16	4	
23/7/2014	16:27	Fine	Middle	1.5	29.70	29.70	29.70	8.11	8.11	8.11	27.36	27.36	27.36	64.1	64.5	64.7	4.19	4.21	4.23	2.51	2.63	2.63	0	0.00
	16:29		Middle	1.5	29.70	29.70	29.70	8.10	8.10	8.11	27.36	27.36	27.36	64.9	65.2	64.7	4.24	4.26	4.23	2.70	2.66	2.63	0	
25/7/2014	18:36	Cloudy	Middle	1.0	27.40	27.40	27.35	8.01	8.01	8.01	28.80	28.80	28.80	75.4	76.4	75.6	5.17	5.25	5.19	1.26	1.06	1.16	0	0.00
	18:37		Middle	1.0	27.30	27.30	27.35	8.00	8.00	8.01	28.79	28.79	28.80	75.6	74.9	75.6	5.19	5.15	5.19	1.19	1.12	1.16	0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C1 - HKCEC Extension  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
30/6/2014	7:23	Cloudy	Middle	2.5	29.40	29.40	29.35	8.12	8.12	8.12	26.74	26.74	26.74	75.8	76.7	75.4	4.84	4.90	4.82	2.08	1.85	1.92	3	3.00
	7:24		Middle	2.5	29.30	29.30		8.12	8.12		26.74	26.74		74.7	74.5		4.78	4.76		1.87	1.89		3	
2/7/2014	9:32	Fine	Middle	3.0	28.40	28.40	28.40	7.93	7.93	7.93	26.92	26.92	26.92	73.4	70.6	71.3	4.92	4.72	4.77	1.85	1.84	1.85	3	3.50
	9:34		Middle	3.0	28.40	28.40		7.93	7.93		26.92	26.92		70.4	70.6		4.71	4.72		1.85	1.84		4	
4/7/2014	10:58	Fine	Middle	3.0	28.70	28.70	28.75	8.40	8.40	8.40	26.45	26.45	26.44	75.4	72.9	74.3	5.03	4.87	4.95	2.84	2.83	2.84	3	3.00
	11:00		Middle	3.0	28.80	28.80		8.39	8.39		26.42	26.42		74.4	74.3		4.96	4.95		2.84	2.83		3	
7/7/2014	2:51	Cloudy	Middle	2.5	28.80	28.80	28.75	8.24	8.24	8.24	27.83	27.83	27.83	79.1	81.4	80.5	5.25	5.40	5.33	3.48	3.39	3.64	4	5.00
	2:52		Middle	2.5	28.70	28.70		8.24	8.24		27.82	27.82		80.4	80.9		5.32	5.33		3.80	3.88		6	
9/7/2014	15:51	Fine	Middle	2.5	27.80	27.80	27.75	8.57	8.57	8.52	27.73	27.73	27.74	86.0	84.0	83.8	5.79	5.66	5.65	4.97	4.96	4.88	4	4.00
	15:53		Middle	2.5	27.70	27.70		8.47	8.47		27.75	27.75		82.4	82.9		5.55	5.58		4.81	4.76		4	
11/7/2014	16:34	Fine	Middle	2.5	27.90	27.90	27.90	8.32	8.32	8.32	27.90	27.89	27.90	77.2	77.5	76.9	5.18	5.22	5.17	5.33	5.34	5.34	4	4.00
	16:36		Middle	2.5	27.90	27.90		8.32	8.32		27.89	27.90		77.2	75.6		5.19	5.07		5.34	5.33		4	
14/7/2014	6:55	Cloudy	Middle	2.5	27.40	27.40	27.40	7.96	7.96	7.97	30.42	30.42	30.43	72.8	71.1	72.0	4.95	4.84	4.89	1.84	1.81	1.83	3	3.00
	6:56		Middle	2.5	27.40	27.40		7.97	7.97		30.43	30.43		72.5	71.6		4.93	4.85		1.86	1.79		3	
16/7/2014	10:29	Fine	Middle	3.0	27.60	27.60	27.60	8.32	8.32	8.27	27.66	27.66	27.66	54.6	52.9	52.5	3.69	3.57	3.54	2.71	2.72	2.75	4	4.50
	10:31		Middle	3.0	27.60	27.60		8.22	8.22		27.66	27.66		51.5	51.1		3.47	3.44		2.72	2.83		5	
21/7/2014	2:47	Fine	Middle	2.5	27.90	27.90	27.90	8.02	8.02	8.02	30.75	30.75	30.75	70.5	71.3	70.7	4.66	4.70	4.67	1.30	1.19	1.20	3	3.50
	2:48		Middle	2.5	27.90	27.90		8.02	8.02		30.75	30.75		70.8	70.3		4.67	4.64		1.25	1.06		4	
23/7/2014	16:21	Fine	Middle	2.5	28.60	28.60	28.60	8.33	8.33	8.31	28.19	28.19	28.19	66.4	64.3	64.0	4.40	4.26	4.24	1.42	1.34	1.36	0	0.00
	16:23		Middle	2.5	28.60	28.60		8.29	8.29		28.19	28.19		63.4	62.0		4.19	4.10		1.34	1.34		0	
25/7/2014	16:28	Cloudy	Middle	2.0	29.20	29.20	29.20	8.29	8.29	8.29	26.60	26.60	26.61	68.0	70.1	69.4	4.50	4.64	4.60	1.09	1.09	1.09	0	0.00
	16:30		Middle	2.0	29.20	29.20		8.28	8.28		26.62	26.62		72.4	66.9		4.79	4.45		1.09	1.09		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P1 - HKCEC Phase I  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature		pH		Salinity		DO Saturation		DO		Turbidity		Suspended Solids							
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
30/6/2014	8:21	Cloudy	Middle	2.5	29.40	29.40	29.40	7.91	7.91	7.93	25.54	25.54	25.55	82.9	83.6	83.3	5.33	5.37	5.35	3.73	3.60	3.57	4	3.50
	8:22		Middle	2.5	29.40	29.40	29.40	7.95	7.95	7.93	25.55	25.55	25.55	83.0	83.7	83.3	5.33	5.38	5.35	3.50	3.46	3.48	3	
2/7/2014	10:07	Fine	Middle	3.0	29.70	29.70	29.70	8.30	8.30	8.30	26.69	26.69	26.69	75.8	79.0	78.0	4.97	5.18	5.12	2.87	2.89	2.88	3	3.00
	10:09		Middle	3.0	29.70	29.70	29.70	8.30	8.30	8.30	26.69	26.69	26.69	78.6	78.7	78.0	5.15	5.16	5.12	2.88	2.88	2.88	3	
4/7/2014	11:19	Fine	Middle	3.0	30.10	30.10	30.10	8.44	8.44	8.45	25.94	25.94	25.93	79.4	78.7	78.4	5.20	5.15	5.13	4.64	4.53	4.48	3	3.00
	11:21		Middle	3.0	30.10	30.10	30.10	8.45	8.45	8.45	25.92	25.92	25.93	78.1	77.4	78.4	5.11	5.06	5.13	4.39	4.35	4.37	3	
7/7/2014	2:05	Cloudy	Middle	2.5	28.60	28.60	28.50	8.26	8.26	8.27	27.05	27.05	27.05	89.2	92.0	91.5	5.97	6.14	6.12	5.12	4.83	4.90	4	4.00
	2:06		Middle	2.5	28.40	28.40	28.50	8.28	8.28	8.27	27.04	27.04	27.05	92.5	92.2	91.5	6.20	6.18	6.12	4.80	4.85	4.82	4	
9/7/2014	16:26	Fine	Middle	2.5	29.00	29.00	29.00	8.44	8.44	8.45	27.40	27.40	27.42	88.9	90.9	89.7	5.88	6.01	5.94	8.12	8.10	8.11	5	5.50
	16:28		Middle	2.5	29.00	29.00	29.00	8.45	8.45	8.45	27.43	27.43	27.42	89.3	89.6	89.7	5.90	5.96	5.94	8.10	8.10	8.11	6	
11/7/2014	17:15	Fine	Middle	2.5	28.50	28.50	28.50	8.35	8.35	8.35	28.03	28.03	28.03	82.2	81.1	81.7	5.48	5.38	5.44	4.61	4.63	4.63	5	4.50
	17:17		Middle	2.5	28.50	28.50	28.50	8.35	8.35	8.35	28.03	28.03	28.03	81.3	82.1	81.7	5.40	5.48	5.44	4.64	4.62	4.63	4	
14/7/2014	6:02	Cloudy	Middle	2.5	27.50	27.50	27.50	7.90	7.90	7.90	29.70	29.70	29.71	75.4	76.0	75.1	5.14	5.12	5.10	2.67	2.87	2.53	6	6.00
	6:03		Middle	2.5	27.50	27.50	27.50	7.90	7.90	7.90	29.72	29.72	29.71	74.8	74.1	75.1	5.09	5.05	5.10	2.27	2.30	2.53	6	
16/7/2014	11:00	Fine	Middle	3.0	27.40	27.40	27.45	8.15	8.15	8.14	29.27	29.27	29.28	54.5	51.2	50.4	3.66	3.44	3.38	7.02	7.08	7.09	5	4.50
	11:02		Middle	3.0	27.50	27.50	27.45	8.12	8.12	8.14	29.28	29.28	29.28	47.3	48.6	50.4	3.17	3.26	3.38	7.12	7.12	7.09	4	
21/7/2014	1:51	Fine	Middle	2.5	28.40	28.40	28.40	8.01	8.01	8.01	30.64	30.64	30.64	66.9	72.3	70.7	4.39	4.74	4.64	1.96	1.86	1.82	3	3.50
	1:52		Middle	2.5	28.40	28.40	28.40	8.01	8.01	8.01	30.64	30.64	30.64	72.5	71.1	70.7	4.76	4.66	4.64	1.77	1.67	1.82	4	
23/7/2014	16:54	Fine	Middle	2.5	29.30	29.30	29.30	8.24	8.24	8.24	28.17	28.17	28.18	73.3	73.7	72.9	4.80	4.83	4.78	1.02	1.06	1.06	0	0.00
	16:56		Middle	2.5	29.30	29.30	29.30	8.24	8.24	8.24	28.18	28.18	28.18	72.6	72.1	72.9	4.75	4.72	4.78	1.08	1.09	1.06	0	
25/7/2014	16:51	Cloudy	Middle	2.0	29.60	29.60	29.65	8.27	8.27	8.28	26.57	26.57	26.55	73.2	72.3	73.5	4.81	4.77	4.84	1.98	1.93	1.90	0	0.00
	16:53		Middle	2.0	29.70	29.70	29.65	8.28	8.28	8.28	26.53	26.53	26.55	73.7	74.9	73.5	4.84	4.92	4.84	1.89	1.81	1.90	0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P3 - APA  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average			
30/6/2014	8:06	Cloudy	Middle	2.5	29.40	29.40	29.35	8.05	8.05	8.05	25.72	25.72	25.79	78.8	80.1	78.9	5.05	5.13	5.05	2.08	2.27	2.13	3	3.50
	8:07		Middle	2.5	29.30	29.30		8.05	8.05		25.86	25.86		78.7	77.9		5.04	4.99		2.10	2.06		4	
2/7/2014	9:57	Fine	Middle	3.0	29.10	29.10	29.10	8.29	8.29	8.29	26.59	26.59	26.59	76.0	77.1	76.9	5.03	5.10	5.09	2.82	2.83	2.83	3	3.00
	9:59		Middle	3.0	29.10	29.10		8.29	8.29		26.58	26.58		77.1	77.2		5.11	5.11		2.82	2.83		3	
4/7/2014	11:09	Fine	Middle	3.0	29.40	29.40	29.45	8.41	8.41	8.43	25.70	25.70	25.72	79.1	81.6	80.0	5.23	5.40	5.29	2.93	2.93	2.94	4	3.50
	11:11		Middle	3.0	29.50	29.50		8.44	8.44		25.74	25.74		80.2	79.0		5.30	5.22		2.97	2.93		3	
7/7/2014	2:14	Cloudy	Middle	2.5	28.50	28.50	28.45	8.28	8.28	8.28	28.15	28.15	28.15	84.3	83.1	83.1	5.61	5.53	5.55	4.71	4.63	4.73	3	3.00
	2:15		Middle	2.5	28.40	28.40		8.28	8.28		28.15	28.15		81.4	83.5		5.42	5.62		4.60	4.97		3	
9/7/2014	16:16	Fine	Middle	2.5	28.50	28.50	28.50	8.44	8.44	8.44	27.74	27.74	27.74	78.5	78.9	78.0	5.22	5.25	5.19	6.46	6.44	6.30	6	5.00
	16:18		Middle	2.5	28.50	28.50		8.43	8.43		27.73	27.73		77.8	76.9		5.18	5.11		6.15	6.15		4	
11/7/2014	17:06	Fine	Middle	2.5	28.30	28.30	28.30	8.35	8.35	8.35	28.14	28.14	28.14	73.4	73.1	73.1	4.90	4.86	4.87	3.42	3.44	3.44	5	5.50
	17:08		Middle	2.5	28.30	28.30		8.35	8.35		28.14	28.14		73.2	72.5		4.87	4.83		3.45	3.43		6	
14/7/2014	6:16	Cloudy	Middle	2.5	27.70	27.70	27.70	7.92	7.92	7.92	30.13	30.13	30.14	72.4	71.8	71.7	4.90	4.86	4.85	1.93	1.85	1.86	4	3.50
	6:17		Middle	2.5	27.70	27.70		7.92	7.93		30.14	30.14		71.9	70.6		4.87	4.78		1.88	1.76		3	
16/7/2014	10:52	Fine	Middle	3.0	26.90	26.90	26.95	8.16	8.16	8.15	28.83	28.83	28.84	56.9	54.7	54.0	3.85	3.71	3.66	4.77	4.73	4.72	3	3.50
	10:54		Middle	3.0	27.00	27.00		8.14	8.14		28.85	28.85		53.0	51.5		3.59	3.49		4.70	4.68		4	
21/7/2014	2:02	Fine	Middle	2.5	28.00	28.00	28.00	8.03	8.03	8.03	30.74	30.74	30.74	69.7	70.7	69.2	4.59	4.66	4.56	1.08	1.06	1.10	5	5.00
	2:03		Middle	2.5	28.00	28.00		8.03	8.03		30.74	30.74		66.9	69.6		4.41	4.59		1.10	1.14		5	
23/7/2014	16:46	Fine	Middle	2.5	28.80	28.80	28.80	8.28	8.25	8.25	28.39	28.39	28.37	64.3	63.5	62.8	4.25	4.20	4.15	0.85	0.82	0.79	0	0.00
	16:48		Middle	2.5	28.80	28.80		8.23	8.23		28.34	28.34		61.5	61.8		4.07	4.08		0.75	0.74		0	
25/7/2014	16:46	Cloudy	Middle	2.0	29.10	29.10	29.15	8.26	8.26	8.26	26.62	26.62	26.63	73.2	71.3	71.5	4.85	4.72	4.74	0.95	0.95	0.96	0	0.00
	16:48		Middle	2.0	29.20	29.20		8.26	8.26		26.64	26.64		70.5	71.0		4.67	4.72		0.96	0.96		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P4 - SOC  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids				
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
30/6/2014	7:46	Cloudy	Middle	2.5	29.10	29.10	29.10	8.09	8.09	8.09	26.49	26.49	26.55	81.6	82.7	81.8	5.22	5.30	5.24	2.73	2.88	2.86	3	3.00
	7:47		Middle	2.5	29.10	29.10		8.09	8.09		26.60	26.60		81.5	81.2		5.22	5.20		2.96	2.85		3	
2/7/2014	9:47	Fine	Middle	3.0	28.70	28.70	28.70	8.28	8.28	8.28	26.92	26.92	26.92	75.2	72.6	74.3	5.00	4.83	4.91	2.83	2.82	2.83	3	3.00
	9:49		Middle	3.0	28.70	28.70		8.28	8.28		26.92	26.92		74.7	74.7		4.90	4.91		2.82	2.83		3	
4/7/2014	10:50	Fine	Middle	3.0	28.40	28.40	28.45	8.39	8.39	8.40	26.20	26.20	26.23	80.0	77.5	77.7	5.37	5.20	5.21	2.84	2.84	2.87	4	3.00
	10:52		Middle	3.0	28.50	28.50		8.40	8.40		26.25	26.25		76.4	76.7		5.12	5.15		2.88	2.91		2	
7/7/2014	2:26	Cloudy	Middle	2.5	28.50	28.50	28.40	8.28	8.28	8.29	27.83	27.83	27.83	83.5	85.3	84.6	5.56	5.67	5.63	4.70	4.80	4.94	4	4.00
	2:27		Middle	2.5	28.30	28.30		8.29	8.29		27.83	27.83		85.0	84.4		5.66	5.63		5.11	5.13		4	
9/7/2014	16:05	Fine	Middle	2.5	28.10	28.10	28.15	8.45	8.45	8.45	27.86	27.86	27.86	87.2	87.0	84.5	5.83	5.82	5.65	5.72	5.65	5.67	5	4.50
	16:07		Middle	2.5	28.20	28.20		8.45	8.45		27.85	27.85		83.4	80.2		5.57	5.36		5.68	5.61		4	
11/7/2014	16:56	Fine	Middle	2.5	28.10	28.10	28.10	8.36	8.36	8.36	28.11	28.10	28.11	79.4	79.6	79.2	5.29	5.30	5.27	5.15	5.16	5.16	4	5.00
	16:58		Middle	2.5	28.10	28.10		8.36	8.36		28.10	28.11		79.5	78.4		5.29	5.21		5.16	5.15		6	
14/7/2014	6:29	Cloudy	Middle	2.5	27.60	27.60	27.55	7.95	7.95	7.95	29.98	29.97	29.97	72.6	72.4	71.7	4.93	4.92	4.89	1.97	2.04	1.98	4	4.00
	6:30		Middle	2.5	27.50	27.50		7.95	7.95		29.97	29.97		70.8	71.1		4.86	4.84		1.99	1.91		4	
16/7/2014	10:43	Fine	Middle	3.0	27.20	27.20	27.25	8.18	8.18	8.17	28.18	28.18	28.19	51.9	50.2	49.6	3.51	3.40	3.36	2.48	2.47	2.44	6	5.50
	10:45		Middle	3.0	27.30	27.30		8.15	8.15		28.20	28.20		48.0	48.3		3.25	3.27		2.43	2.38		5	
21/7/2014	2:25	Fine	Middle	2.5	28.10	28.10	28.10	8.03	8.03	8.03	30.79	30.79	30.79	63.0	64.6	63.4	4.15	4.25	4.17	1.49	1.37	1.30	4	3.50
	2:26		Middle	2.5	28.10	28.10		8.03	8.03		30.79	30.79		63.6	62.3		4.19	4.10		1.19	1.16		3	
23/7/2014	16:36	Fine	Middle	2.5	28.60	28.60	28.65	8.25	8.25	8.25	28.39	28.39	28.38	62.1	62.1	62.2	4.10	4.10	4.11	0.89	0.94	0.94	0	0.00
	16:38		Middle	2.5	28.70	28.70		8.24	8.24		28.37	28.37		62.4	62.3		4.13	4.12		0.97	0.97		0	
25/7/2014	16:40	Cloudy	Middle	2.0	29.20	29.20	29.20	8.29	8.29	8.29	26.81	26.81	26.81	68.1	68.0	67.8	4.50	4.50	4.48	1.54	1.62	1.71	0	0.00
	16:42		Middle	2.0	29.20	29.20		8.28	8.28		26.81	26.81		69.8	65.4		4.61	4.32		1.84	1.85		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





**Water Monitoring Result at P5 - WCT / RT / IT  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average			
30/6/2014	7:31	Cloudy	Middle	2.5	29.20	29.20	29.20	8.11	8.11	8.11	26.77	26.77	26.96	89.6	89.2	89.2	5.73	5.70	5.70	2.57	2.67	2.67	4	3.50
	7:32		Middle	2.5	29.20	29.20		8.11	8.11		27.15	27.15		89.4	88.4		5.71	5.65		2.71	2.73		3	
2/7/2014	9:42	Fine	Middle	3.0	29.00	29.00	29.00	8.23	8.23	8.23	26.79	26.79	26.79	75.7	79.1	77.6	5.01	5.23	5.13	2.32	2.33	2.33	3	3.00
	9:44		Middle	3.0	29.00	29.00		8.23	8.23		26.79	26.79		78.0	77.5		5.16	5.13		2.33	2.32		3	
4/7/2014	10:46	Fine	Middle	3.0	28.50	28.50	28.45	8.37	8.37	8.39	25.80	25.80	25.81	79.8	79.8	79.8	5.37	5.37	5.37	3.36	3.37	3.43	3	3.00
	10:48		Middle	3.0	28.40	28.40		8.40	8.40		25.82	25.82		81.0	78.7		5.45	5.30		3.53	3.44		3	
7/7/2014	2:38	Cloudy	Middle	2.5	28.30	28.30	28.30	8.29	8.29	8.29	27.82	27.82	27.82	84.2	86.2	84.4	5.63	5.77	5.65	5.76	5.62	5.68	6	5.50
	2:39		Middle	2.5	28.30	28.30		8.29	8.29		27.82	27.82		83.0	84.3		5.56	5.64		5.64	5.70		5	
9/7/2014	16:01	Fine	Middle	2.5	28.20	28.20	28.25	8.43	8.43	8.43	27.82	27.82	27.82	78.6	77.2	77.5	5.24	5.15	5.17	4.66	4.64	4.63	4	4.00
	16:03		Middle	2.5	28.30	28.30		8.43	8.43		27.81	27.81		77.0	77.0		5.14	5.14		4.61	4.59		4	
11/7/2014	16:50	Fine	Middle	2.5	28.00	28.00	28.00	8.34	8.34	8.34	28.23	28.23	28.24	70.0	72.1	70.9	4.68	4.82	4.74	4.58	4.58	4.58	7	7.00
	16:52		Middle	2.5	28.00	28.00		8.34	8.34		28.24	28.24		71.1	70.3		4.75	4.70		4.57	4.57		7	
14/7/2014	6:42	Cloudy	Middle	2.5	27.80	27.80	27.75	7.95	7.95	7.95	30.23	30.23	30.24	80.9	82.8	82.2	5.47	5.60	5.54	2.15	2.04	2.09	4	4.50
	6:43		Middle	2.5	27.70	27.70		7.95	7.95		30.24	30.24		82.7	82.2		5.60	5.48		2.08	2.09		5	
16/7/2014	10:38	Fine	Middle	3.0	26.90	26.90	26.95	8.23	8.23	8.21	28.98	28.98	28.98	57.2	55.3	54.1	3.88	3.75	3.67	3.66	3.64	3.62	6	6.00
	10:40		Middle	3.0	27.00	27.00		8.18	8.18		28.98	28.98		53.0	51.0		3.59	3.45		3.53	3.63		6	
21/7/2014	2:36	Fine	Middle	2.5	28.00	28.00	28.00	8.01	8.01	8.01	30.77	30.77	30.77	76.8	77.0	76.0	5.06	5.03	5.00	1.76	1.85	1.72	3	3.50
	2:37		Middle	2.5	28.00	28.00		8.01	8.01		30.76	30.76		75.9	74.4		5.00	4.90		1.62	1.66		4	
23/7/2014	16:31	Fine	Middle	2.5	28.70	28.70	28.75	8.28	8.28	8.27	28.32	28.32	28.31	61.6	59.0	58.6	4.07	3.90	3.87	1.31	1.29	1.27	0	0.00
	16:33		Middle	2.5	28.80	28.80		8.26	8.26		28.30	28.30		54.5	59.4		3.60	3.92		1.25	1.24		0	
25/7/2014	16:36	Cloudy	Middle	2.0	29.00	29.00	29.00	8.25	8.25	8.27	26.86	26.86	26.87	61.5	60.5	59.8	4.08	4.01	3.97	1.24	1.41	1.38	0	0.00
	16:38		Middle	2.0	29.00	29.00		8.28	8.28		26.88	26.88		59.1	58.1		3.92	3.85		1.42	1.44		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids				
			m		°C		-		ppt		%		mg/L		NTU		mg/L							
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average						
30/6/2014	5:50	Cloudy	Middle	3.0	29.30	29.30	29.30	8.22	8.22	8.22	30.17	30.11	30.12	81.0	81.6	80.5	5.34	5.34	5.31	2.67	2.69	2.71	3	3.00
	5:51		Middle	3.0	29.30	29.30		8.22	8.22		30.08	30.11		78.7	80.7		5.25	5.30		2.72	2.76		3	
2/7/2014	10:15	Fine	Middle	3.5	29.10	29.10	29.20	8.32	8.32	6.33	27.14	27.14	27.13	80.2	79.5	79.2	5.30	5.26	5.23	2.44	2.42	2.43	4	3.50
	10:17		Middle	3.5	29.30	29.30		8.34	0.34		27.11	27.11		79.1	78.1		5.22	5.15		2.42	2.42		3	
4/7/2014	10:50	Fine	Middle	3.5	28.90	28.90	28.95	8.41	8.41	8.42	27.08	27.08	27.08	97.1	98.8	97.5	6.44	6.55	6.47	4.13	4.11	4.13	3	3.50
	10:52		Middle	3.5	29.00	29.00		8.43	8.43		27.08	27.08		97.6	96.6		6.47	6.40		4.14	4.14		4	
7/7/2014	3:25	Cloudy	Middle	3.5	28.30	28.30	28.25	8.30	8.30	8.30	27.54	27.54	27.54	87.1	86.9	87.0	5.83	5.82	5.83	4.11	4.56	4.44	5	5.00
	3:26		Middle	3.5	28.20	28.20		8.30	8.30		27.53	27.53		85.6	88.4		5.74	5.93		4.60	4.50		5	
9/7/2014	14:32	Fine	Middle	3.0	29.50	29.50	29.60	8.35	8.35	8.38	27.87	27.87	27.87	111.4	115.0	114.4	7.47	7.50	7.51	4.98	4.81	4.91	4	4.00
	14:35		Middle	3.0	29.70	29.70		8.41	8.41		27.87	27.87		115.4	115.6		7.54	7.54		4.85	4.99		4	
11/7/2014	16:35	Fine	Middle	3.0	28.10	28.10	28.15	8.38	8.38	8.40	28.29	28.29	28.30	99.5	99.2	101.2	6.64	6.62	6.75	5.26	5.27	5.30	6	6.00
	16:37		Middle	3.0	28.20	28.20		8.41	8.41		28.30	28.30		103.6	102.5		6.91	6.83		5.32	5.35		6	
14/7/2014	7:46	Cloudy	Middle	3.5	27.80	27.80	27.80	8.06	8.06	8.06	30.15	30.15	30.17	78.4	78.6	77.8	5.31	5.31	5.25	1.57	1.41	1.34	4	3.50
	7:47		Middle	3.5	27.80	27.80		8.06	8.06		30.17	30.22		76.9	77.1		5.12	5.24		1.16	1.20		3	
16/7/2014	9:15	Fine	Middle	3.5	27.40	27.40	27.50	8.18	8.18	8.18	28.70	28.70	28.70	76.1	74.5	74.7	5.12	5.01	5.02	3.41	3.42	3.42	6	6.00
	9:17		Middle	3.5	27.60	27.60		8.17	8.17		28.69	28.69		75.0	73.1		5.04	4.91		3.42	3.42		6	
21/7/2014	3:10	Fine	Middle	3.5	27.80	27.80	27.85	7.83	7.83	7.84	30.59	30.59	30.59	70.5	70.1	70.3	4.67	4.64	4.66	1.85	1.86	1.82	5	5.00
	3:11		Middle	3.5	27.90	27.90		7.85	7.85		30.59	30.59		70.3	70.4		4.65	4.66		1.76	1.82		5	
23/7/2014	15:45	Fine	Middle	3.0	30.10	30.10	30.25	8.17	8.17	8.18	28.87	28.87	28.87	90.9	93.3	91.9	5.84	5.99	5.90	2.03	2.06	2.03	0	0.00
	15:47		Middle	3.0	30.40	30.40		8.19	8.19		28.86	28.86		90.7	92.7		5.82	5.94		2.03	2.01		0	
25/7/2014	19:25	Cloudy	Middle	3.5	27.30	27.30	27.30	7.98	7.98	7.98	30.21	30.21	30.21	75.1	74.3	73.8	5.12	5.07	5.03	1.09	1.16	1.11	0	0.00
	19:26		Middle	3.5	27.30	27.30		7.98	7.98		30.21	30.21		73.3	72.3		5.00	4.93		1.11	1.08		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at WSD19 - Sheung Wan  
Mid-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
30/6/2014	5:18	Cloudy	Middle	1.5	29.10	29.10	29.15	8.09	8.09	8.09	28.47	28.67	28.63	81.3	82.3	81.5	5.38	5.45	5.38	2.44	2.14	2.14	4	4.00
	5:19		Middle	1.5	29.20	29.20		8.09	8.09		28.68	28.68		81.3	81.1		5.37	5.32		1.97	2.02		4	
2/7/2014	9:50	Fine	Middle	3.0	29.10	29.10	28.45	8.27	8.27	8.30	26.84	26.84	26.84	86.8	88.2	89.0	5.73	5.82	5.87	2.64	2.65	2.66	3	3.00
	9:52		Middle	3.0	26.30	29.30		8.33	8.33		26.84	26.84		90.2	90.7		5.95	5.99		2.68	2.67		3	
4/7/2014	10:30	Fine	Middle	3.0	29.50	29.50	29.60	8.43	8.43	8.43	26.25	26.25	26.26	92.1	92.4	91.2	6.07	6.08	6.00	3.52	3.47	3.48	3	3.00
	10:32		Middle	3.0	29.70	29.70		8.43	8.43		26.26	26.26		90.3	89.9		5.94	5.91		3.45	3.48		3	
7/7/2014	4:34	Cloudy	Middle	2.5	28.50	28.50	28.45	8.12	8.12	8.13	25.63	25.63	25.63	88.7	87.4	88.6	5.98	5.90	5.98	5.84	5.76	5.69	6	5.00
	4:35		Middle	2.5	28.40	28.40		8.13	8.13		25.63	25.63		89.3	88.8		6.03	6.00		5.59	5.55		4	
9/7/2014	14:10	Fine	Middle	2.5	30.10	30.10	30.30	8.23	8.23	8.25	28.01	28.01	28.01	94.4	94.4	92.9	6.09	6.08	5.98	9.52	9.33	9.24	3	3.50
	14:12		Middle	2.5	30.50	30.50		8.26	8.26		28.01	28.01		91.4	91.3		5.88	5.87		9.13	8.99		4	
11/7/2014	16:15	Fine	Middle	2.5	28.20	28.20	28.30	8.34	8.34	8.34	28.66	28.66	28.66	88.7	89.5	87.5	5.88	5.94	5.81	6.94	6.93	6.92	6	6.50
	16:17		Middle	2.5	28.40	28.40		8.34	8.34		28.66	28.66		86.9	85.0		5.76	5.64		6.91	6.90		7	
14/7/2014	5:40	Cloudy	Middle	2.5	27.50	27.50	27.40	8.02	8.02	8.02	29.17	29.17	29.17	76.5	76.9	76.1	5.25	5.26	5.21	1.72	1.76	1.61	3	4.00
	5:41		Middle	2.5	27.30	27.30		8.02	8.02		29.16	29.16		76.3	74.8		5.22	5.12		1.52	1.43		5	
16/7/2014	8:50	Fine	Middle	3.0	28.00	28.00	28.15	8.20	8.20	8.19	27.81	27.81	27.81	63.5	63.3	63.3	4.25	4.23	4.23	3.09	3.04	3.04	5	4.50
	8:52		Middle	3.0	28.30	28.30		8.17	8.17		27.81	27.81		62.1	64.2		4.17	4.28		3.02	3.00		4	
21/7/2014	1:30	Fine	Middle	2.5	28.00	28.00	28.00	7.98	7.98	7.98	30.53	30.53	30.53	72.3	73.5	72.6	4.77	4.85	4.79	1.97	2.03	1.96	5	4.50
	1:31		Middle	2.5	28.00	28.00		7.98	7.98		30.53	30.53		70.9	73.8		4.68	4.87		1.90	1.92		4	
23/7/2014	15:07	Fine	Middle	3.0	30.20	30.20	30.28	8.17	8.17	8.18	28.95	28.95	28.94	83.3	84.9	85.0	5.34	5.45	5.45	3.51	3.72	3.62	0	0.00
	15:09		Middle	3.0	30.30	30.40		8.18	8.18		28.93	28.93		85.5	86.1		5.48	5.52		3.64	3.62		0	
25/7/2014	20:20	Cloudy	Middle	2.5	27.60	27.60	27.60	8.04	8.04	8.04	28.93	28.93	28.97	75.0	74.9	74.9	5.10	5.08	5.08	2.92	2.73	2.81	0	0.00
	20:21		Middle	2.5	27.60	27.60		8.04	8.04		28.92	29.08		74.3	75.2		5.03	5.09		2.76	2.81		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at WSD9 - Tai Wan  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	17:10	Cloudy	Middle	2.0	29.10	29.10	29.10	8.37	8.37	8.41	27.26	27.26	27.26	102.5	103.8	101.6	6.77	6.85	6.71	4.02	4.01	3.93	2	2.50
	17:12		Middle	2.0	29.10	29.10		8.44	8.44		27.26	27.26		100.7	99.3		6.65	6.55		3.81	3.88		3	
2/7/2014	16:35	Fine	Middle	2.5	29.50	29.50	29.70	8.38	8.38	8.39	27.37	27.37	27.27	85.4	83.7	81.1	5.70	5.58	5.41	2.45	2.43	2.43	3	3.50
	16:37		Middle	2.5	29.90	29.90		8.39	8.39		27.17	27.17		77.8	77.5		5.19	5.18		2.42	2.41		4	
4/7/2014	17:15	Fine	Middle	2.5	30.10	30.10	30.15	8.40	8.40	8.41	27.26	27.26	27.28	71.8	70.5	70.2	4.73	4.63	4.62	3.42	3.43	3.42	2	2.00
	17:17		Middle	2.5	30.20	30.20		8.42	8.42		27.30	27.30		69.4	69.2		4.57	4.56		3.41	3.43		2	
7/7/2014	7:10	Fine	Middle	3.0	28.50	28.50	28.50	8.50	8.50	8.53	26.23	26.23	26.24	112.5	115.0	114.9	7.54	7.71	7.70	3.58	3.58	3.54	4	4.00
	7:12		Middle	3.0	28.50	28.50		8.55	8.55		26.25	26.25		115.4	116.8		7.74	7.82		3.52	3.48		4	
9/7/2014	9:05	Fine	Middle	3.0	28.70	28.70	28.80	8.16	8.16	8.21	28.72	28.72	28.72	100.2	102.6	101.3	6.59	6.74	6.66	4.19	3.92	3.99	4	4.00
	9:07		Middle	3.0	28.90	28.90		8.25	8.25		28.72	28.72		100.2	102.3		6.58	6.71		3.91	3.95		4	
11/7/2014	9:15	Cloudy	Middle	3.0	27.00	27.00	27.00	8.20	8.20	8.22	30.11	30.11	30.11	85.6	86.1	85.5	5.76	5.79	5.75	3.91	3.91	3.90	5	5.50
	9:17		Middle	3.0	27.00	27.00		8.24	8.24		30.11	30.11		84.9	85.3		5.72	5.74		3.90	3.89		6	
14/7/2014	10:35	Fine	Middle	3.0	26.10	26.10	26.20	8.28	8.28	8.28	31.59	31.59	31.59	75.9	78.4	77.2	5.14	5.30	5.22	4.15	4.15	4.14	4	4.50
	10:37		Middle	3.0	26.30	26.30		8.28	8.28		31.59	31.59		78.6	75.9		5.32	5.13		4.17	4.09		5	
16/7/2014	17:15	Sunny	Middle	2.5	28.30	28.30	28.30	8.24	8.24	8.25	30.22	30.22	30.21	74.8	76.1	75.8	5.01	5.10	5.08	1.79	1.79	1.79	5	5.50
	17:17		Middle	2.5	28.30	28.30		8.25	8.25		30.20	30.20		76.4	75.9		5.11	5.08		1.78	1.78		6	
21/7/2014	7:11	Fine	Middle	2.5	27.30	27.30	27.30	8.44	8.44	8.44	29.03	29.03	29.03	82.4	82.8	83.1	5.51	5.53	5.55	3.10	3.10	3.13	4	3.50
	7:13		Middle	2.5	27.30	27.30		8.44	8.44		29.03	29.03		83.4	83.7		5.57	5.59		3.16	3.14		3	
23/7/2014	9:00	Sunny	Middle	3.0	28.80	28.80	28.80	8.27	8.27	8.27	28.08	28.08	28.08	79.2	79.1	77.6	5.28	5.27	5.15	2.01	2.04	2.03	0	0.00
	9:02		Middle	3.0	28.80	28.80		8.27	8.27		28.08	28.08		75.8	76.2		5.02	5.01		2.04	2.03		0	
25/7/2014	9:25	Cloudy	Middle	3.0	27.70	27.70	27.75	8.28	8.28	8.29	29.05	29.05	29.05	86.5	87.6	87.0	5.78	5.86	5.82	2.60	2.60	2.61	0	0.00
	9:27		Middle	3.0	27.80	27.80		8.29	8.29		29.05	29.05		86.5	87.4		5.78	5.84		2.61	2.64		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at WSD17 - Quarry Bay  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	11:04	Cloudy	Middle	3	28.90	28.90	29.00	8.23	8.23	8.26	30.11	30.11	30.11	89.0	88.9	88.4	5.80	5.79	5.76	3.22	3.22	3.24	4	3.00
	11:07		Middle	3	29.10	29.10		8.28	8.28		30.10	30.10		87.7	88.0		5.71	5.72		3.21	3.30		2	
2/7/2014	15:50	Fine	Middle	3	29.00	29.00	29.05	8.29	8.29	8.30	27.93	27.93	27.93	78.3	78.3	78.4	5.15	5.15	5.16	2.90	2.96	2.95	4	3.50
	15:52		Middle	3	29.10	29.10		8.31	8.31		27.93	27.93		78.5	78.4		5.16	5.16		2.97	2.97		3	
4/7/2014	15:35	Fine	Middle	3	29.10	29.10	29.20	8.40	8.40	8.42	28.66	28.66	28.66	91.7	85.1	84.1	5.99	5.56	5.49	3.32	3.42	3.40	3	3.50
	15:37		Middle	3	29.30	29.30		8.43	8.43		28.65	28.65		81.7	77.7		5.34	5.07		3.43	3.43		4	
7/7/2014	8:00	Fine	Middle	3	27.90	27.90	28.85	8.44	8.44	8.46	26.84	26.84	26.87	98.9	99.8	98.7	6.68	6.74	6.67	3.31	3.42	3.36	4	4.50
	8:02		Middle	3	29.80	29.80		8.47	8.47		26.90	26.90		99.8	96.1		6.74	6.50		3.42	3.30		5	
9/7/2014	10:00	Fine	Middle	3	27.20	27.20	27.30	8.26	8.26	8.27	29.37	29.37	29.37	83.1	84.6	83.7	5.59	5.68	5.63	3.11	3.10	3.11	3	3.00
	10:02		Middle	3	27.40	27.40		8.28	8.28		29.37	29.37		84.5	82.6		5.68	5.55		3.10	3.11		3	
11/7/2014	10:00	Cloudy	Middle	3	26.60	26.60	26.55	8.26	8.26	8.27	30.37	30.37	30.38	82.7	81.8	82.1	5.60	5.55	5.57	3.27	3.30	3.30	6	5.50
	10:02		Middle	3	26.50	26.50		8.28	8.28		30.39	30.39		82.4	81.6		5.58	5.53		3.31	3.32		5	
14/7/2014	11:02	Fine	Middle	3	26.20	26.20	26.25	8.28	8.28	8.28	29.76	29.76	29.76	70.7	68.1	69.6	4.83	4.65	4.75	5.13	5.15	5.15	4	4.50
	11:04		Middle	3	26.30	26.30		8.27	8.27		29.75	29.75		69.3	70.3		4.73	4.80		5.15	5.15		5	
16/7/2014	15:15	Sunny	Middle	3	28.40	28.40	28.50	8.12	8.12	8.14	30.34	30.34	30.33	97.0	98.2	96.9	6.37	6.44	6.35	3.10	3.10	3.15	3	3.50
	15:17		Middle	3	28.60	28.60		8.15	8.15		30.31	30.31		94.9	97.5		6.22	6.35		3.18	3.20		4	
21/7/2014	7:42	Fine	Middle	3	27.80	27.80	27.85	8.37	8.37	8.37	29.26	29.26	29.26	72.8	75.8	75.7	4.86	5.05	5.05	3.18	3.20	3.20	3	4.00
	7:44		Middle	3	27.90	27.90		8.36	8.36		29.26	29.26		77.9	76.2		5.19	5.08		3.21	3.21		5	
23/7/2014	10:02	Sunny	Middle	3	28.90	28.90	29.05	8.26	8.26	8.26	28.63	28.63	28.63	76.9	79.8	78.3	5.05	5.23	5.13	1.79	1.79	1.76	0	0.00
	10:04		Middle	3	29.20	29.20		8.25	8.25		28.62	28.62		79.1	77.4		5.18	5.07		1.72	1.73		0	
25/7/2014	10:35	Cloudy	Middle	3	27.00	27.00	27.05	8.27	8.27	8.27	29.90	29.90	29.90	72.6	73.8	72.7	4.89	4.97	4.90	2.17	2.19	2.20	0	0.00
	10:37		Middle	3	27.10	27.10		8.27	8.27		29.90	29.90		72.7	71.7		4.89	4.83		2.20	2.22		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C7 - Windsor House  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	14:47	Cloudy	Middle	2	29.30	29.30	29.35	8.39	8.39	8.40	27.37	27.37	27.37	88.6	89.4	89.3	5.82	5.97	5.94	6.18	6.17	6.19	4	4.50
	14:49		Middle	2	29.40	29.40		8.40	8.40		27.37	27.37		89.3	89.7		5.97	5.99		6.17	6.25		5	
2/7/2014	15:32	Fine	Middle	2	29.40	29.40	29.40	8.28	8.28	8.28	26.26	26.26	26.26	64.9	66.4	66.0	4.29	4.39	4.36	3.05	3.07	3.10	5	4.50
	15:34		Middle	2	29.40	29.40		8.27	8.27		26.26	26.26		66.6	66.0		4.40	4.36		3.09	3.17		4	
4/7/2014	15:22	Fine	Middle	2	30.10	30.10	30.15	8.46	8.46	8.47	25.98	25.98	25.96	97.0	88.2	95.4	6.34	6.42	6.40	5.05	5.03	5.01	4	3.50
	15:25		Middle	2	30.20	30.20		8.47	8.47		25.94	25.94		98.0	98.4		6.40	6.43		5.00	4.97		3	
7/7/2014	10:07	Fine	Middle	2	29.10	29.10	29.10	8.43	8.43	8.43	24.56	24.56	24.56	87.9	87.3	88.2	5.90	5.83	5.90	3.42	3.43	3.43	4	4.00
	10:09		Middle	2	29.10	29.10		8.43	8.43		24.56	24.56		89.9	87.5		6.00	5.87		3.42	3.43		4	
9/7/2014	11:17	Fine	Middle	2	28.20	28.20	28.30	8.25	8.25	8.25	27.14	27.14	27.14	71.8	71.2	72.3	4.80	4.76	4.73	2.55	2.56	2.56	3	3.00
	11:19		Middle	2	28.40	28.40		8.24	8.24		27.14	27.14		76.5	69.7		4.71	4.66		2.56	2.55		3	
11/7/2014	11:58	Cloudy	Middle	2	28.20	28.20	28.25	8.27	8.27	8.27	26.85	26.85	26.85	60.4	61.5	60.9	4.06	4.13	4.09	2.91	2.91	2.91	5	4.50
	12:00		Middle	2	28.30	28.30		8.27	8.27		26.85	26.85		61.4	60.3		4.12	4.05		2.91	2.91		4	
14/7/2014	14:17	Fine	Middle	2	28.90	28.90	28.95	8.21	8.21	8.20	26.04	26.04	26.04	65.1	67.0	65.7	4.34	4.46	4.38	3.24	3.31	3.24	3	3.00
	14:19		Middle	2	29.00	29.00		8.19	8.19		26.04	26.04		65.3	65.4		4.36	4.36		3.32	3.10		3	
16/7/2014	14:47	Sunny	Middle	2	28.50	28.50	28.65	8.15	8.15	8.15	28.42	28.42	28.42	67.2	68.3	67.5	4.44	4.52	4.46	3.50	3.47	3.46	4	4.50
	14:49		Middle	2	28.80	28.80		8.14	8.14		28.41	28.41		67.6	66.8		4.46	4.41		3.44	3.43		5	
21/7/2014	9:32	Fine	Middle	2	28.00	28.00	28.00	8.14	8.14	8.13	27.74	27.74	27.75	63.0	66.2	64.5	4.23	4.44	4.33	2.51	2.51	2.52	4	4.00
	9:34		Middle	2	28.00	28.00		8.12	8.12		27.75	27.75		64.1	64.7		4.30	4.34		2.54	2.51		4	
23/7/2014	11:52	Sunny	Middle	2	29.30	29.30	29.35	8.10	8.10	8.10	27.79	27.79	27.79	54.0	55.8	54.7	3.54	3.66	3.59	3.51	3.51	3.54	0	0.00
	11:54		Middle	2	29.40	29.40		8.09	8.09		27.79	27.79		55.2	53.9		3.62	3.53		3.55	3.57		0	
25/7/2014	12:04	Cloudy	Middle	2	28.90	28.90	28.90	8.16	8.16	8.16	27.02	27.02	27.02	62.1	63.3	63.8	4.12	4.20	4.23	2.11	2.11	2.11	0	0.00
	12:06		Middle	2	28.90	28.90		8.15	8.15		27.02	27.02		65.0	64.6		4.31	4.28		2.11	2.11		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





**Water Monitoring Result at C1 - HKCEC  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	14:50	Cloudy	Middle	2.5	28.10	28.10	28.20	8.57	8.51	8.56	24.62	24.61	24.59	85.3	85.5	84.9	5.78	5.79	5.75	3.63	3.54	3.57	3	3.00
	14:52		Middle	2.5	28.30	28.30		8.58	8.58		24.57	24.57		84.8	84.0		5.74	5.68		3.54	3.55		3	
2/7/2014	14:55	Fine	Middle	2.5	28.70	28.70	28.70	8.47	8.47	8.47	25.71	25.71	25.71	92.5	91.8	93.7	6.17	6.09	6.43	2.61	2.62	2.62	4	3.50
	14:57		Middle	2.5	28.70	28.70		8.47	8.47		25.71	25.71		95.9	94.6		6.93	6.51		2.62	2.61		3	
4/7/2014	15:33	Fine	Middle	3.0	29.50	29.50	29.50	8.41	8.41	8.42	25.73	25.73	25.74	104.1	102.1	101.6	6.88	6.75	6.72	4.58	4.58	4.59	3	3.50
	15:35		Middle	3.0	29.50	29.50		8.42	8.42		25.75	25.75		100.1	100.1		6.62	6.62		4.59	4.59		4	
7/7/2014	9:19	Fine	Middle	2.5	28.90	28.90	28.90	8.75	8.75	8.75	23.81	23.81	23.81	69.4	69.4	68.9	4.70	4.71	4.67	3.80	3.79	3.80	4	4.00
	9:21		Middle	2.5	28.90	28.90		8.75	8.75		23.81	23.81		68.9	68.0		4.65	4.62		3.79	3.80		4	
9/7/2014	10:48	Fine	Middle	2.5	28.20	28.20	28.10	8.38	8.38	8.39	26.67	26.67	26.69	81.5	84.7	82.8	5.49	5.71	5.58	3.45	3.70	3.83	3	3.50
	10:50		Middle	2.5	28.00	28.00		8.40	8.40		26.70	26.70		83.4	81.6		5.63	5.50		3.94	4.23		4	
11/7/2014	11:51	Cloudy	Middle	2.5	28.00	28.00	27.90	8.23	8.23	8.25	27.30	27.30	27.33	71.7	72.8	72.0	4.83	4.91	4.85	2.95	3.02	3.02	6	5.50
	11:53		Middle	2.5	27.80	27.80		8.26	8.26		27.36	27.36		72.3	71.0		4.87	4.78		3.04	3.05		5	
14/7/2014	14:19	Fine	Middle	2.5	28.50	28.50	28.50	8.16	8.16	8.16	26.36	26.36	26.36	79.4	79.0	78.4	5.41	5.32	5.29	3.90	3.91	3.91	6	6.00
	14:21		Middle	2.5	28.50	28.50		8.16	8.16		26.36	26.36		77.7	77.6		5.23	5.20		3.91	3.92		6	
16/7/2014	15:29	Sunny	Middle	3.0	27.70	27.70	27.70	8.20	8.20	8.20	27.09	27.09	27.10	65.7	64.8	63.4	4.44	4.31	4.27	4.48	4.90	4.66	5	6.00
	15:31		Middle	3.0	27.70	27.70		8.20	8.20		27.10	27.10		61.5	61.5		4.16	4.16		4.65	4.59		7	
21/7/2014	10:01	Fine	Middle	2.5	27.90	27.90	27.90	8.17	8.17	8.15	27.47	27.47	27.50	61.5	61.3	60.9	4.14	4.13	4.10	1.95	1.93	1.92	6	5.50
	10:03		Middle	2.5	27.90	27.90		8.12	8.12		27.52	27.52		60.9	60.0		4.10	4.03		1.91	1.90		5	
23/7/2014	11:02	Sunny	Middle	2.5	28.50	28.50	28.55	8.13	8.13	8.13	27.63	27.63	27.64	65.7	62.7	63.4	4.37	4.17	4.22	1.09	1.09	1.09	0	0.00
	11:04		Middle	2.5	28.60	28.60		8.12	8.12		27.65	27.65		62.2	62.9		4.14	4.18		1.09	1.09		0	
25/7/2014	11:03	Cloudy	Middle	3.0	28.80	28.80	28.90	8.21	8.21	8.21	26.36	26.36	26.36	69.0	68.6	69.7	4.60	4.57	4.64	0.75	0.73	0.72	0	0.00
	11:05		Middle	3.0	29.00	29.00		8.20	8.20		26.35	26.35		71.2	70.0		4.74	4.65		0.71	0.70		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P1 - HKCEC Phase I  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	15:31	Cloudy	Middle	2.5	29.50	29.50	29.50	8.63	8.63	8.64	24.30	24.30	24.29	91.0	90.8	91.0	6.07	6.06	6.07	2.43	2.42	2.41	4	4.00
	15:33		Middle	2.5	29.50	29.50		8.65	8.65		24.27	24.27		91.5	90.7		6.11	6.05		2.41	2.39		4	
2/7/2014	15:31	Fine	Middle	3.0	28.80	28.80	28.80	8.51	8.51	8.51	25.90	25.90	25.90	96.1	97.8	96.9	6.45	6.48	6.47	2.47	2.48	2.47	3	3.00
	15:33		Middle	3.0	28.80	28.80		8.51	8.51		25.90	25.90		95.8	97.9		6.46	6.50		2.47	2.46		3	
4/7/2014	16:08	Fine	Middle	3.0	29.50	29.50	29.55	8.64	8.64	8.65	25.56	25.56	25.57	112.2	114.0	116.6	7.42	7.55	7.71	3.63	3.67	3.63	3	3.00
	16:10		Middle	3.0	29.60	29.60		8.65	8.65		25.58	25.58		119.5	120.5		7.90	7.97		3.62	3.59		3	
7/7/2014	10:02	Fine	Middle	2.5	29.30	29.30	29.30	8.68	8.68	8.68	23.62	23.63	23.63	86.4	84.9	84.5	6.01	5.71	5.76	3.79	3.80	3.79	5	5.00
	10:04		Middle	2.5	29.30	29.30		8.68	8.68		23.63	23.62		83.9	82.8		5.67	5.63		3.78	3.79		5	
9/7/2014	11:35	Fine	Middle	2.5	28.30	28.30	28.30	8.46	8.45	8.44	27.40	27.40	27.39	82.9	83.1	83.0	5.53	5.55	5.54	3.29	3.27	3.28	3	3.50
	11:37		Middle	2.5	28.30	28.30		8.42	8.42		27.37	27.37		83.0	83.0		5.54	5.54		3.28	3.29		4	
11/7/2014	12:19	Cloudy	Middle	2.5	28.30	28.30	28.30	8.39	8.39	8.40	27.32	27.32	27.32	80.0	77.7	76.4	5.35	5.20	5.11	3.89	3.93	3.96	5	5.00
	12:21		Middle	2.5	28.30	28.30		8.40	8.40		27.31	27.31		75.0	72.7		5.01	4.87		3.94	4.07		5	
14/7/2014	14:57	Fine	Middle	2.5	28.30	28.30	28.30	8.24	8.24	8.24	27.07	27.08	27.08	74.7	76.1	75.6	5.05	5.09	5.08	4.30	4.32	4.31	5	5.00
	14:59		Middle	2.5	28.30	28.30		8.24	8.24		27.08	27.07		75.2	76.2		5.08	5.09		4.30	4.32		5	
16/7/2014	15:57	Sunny	Middle	2.5	28.00	28.00	28.05	8.25	8.25	8.25	27.50	27.50	27.49	70.0	67.7	67.0	4.70	4.55	4.50	3.15	3.17	3.13	4	4.50
	15:59		Middle	2.5	28.10	28.10		8.24	8.24		27.48	27.48		65.4	65.0		4.39	4.36		3.13	3.08		5	
21/7/2014	10:32	Fine	Middle	2.5	28.50	28.50	28.50	8.13	8.13	8.13	27.61	27.61	27.61	65.3	62.7	62.7	4.35	4.17	4.17	1.39	1.41	1.39	5	5.00
	10:34		Middle	2.5	28.50	28.50		8.12	8.12		27.60	27.60		62.0	60.7		4.11	4.04		1.40	1.37		5	
23/7/2014	11:36	Sunny	Middle	2.5	29.30	29.30	29.35	8.16	8.16	8.16	27.05	27.05	27.06	70.4	70.5	70.6	4.61	4.61	4.63	0.76	0.74	0.74	0	0.00
	11:38		Middle	2.5	29.40	29.40		8.16	8.16		27.06	27.06		70.9	70.6		4.65	4.63		0.73	0.74		0	
25/7/2014	11:37	Cloudy	Middle	3.0	28.50	28.50	28.60	8.11	8.11	8.13	26.49	26.49	26.49	75.5	76.0	75.1	5.05	5.08	5.02	0.56	0.53	0.53	0	0.00
	11:39		Middle	3.0	28.70	28.70		8.14	8.14		26.48	26.48		75.4	73.4		5.04	4.90		0.52	0.52		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P3 - APA  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	15:22	Cloudy	Middle	2.5	29.50	29.50	29.40	8.65	8.65	8.66	24.22	24.22	24.22	82.3	83.2	81.9	5.49	5.88	5.55	2.75	2.72	2.74	3	3.00
	15:24		Middle	2.5	29.30	29.30		8.66	8.66		24.21	24.21		82.1	80.1		5.47	5.34		2.77	2.73		3	
2/7/2014	15:22	Fine	Middle	2.5	28.90	28.90	28.90	8.52	8.52	8.52	25.76	25.76	25.76	95.9	97.5	97.4	6.41	6.57	6.51	2.28	2.27	2.28	3	3.00
	15:24		Middle	2.5	28.90	28.90		8.52	8.52		25.76	25.76		98.6	97.6		6.58	6.48		2.28	2.27		3	
4/7/2014	16:00	Fine	Middle	2.5	29.60	29.60	29.75	8.65	8.65	8.67	25.53	25.53	25.52	124.7	124.2	124.6	8.23	8.20	8.22	3.70	3.66	3.60	3	3.50
	16:02		Middle	2.5	29.90	29.90		8.68	8.68		25.50	25.50		125.5	123.9		8.29	8.17		3.52	3.51		4	
7/7/2014	9:54	Fine	Middle	2.5	29.10	29.10	29.10	8.68	8.68	8.68	23.89	23.90	23.90	90.6	89.7	89.4	6.11	6.04	6.03	3.70	3.71	3.72	5	4.50
	9:56		Middle	2.5	29.10	29.10		8.68	8.68		23.90	23.89		88.5	88.6		5.98	5.99		3.72	3.73		4	
9/7/2014	11:21	Fine	Middle	2.5	28.30	28.30	28.35	8.45	8.45	8.46	26.99	26.99	26.97	82.0	80.3	79.6	5.50	5.38	5.33	3.29	3.31	3.27	3	3.50
	11:23		Middle	2.5	28.40	28.40		8.46	8.46		26.95	26.95		78.6	77.4		5.26	5.19		3.30	3.19		4	
11/7/2014	12:11	Cloudy	Middle	2.5	28.10	28.10	28.15	8.39	8.39	8.39	27.50	27.52	27.50	71.8	75.2	73.9	4.81	5.04	4.95	3.29	3.47	3.36	6	6.00
	12:13		Middle	2.5	28.20	28.20		8.39	8.39		27.48	27.48		74.9	73.6		5.01	4.93		3.52	3.17		6	
14/7/2014	14:45	Fine	Middle	2.5	28.10	28.10	28.10	8.24	8.24	8.24	26.73	26.73	26.73	75.2	75.6	76.3	5.06	5.08	5.12	3.18	3.18	3.18	5	4.50
	14:47		Middle	2.5	28.10	28.10		8.24	8.24		26.73	26.73		76.5	77.7		5.14	5.19		3.18	3.18		4	
16/7/2014	15:49	Sunny	Middle	2.5	27.90	27.90	27.95	8.24	8.24	8.24	27.34	27.34	27.35	68.9	68.0	68.4	4.64	4.58	4.61	3.05	2.93	2.85	4	4.50
	15:51		Middle	2.5	28.00	28.00		8.23	8.23		27.35	27.35		68.2	68.5		4.59	4.61		2.72	2.70		5	
21/7/2014	10:24	Fine	Middle	2.5	27.80	27.80	27.85	8.13	8.13	8.13	27.56	27.56	27.55	65.9	66.8	66.7	4.44	4.50	4.49	1.54	1.64	1.63	4	3.50
	10:26		Middle	2.5	27.90	27.90		8.12	8.12		27.54	27.54		67.2	67.0		4.52	4.51		1.67	1.67		3	
23/7/2014	11:26	Sunny	Middle	2.5	28.80	28.80	28.90	8.15	8.15	8.15	27.93	27.93	27.92	70.9	70.7	69.8	4.67	4.67	4.60	0.91	0.85	0.88	0	0.00
	11:28		Middle	2.5	29.00	29.00		8.14	8.14		27.90	27.90		69.4	68.0		4.57	4.48		0.84	0.91		0	
25/7/2014	11:29	Cloudy	Middle	3.0	28.60	28.60	28.70	8.24	8.24	8.23	26.39	26.39	26.38	72.5	71.9	71.8	4.85	4.80	4.80	0.70	0.70	0.69	0	0.00
	11:31		Middle	3.0	28.80	28.80		8.22	8.22		26.37	26.37		70.1	72.8		4.67	4.86		0.69	0.68		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P4 - SOC  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	15:06	Cloudy	Middle	2.5	29.20	29.20	29.25	8.58	8.58	8.61	24.31	24.31	24.32	89.3	87.7	87.9	5.98	5.87	5.88	3.04	3.04	3.01	2	2.50
	15:08		Middle	2.5	29.30	29.30		8.63	8.63		24.32	24.32		86.9	87.6		5.81	5.86		3.00	2.94		3	
2/7/2014	15:12	Fine	Middle	2.5	29.10	29.10	29.10	8.50	8.50	8.50	25.75	25.75	25.75	95.0	95.2	96.9	6.32	6.33	6.45	1.97	1.96	1.97	4	3.50
	15:14		Middle	2.5	29.10	29.10		8.50	8.50		25.75	25.75		97.5	99.8		6.49	6.65		1.97	1.96		3	
4/7/2014	15:48	Fine	Middle	2.5	29.90	29.90	29.85	8.64	8.64	8.66	25.43	25.43	25.44	127.8	126.0	125.4	8.43	8.31	8.27	3.33	3.31	3.18	3	3.00
	15:50		Middle	2.5	29.80	29.80		8.67	8.67		25.45	25.45		124.6	123.1		8.21	8.11		3.02	3.07		3	
7/7/2014	9:42	Fine	Middle	2.5	28.90	28.90	28.90	8.59	8.59	8.59	23.69	23.69	23.69	71.0	74.2	71.9	4.81	4.81	4.81	3.60	3.61	3.61	5	4.50
	9:44		Middle	2.5	28.90	28.90		8.59	8.59		23.69	23.69		70.9	71.6		4.79	4.84		3.61	3.60		4	
9/7/2014	11:12	Fine	Middle	2.5	28.50	28.50	28.50	8.45	8.45	8.46	26.85	26.85	26.83	82.3	79.3	79.2	5.50	5.30	5.29	3.30	3.37	3.29	4	4.00
	11:14		Middle	2.5	28.50	28.50		8.46	8.46		26.81	26.81		78.2	76.8		5.23	5.13		3.32	3.17		4	
11/7/2014	12:03	Cloudy	Middle	2.5	28.10	28.10	28.15	8.37	8.37	8.38	27.23	27.24	27.23	84.0	83.6	82.3	5.64	5.61	5.52	2.41	2.40	2.39	4	4.00
	12:05		Middle	2.5	28.20	28.20		8.38	8.38		27.23	27.23		81.4	80.2		5.46	5.38		2.38	2.36		4	
14/7/2014	14:35	Fine	Middle	2.5	28.00	28.00	28.00	8.26	8.26	8.26	26.58	26.58	26.58	75.6	73.1	74.8	5.10	4.94	5.05	3.37	3.38	3.38	4	4.50
	14:37		Middle	2.5	28.00	28.00		8.26	8.26		26.58	26.58		75.7	74.9		5.10	5.05		3.37	3.38		5	
16/7/2014	15:41	Sunny	Middle	2.5	27.80	27.80	27.85	8.22	8.22	8.22	27.16	27.16	27.16	64.9	63.7	63.1	4.37	4.29	4.25	3.81	3.98	3.85	4	4.50
	15:43		Middle	2.5	27.90	27.90		8.22	8.22		27.15	27.15		62.5	61.2		4.22	4.13		3.85	3.77		5	
21/7/2014	10:10	Fine	Middle	2.5	27.60	27.60	27.60	8.13	8.13	8.13	27.52	27.52	27.52	59.6	61.0	60.0	4.03	4.12	4.05	3.05	2.92	2.92	3	3.00
	10:12		Middle	2.5	27.60	27.60		8.12	8.12		27.51	27.51		60.0	59.4		4.05	4.01		2.87	2.85		3	
23/7/2014	11:17	Sunny	Middle	2.5	29.00	29.00	28.90	8.14	8.14	8.14	27.86	27.86	27.87	71.3	68.9	68.9	4.72	4.56	4.56	0.71	0.70	0.70	0	0.00
	11:19		Middle	2.5	28.80	28.80		8.13	8.13		27.88	27.88		67.5	67.9		4.46	4.49		0.68	0.69		0	
25/7/2014	11:19	Cloudy	Middle	3.0	28.50	28.50	28.60	8.22	8.22	8.22	26.32	26.32	26.31	71.5	68.5	69.6	4.79	4.58	4.65	1.21	1.22	1.19	0	0.00
	11:21		Middle	3.0	28.70	28.70		8.21	8.21		26.29	26.29		70.0	68.2		4.68	4.56		1.22	1.10		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P5 - WCT / RT / IT  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-			ppt		%		mg/L		NTU		mg/L						
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	15:14	Cloudy	Middle	2.5	28.70	28.70	28.75	8.55	8.55	8.56	24.01	24.01	24.02	95.6	95.6	94.6	6.40	6.40	6.33	3.63	3.50	3.55	4	3.50
	15:16		Middle	2.5	28.80	28.80		8.56	8.56		24.03	24.03		93.7	93.5		6.27	6.26		3.54	3.52		3	
2/7/2014	15:05	Fine	Middle	2.5	29.00	29.00	29.00	8.46	8.46	8.46	25.73	25.73	25.73	93.6	95.8	95.6	6.24	6.39	6.38	2.18	2.18	2.17	3	3.00
	15:07		Middle	2.5	29.00	29.00		8.46	8.46		25.73	25.73		96.6	96.5		6.44	6.43		2.15	2.15		3	
4/7/2014	15:43	Fine	Middle	2.5	29.90	29.90	29.90	8.57	8.57	8.60	25.71	25.71	25.71	111.4	112.2	111.5	7.33	7.38	7.32	3.52	3.39	3.42	4	3.50
	15:45		Middle	2.5	29.90	29.90		8.62	8.62		25.70	25.70		112.7	109.5		7.37	7.20		3.39	3.39		3	
7/7/2014	9:33	Fine	Middle	2.5	28.90	28.90	28.90	8.60	8.60	8.60	23.74	23.76	23.72	57.8	58.0	58.5	3.91	3.92	3.97	3.11	3.10	3.11	4	4.00
	9:35		Middle	2.5	28.90	28.90		8.60	8.60		23.82	23.55		58.7	59.6		4.00	4.04		3.11	3.12		4	
9/7/2014	11:07	Fine	Middle	2.5	28.60	28.60	28.62	8.38	8.38	8.40	26.84	26.84	26.84	90.1	87.5	87.9	6.02	5.84	5.86	2.95	2.94	2.94	3	3.00
	11:09		Middle	2.5	28.60	28.68		8.42	8.42		26.82	26.84		88.1	85.7		5.85	5.72		2.93	2.93		3	
11/7/2014	11:59	Cloudy	Middle	2.5	28.10	28.10	28.10	8.33	8.33	8.34	27.28	27.28	27.28	70.3	68.8	68.6	4.72	4.62	4.61	2.54	2.57	2.60	4	4.50
	11:01		Middle	2.5	28.10	28.10		8.35	8.35		27.27	27.27		67.9	67.2		4.56	4.52		2.61	2.68		5	
14/7/2014	14:30	Fine	Middle	2.5	28.40	28.40	28.40	8.22	8.22	8.22	26.61	26.61	26.61	74.9	76.3	76.7	5.02	5.11	5.12	3.73	3.74	3.74	4	4.00
	14:32		Middle	2.5	28.40	28.40		8.22	8.22		26.61	26.61		77.7	77.7		5.16	5.20		3.74	3.73		4	
16/7/2014	15:37	Sunny	Middle	2.5	27.90	27.90	27.90	8.22	8.22	8.22	26.14	26.14	26.17	66.1	64.8	66.4	4.49	4.39	4.51	3.10	3.09	3.02	5	4.50
	15:39		Middle	2.5	27.90	27.90		8.21	8.21		26.20	26.20		67.7	67.1		4.59	4.55		2.96	2.92		4	
21/7/2014	10:15	Fine	Middle	2.5	27.60	27.60	27.60	8.13	8.13	8.13	27.44	27.44	27.46	60.4	58.4	58.4	4.08	3.95	3.95	1.24	1.23	1.25	5	4.50
	10:17		Middle	2.5	27.60	27.60		8.12	8.12		27.48	27.48		57.4	57.3		3.88	3.88		1.27	1.26		4	
23/7/2014	11:12	Sunny	Middle	2.5	28.60	28.60	28.65	8.13	8.13	8.13	27.87	27.87	27.87	66.9	66.0	65.1	4.43	4.37	4.31	0.85	0.84	0.80	0	0.00
	11:14		Middle	2.5	28.70	28.70		8.13	8.13		27.86	27.86		64.9	62.5		4.30	4.14		0.75	0.75		0	
25/7/2014	11:14	Cloudy	Middle	3.0	28.90	28.90	29.05	8.21	8.21	8.21	26.40	26.40	26.37	65.4	65.7	65.0	4.35	4.37	4.32	0.55	0.54	0.53	0	0.00
	11:16		Middle	3.0	29.20	29.20		8.20	8.20		26.34	26.34		63.2	65.6		4.19	4.36		0.52	0.52		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	14:05	Cloudy	Middle	3.5	29.40	29.40	29.45	8.47	8.47	8.49	26.47	26.47	26.47	101.9	102.0	102.5	6.71	6.72	6.75	3.84	3.80	3.81	3	3.00
	14:07		Middle	3.5	29.50	29.50		8.50	8.50		26.47	26.47		101.9	104.0		6.72	6.86		3.79	3.79		3	
2/7/2014	14:55	Fine	Middle	3.5	29.40	29.40	29.50	8.39	8.39	8.41	27.01	27.01	27.01	97.6	98.7	98.2	6.14	6.40	6.36	3.00	3.22	3.08	4	4.00
	14:57		Middle	3.5	29.60	29.60		8.42	8.42		27.01	27.01		97.8	98.7		6.42	6.48		3.05	3.03		4	
4/7/2014	14:40	Fine	Middle	3.5	30.60	30.60	30.70	8.50	8.50	8.53	26.88	26.88	26.88	97.9	92.3	91.7	6.70	6.01	6.02	3.57	3.99	3.82	4	3.50
	14:42		Middle	3.5	30.80	30.80		8.55	8.55		26.87	26.87		89.5	87.0		5.76	5.60		3.91	3.81		3	
7/7/2014	9:30	Fine	Middle	3.5	28.60	28.60	28.55	8.46	8.46	8.49	24.90	24.90	24.91	113.0	113.6	111.9	7.63	7.67	7.55	2.78	2.81	2.81	6	5.00
	9:32		Middle	3.5	28.50	28.50		8.52	8.52		24.92	24.92		111.1	109.8		7.50	7.41		2.81	2.83		4	
9/7/2014	10:45	Fine	Middle	3.5	28.00	28.00	28.05	8.37	8.37	8.38	27.67	27.67	27.67	98.2	96.7	97.5	6.58	6.48	6.53	4.02	3.91	3.89	5	5.00
	10:47		Middle	3.5	28.10	28.10		8.39	8.39		27.67	27.67		97.0	98.1		6.50	6.57		3.82	3.81		5	
11/7/2014	11:30	Cloudy	Middle	3.5	27.60	27.60	27.60	8.35	8.35	8.36	28.50	28.50	28.50	96.4	96.0	95.4	6.48	6.45	6.41	5.56	5.53	5.52	5	5.50
	11:32		Middle	3.5	27.60	27.60		8.37	8.37		28.50	28.50		95.0	94.3		6.38	6.34		5.51	5.48		6	
14/7/2014	13:40	Fine	Middle	3.5	28.10	28.10	28.25	8.29	8.29	8.29	27.80	27.80	27.80	84.5	87.3	86.5	5.64	5.82	5.77	5.13	4.95	4.96	6	6.00
	13:42		Middle	3.5	28.40	28.40		8.28	8.28		27.79	27.79		86.3	88.0		5.75	5.87		4.82	4.93		6	
16/7/2014	14:10	Sunny	Middle	3.5	29.00	29.00	29.15	8.26	8.26	8.25	28.82	28.82	28.82	87.3	89.3	89.9	5.72	5.84	5.88	3.24	3.28	3.31	5	5.00
	14:12		Middle	3.5	29.30	29.30		8.24	8.24		28.82	28.82		91.7	91.1		5.99	5.95		3.30	3.42		5	
21/7/2014	8:55	Fine	Middle	3.5	27.90	27.90	27.95	8.24	8.24	8.24	28.89	28.89	28.89	83.9	85.0	84.5	5.59	5.67	5.63	2.19	2.19	2.18	4	3.50
	8:57		Middle	3.5	28.00	28.00		8.23	8.23		28.89	28.89		84.2	84.8		5.61	5.65		2.17	2.17		3	
23/7/2014	11:25	Sunny	Middle	4.0	29.40	29.40	29.55	8.20	8.20	8.20	28.72	28.72	28.72	80.0	82.6	82.7	5.20	5.36	5.37	1.42	1.55	1.56	0	0.00
	11:27		Middle	4.0	29.70	29.70		8.20	8.20		28.71	28.71		83.7	84.5		5.44	5.48		1.58	1.70		0	
25/7/2014	11:25	Cloudy	Middle	3.5	28.60	28.60	28.60	8.28	8.28	8.28	27.49	27.49	27.49	88.9	89.3	89.0	5.91	5.94	5.92	2.29	2.41	2.37	0	0.00
	11:27		Middle	3.5	28.60	28.60		8.28	8.28		27.49	27.49		88.9	88.7		5.91	5.90		2.41	2.37		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





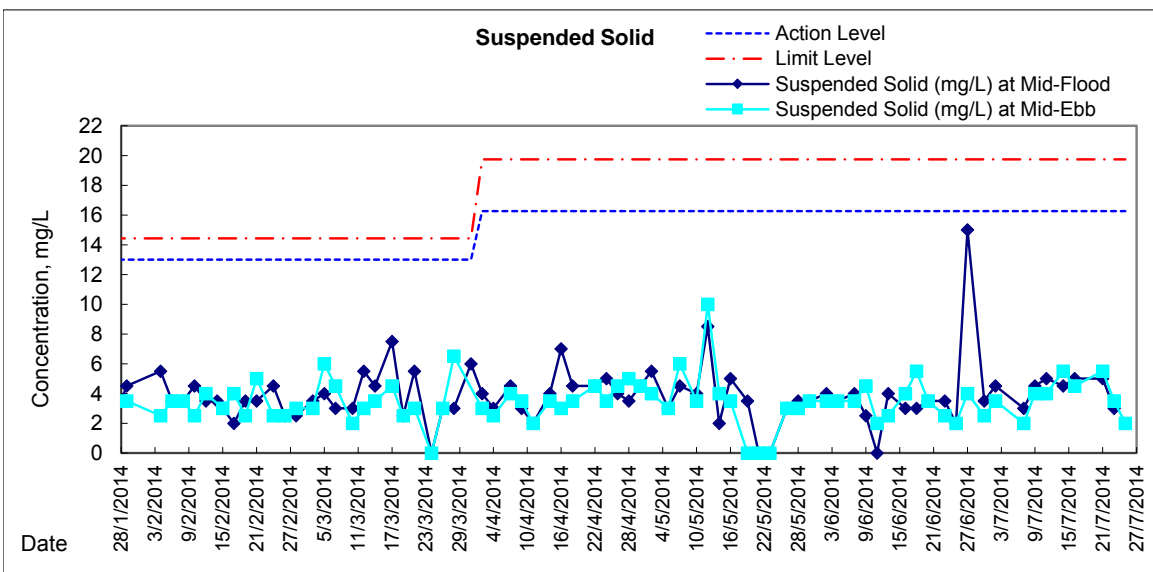
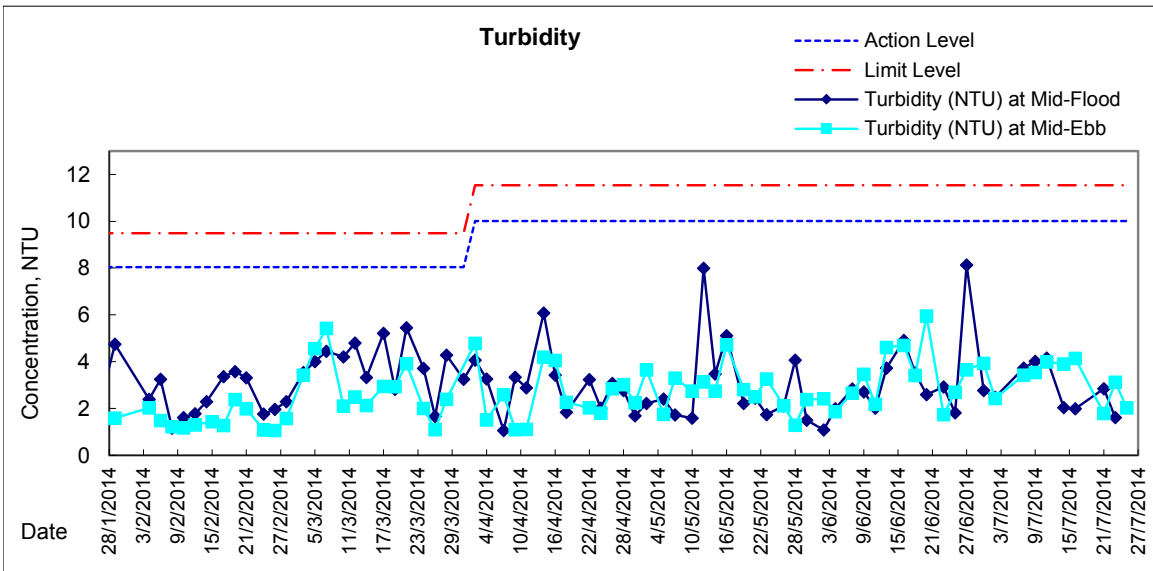
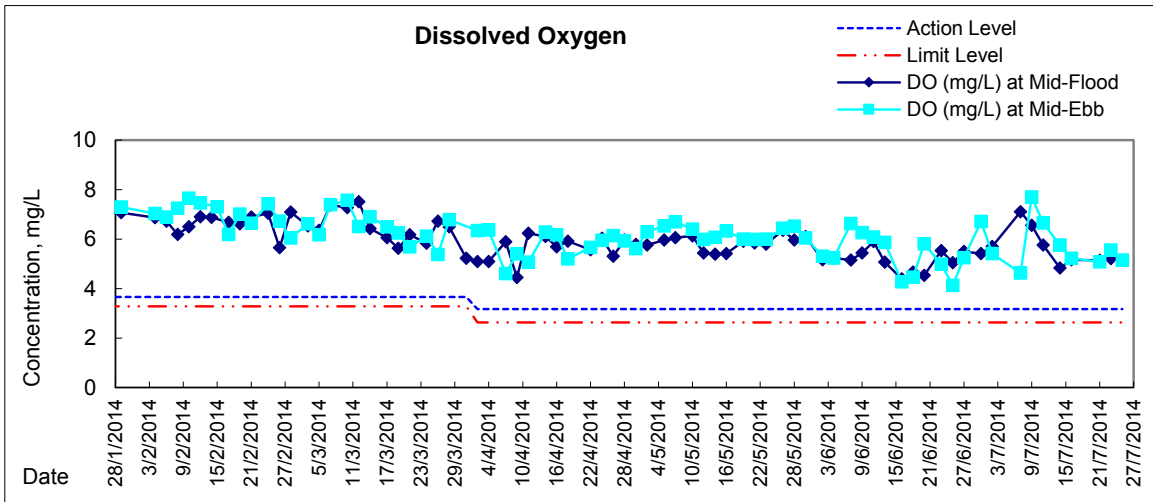
**Water Monitoring Result at WSD19 - Sheung Wan  
Mid-Ebb Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids					
					°C			-			ppt		%		mg/L		NTU		mg/L					
					Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
30/6/2014	13:45	Cloudy	Middle	3.0	29.90	29.90	29.90	8.39	8.39	8.42	25.87	25.87	25.87	95.1	95.3	94.0	6.23	6.27	6.16	5.09	5.14	5.15	3	3.00
	13:47		Middle	3.0	29.90	29.90		8.45	8.45		25.87	25.87		94.3	91.1		6.18	5.97		5.13	5.25		3	
2/7/2014	14:30	Fine	Middle	3.0	30.30	30.30	30.40	8.34	8.34	8.37	26.56	26.56	26.56	96.4	100.4	97.9	6.26	6.52	6.36	3.42	3.42	3.43	5	4.50
	14:32		Middle	3.0	30.50	30.50		8.39	8.39		26.55	26.55		100.0	94.8		6.49	6.15		3.41	3.45		4	
4/7/2014	14:20	Fine	Middle	3.0	31.00	31.00	31.00	8.49	8.49	8.52	26.33	26.33	26.33	101.4	97.3	96.8	6.50	6.23	6.19	3.73	3.94	3.73	2	3.00
	14:22		Middle	3.0	31.00	31.00		8.54	8.54		26.33	26.33		94.1	94.4		6.01	6.02		3.62	3.61		4	
7/7/2014	9:15	Fine	Middle	3.0	28.60	28.60	28.60	8.44	8.44	8.45	23.99	23.99	24.00	103.9	105.3	104.7	7.04	7.14	7.09	4.14	4.14	4.14	5	4.50
	9:17		Middle	3.0	28.60	28.60		8.46	8.46		24.00	24.00		105.0	104.7		7.10	7.09		4.14	4.13		4	
9/7/2014	10:30	Fine	Middle	3.0	28.20	28.20	28.25	8.32	8.32	8.35	27.43	27.43	27.44	103.2	103.2	103.8	6.91	6.91	6.95	3.31	3.32	3.40	3	3.00
	10:32		Middle	3.0	28.30	28.30		8.38	8.38		27.44	27.44		104.2	104.5		6.97	6.99		3.40	3.57		3	
11/7/2014	11:15	Cloudy	Middle	3.0	27.90	27.90	27.90	8.33	8.33	8.35	27.69	27.69	27.69	92.4	90.8	91.0	6.21	6.16	6.13	5.39	5.28	5.30	4	5.00
	11:17		Middle	3.0	27.90	27.90		8.36	8.36		27.68	27.68		90.9	89.8		6.11	6.03		5.27	5.27		6	
14/7/2014	11:35	Fine	Middle	3.5	27.30	27.30	27.25	8.32	8.32	8.31	27.82	27.82	27.83	80.6	81.9	81.0	5.46	5.56	5.49	3.48	3.49	3.49	5	4.50
	11:37		Middle	3.5	27.20	27.20		8.30	8.30		27.83	27.83		81.1	80.2		5.51	5.44		3.50	3.50		4	
16/7/2014	13:50	Sunny	Middle	3.0	30.20	30.20	30.35	8.34	8.34	8.33	28.05	28.05	28.05	89.2	93.6	90.4	5.75	6.03	5.82	3.77	3.81	3.79	3	3.50
	13:52		Middle	3.0	30.50	30.50		8.32	8.32		28.05	28.05		88.6	90.0		5.70	5.79		3.80	3.79		4	
21/7/2014	8:35	Fine	Middle	3.5	27.80	27.80	27.85	8.27	8.27	8.26	28.32	28.32	28.33	77.0	78.0	77.8	5.16	5.22	5.21	2.51	2.51	2.50	3	3.50
	8:37		Middle	3.5	27.90	27.90		8.25	8.25		28.33	28.33		79.2	77.1		5.31	5.16		2.52	2.45		4	
23/7/2014	11:00	Sunny	Middle	3.5	29.50	29.50	29.70	8.24	8.24	8.24	28.98	28.98	28.96	88.5	88.1	88.9	5.71	5.70	5.73	2.40	2.50	2.46	0	0.00
	11:02		Middle	3.5	29.90	29.90		8.24	8.24		28.89	28.98		89.1	89.7		5.76	5.73		2.51	2.43		0	
25/7/2014	11:05	Cloudy	Middle	3.0	28.70	28.70	28.75	8.29	8.29	8.29	27.14	27.14	27.14	89.4	89.8	87.9	5.94	5.97	5.84	1.77	1.76	1.76	0	0.00
	11:07		Middle	3.0	28.80	28.80		8.29	8.29		27.14	27.14		87.3	85.0		5.80	5.65		1.76	1.75		0	

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.

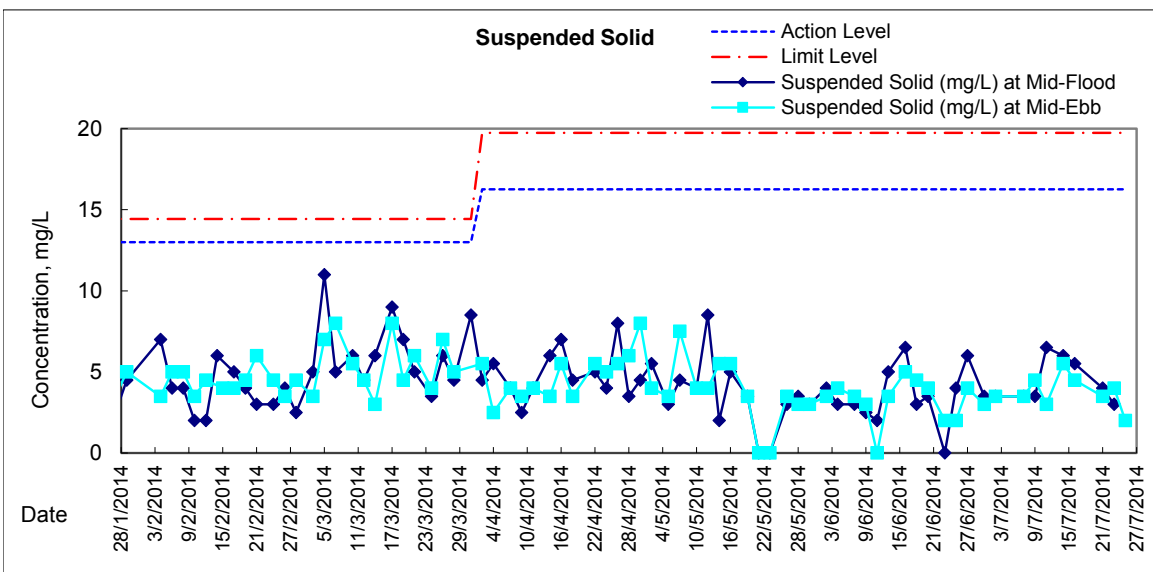
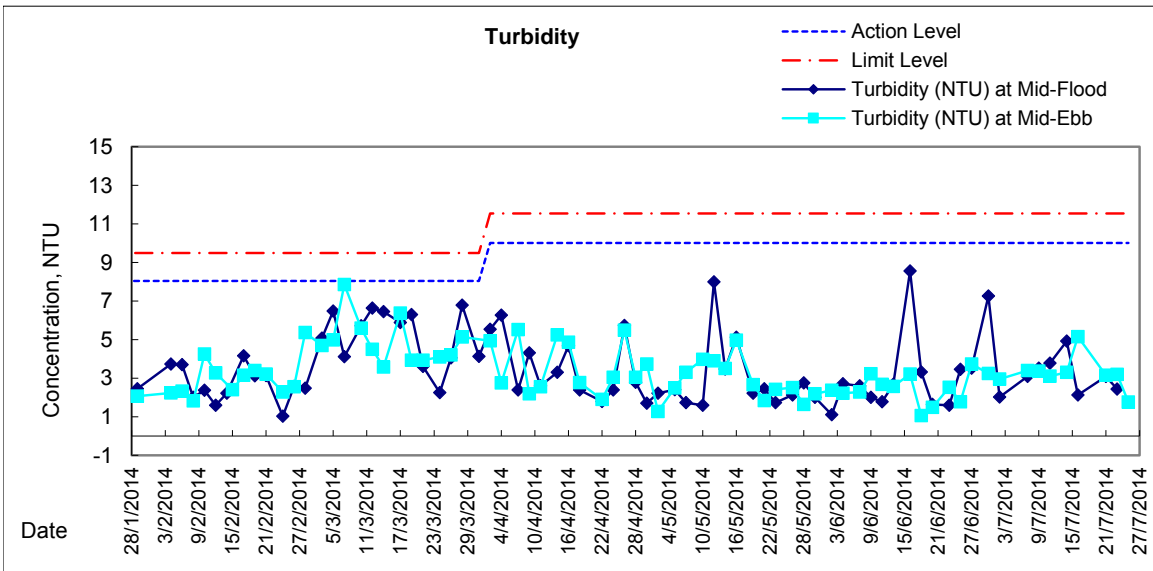
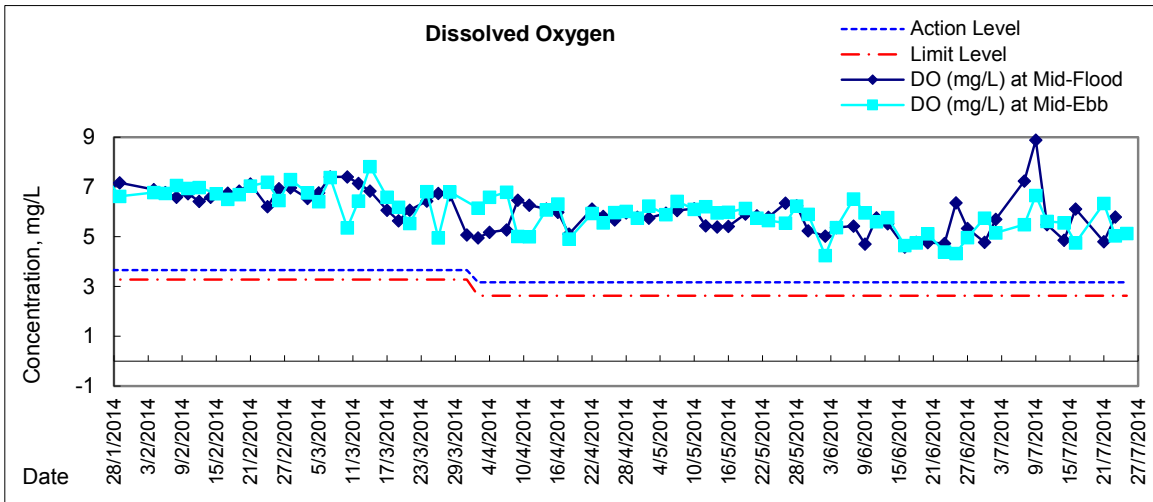


# Graphic Presentation of Water Quality Result of WSD9 - Tai Wan



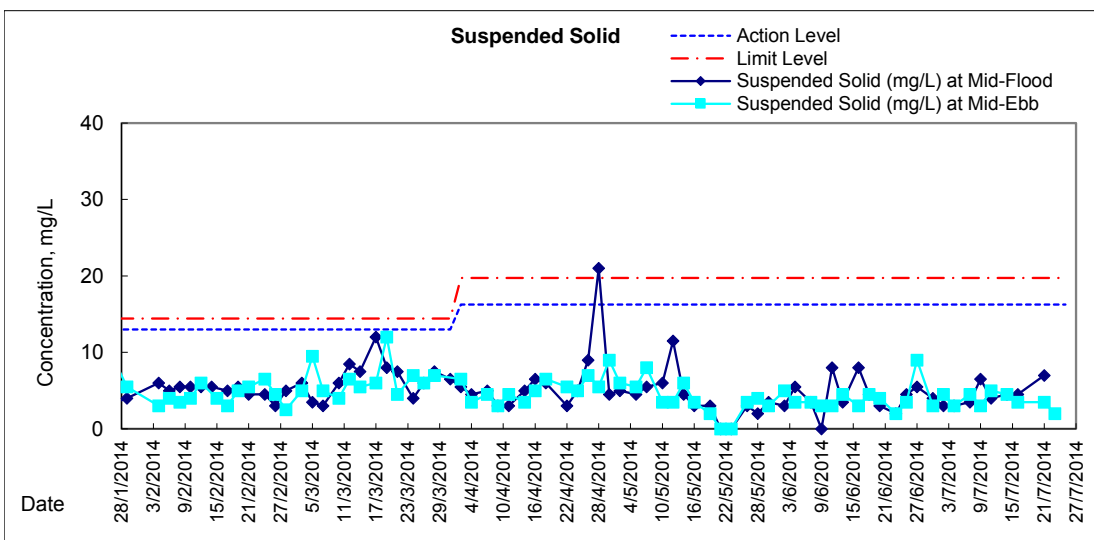
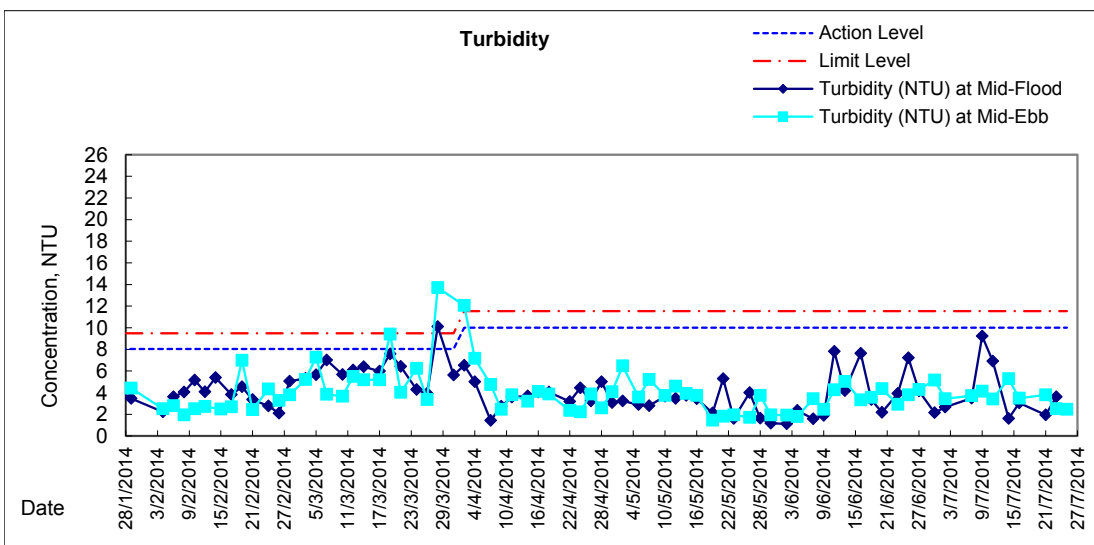
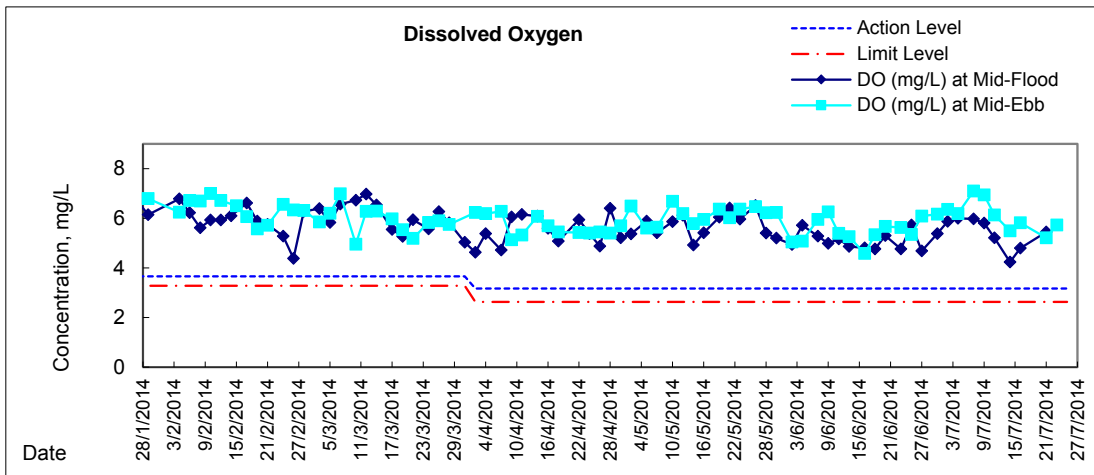


# Graphic Presentation of Water Quality Result of WSD17 - Quarry Bay



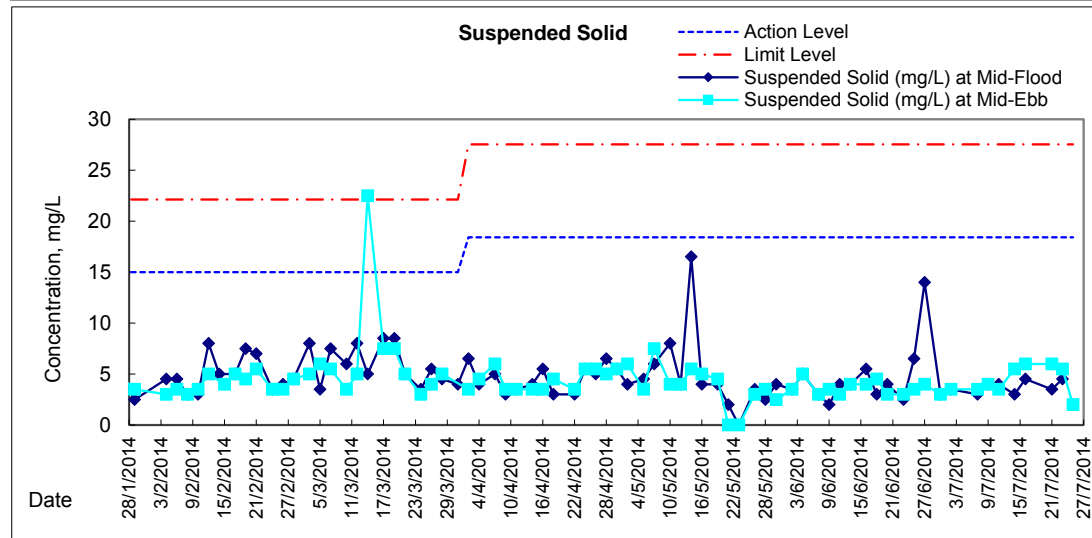
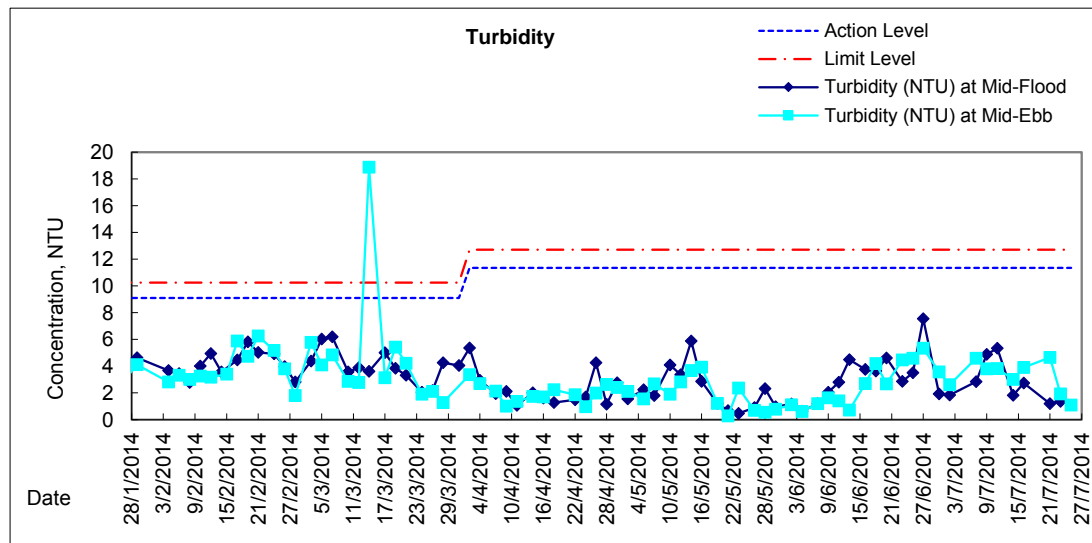
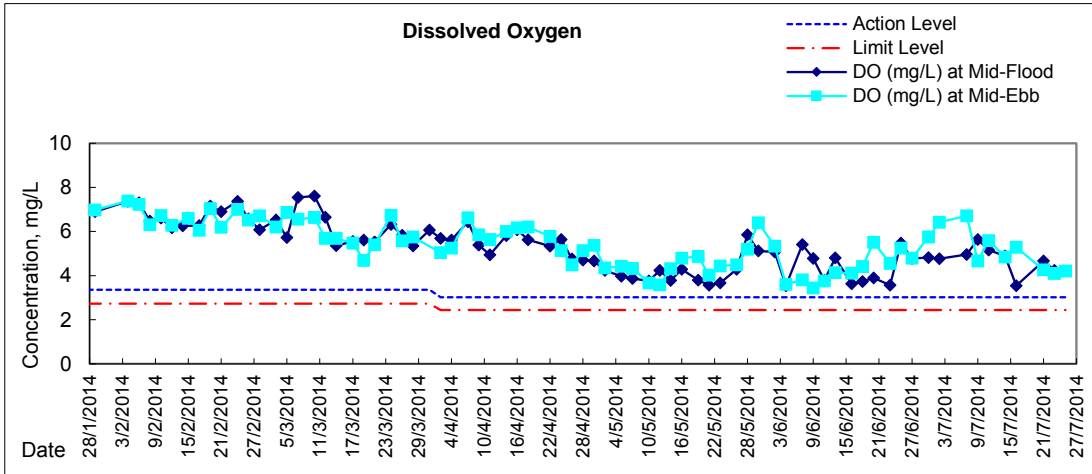


# Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan



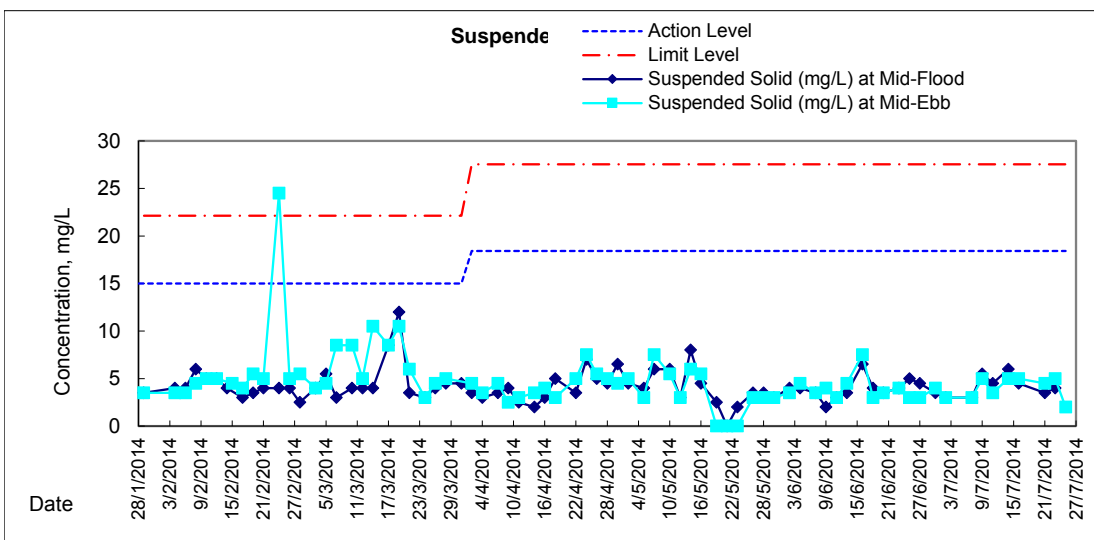
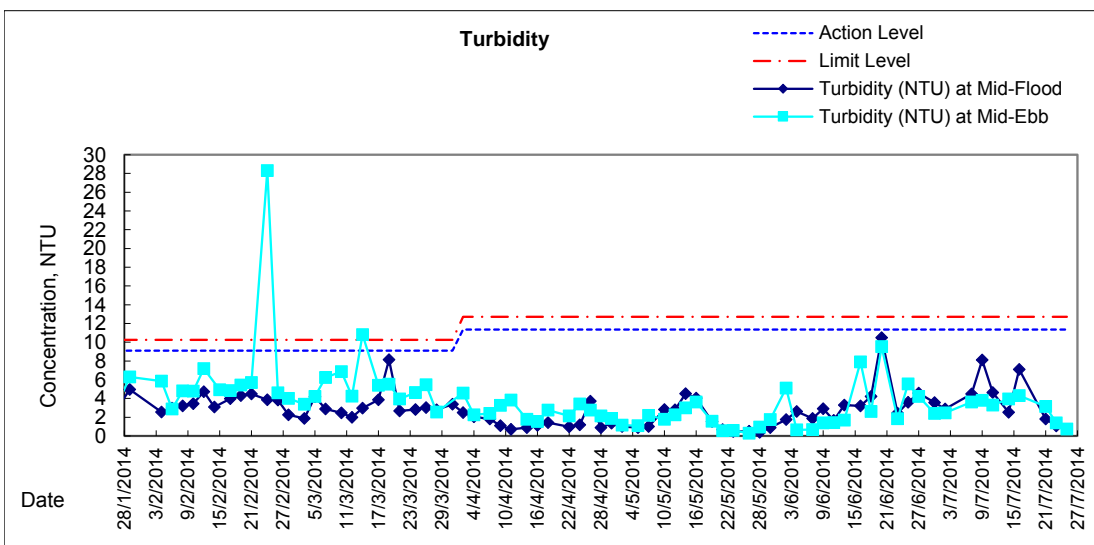
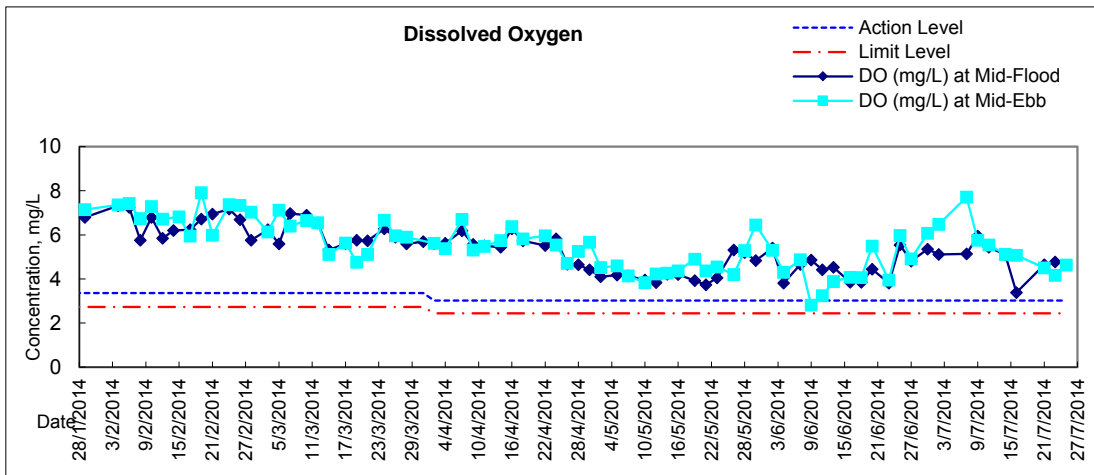


### Graphic Presentation of Water Quality Result of C1 - HKCEC





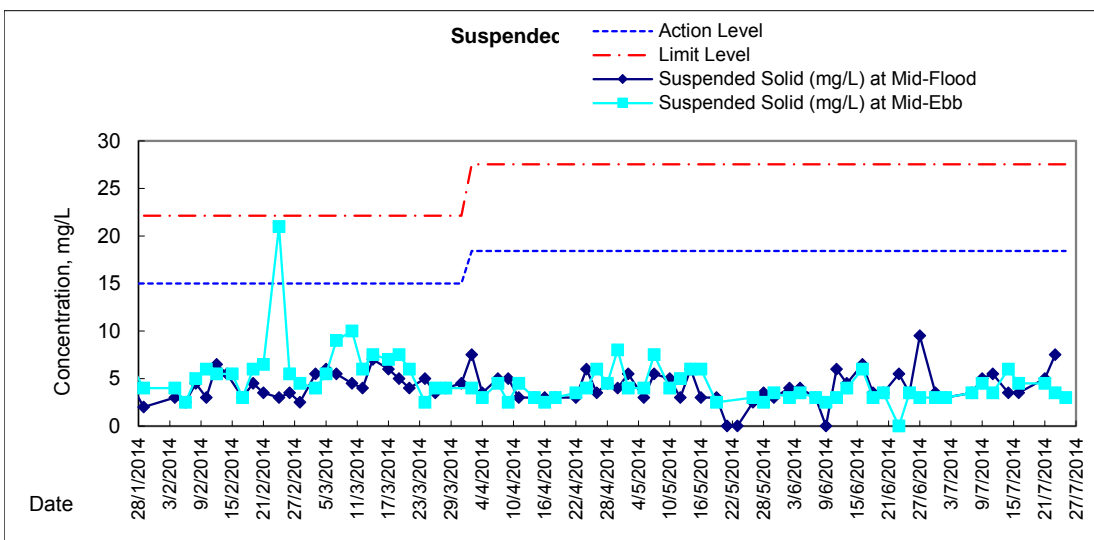
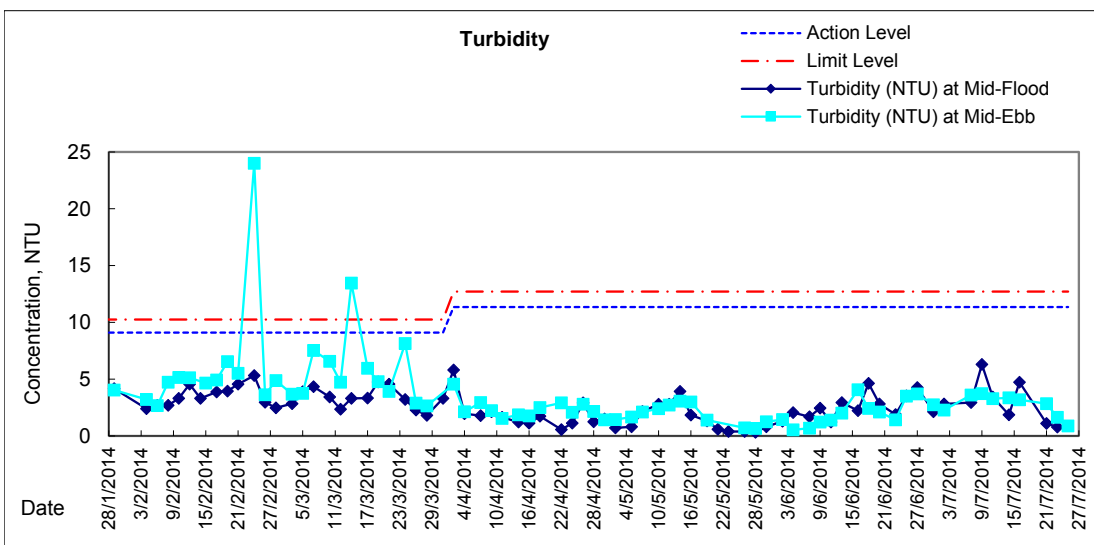
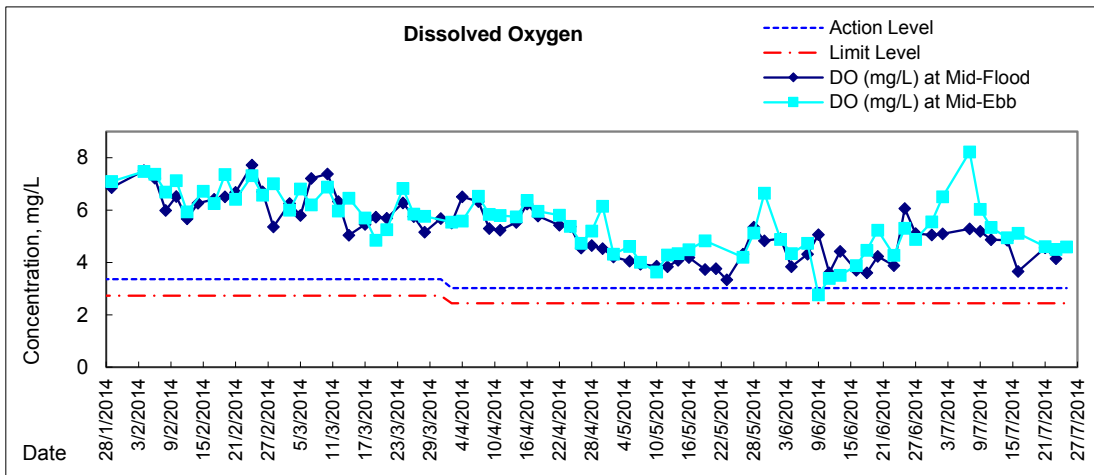
# Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I





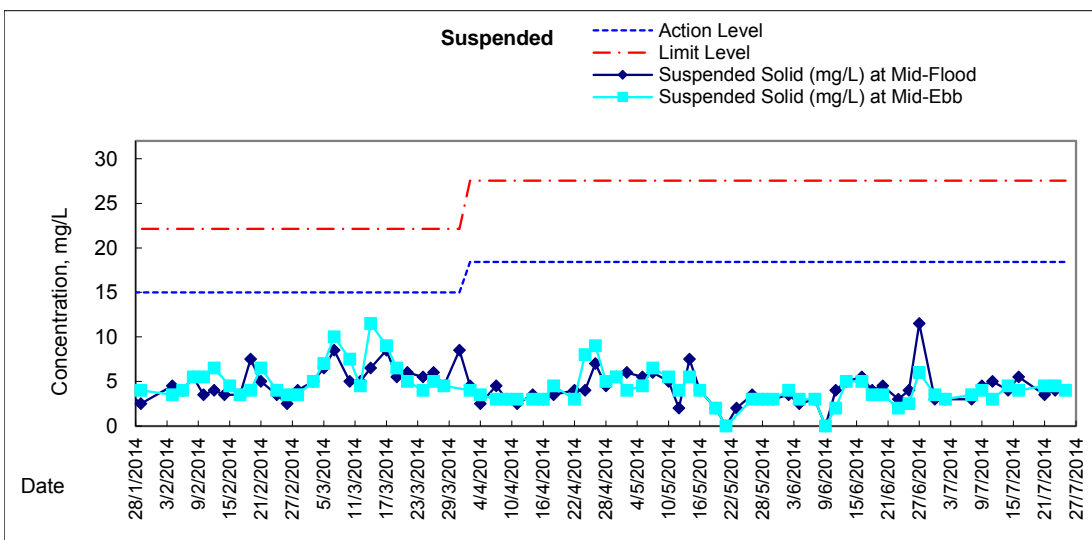
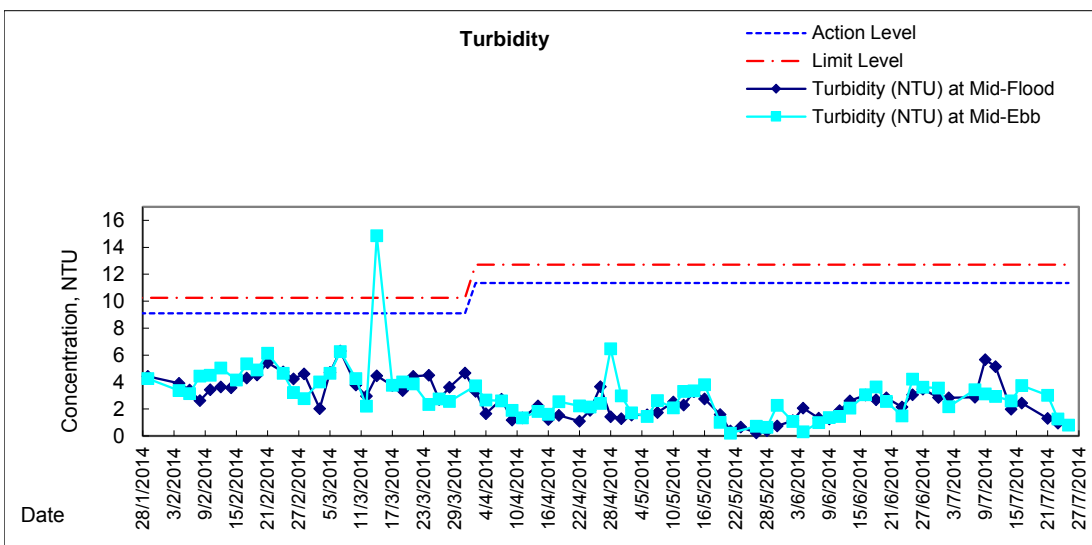
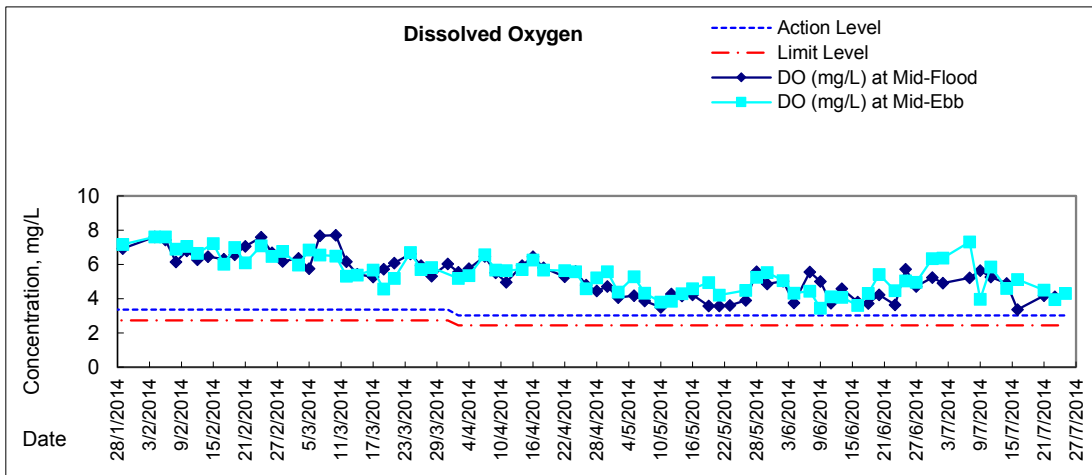


# Graphic Presentation of Water Quality Result of P3 - APA



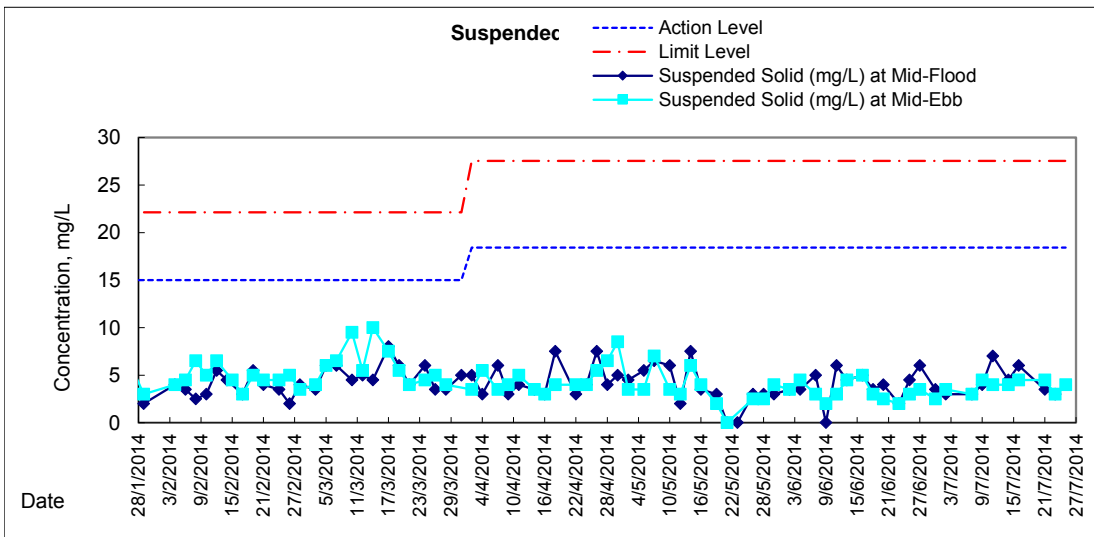
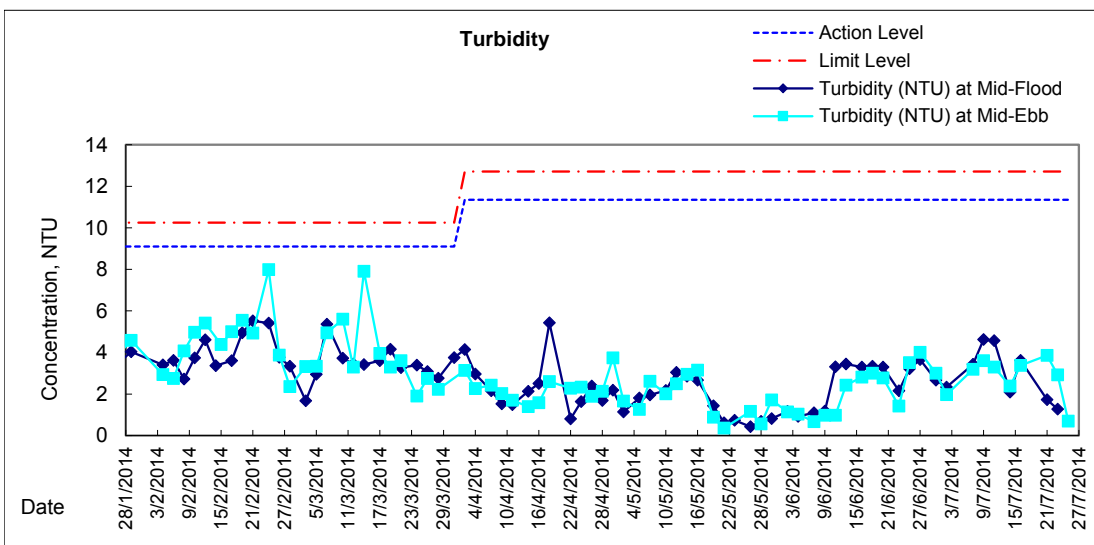
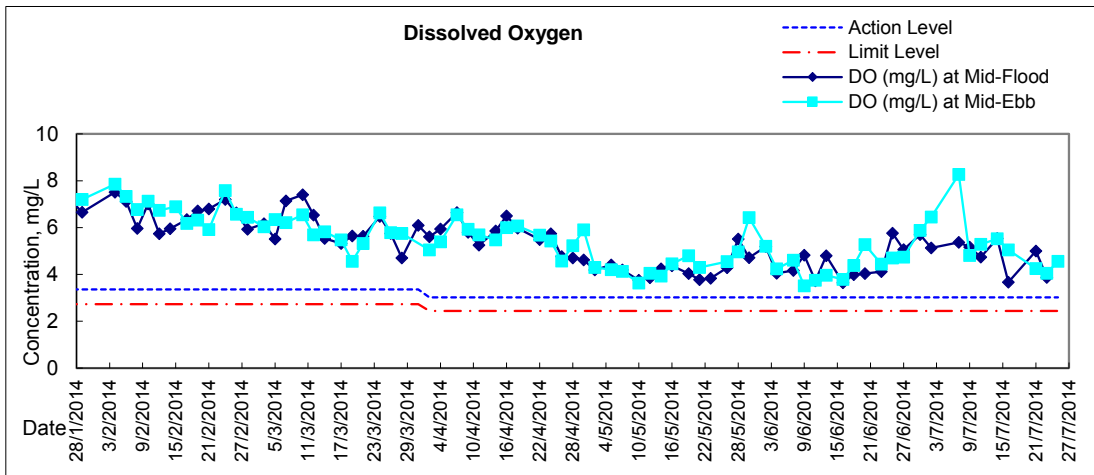


### Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT



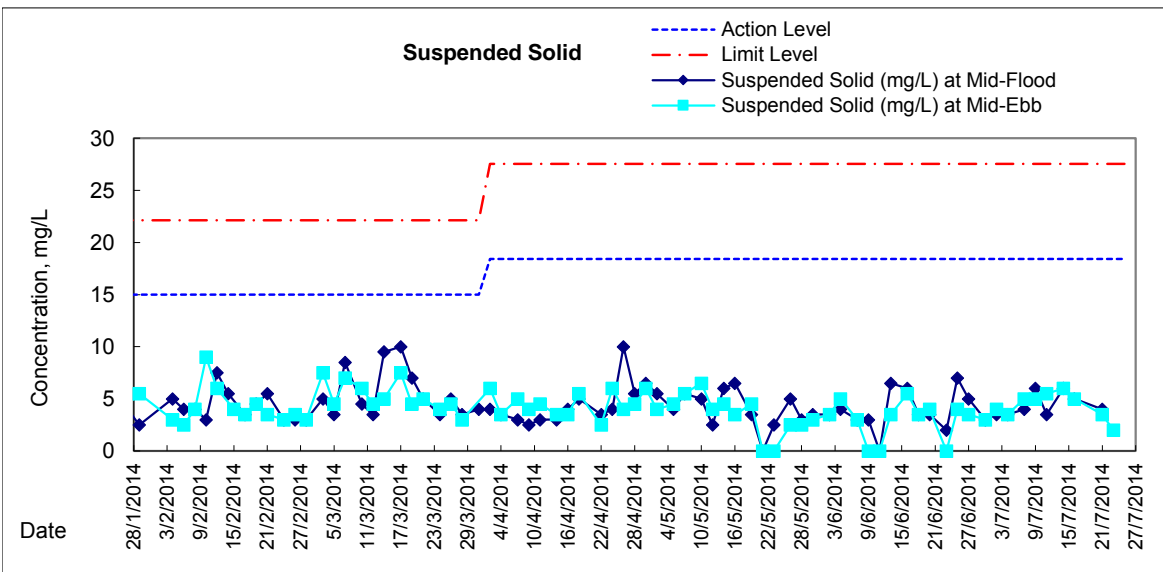
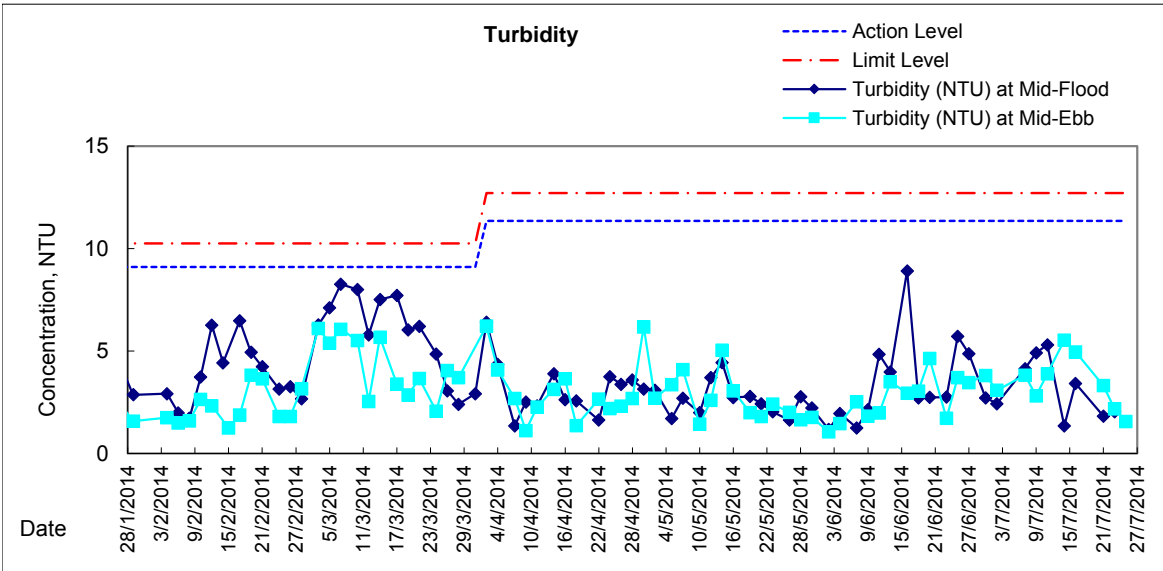
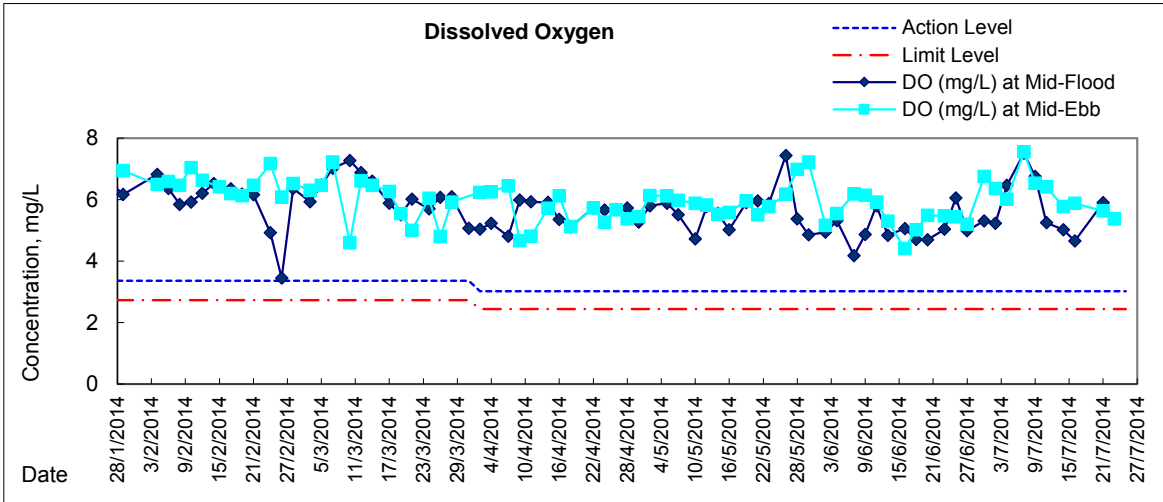


### Graphic Presentation of Water Quality Result of P4 - SOC



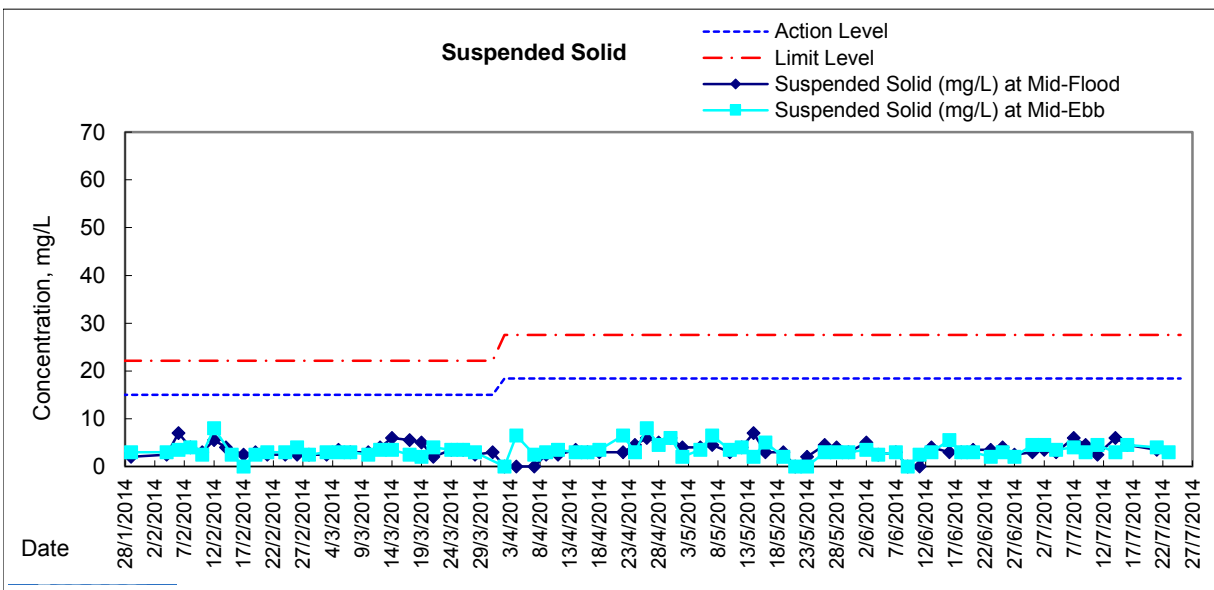
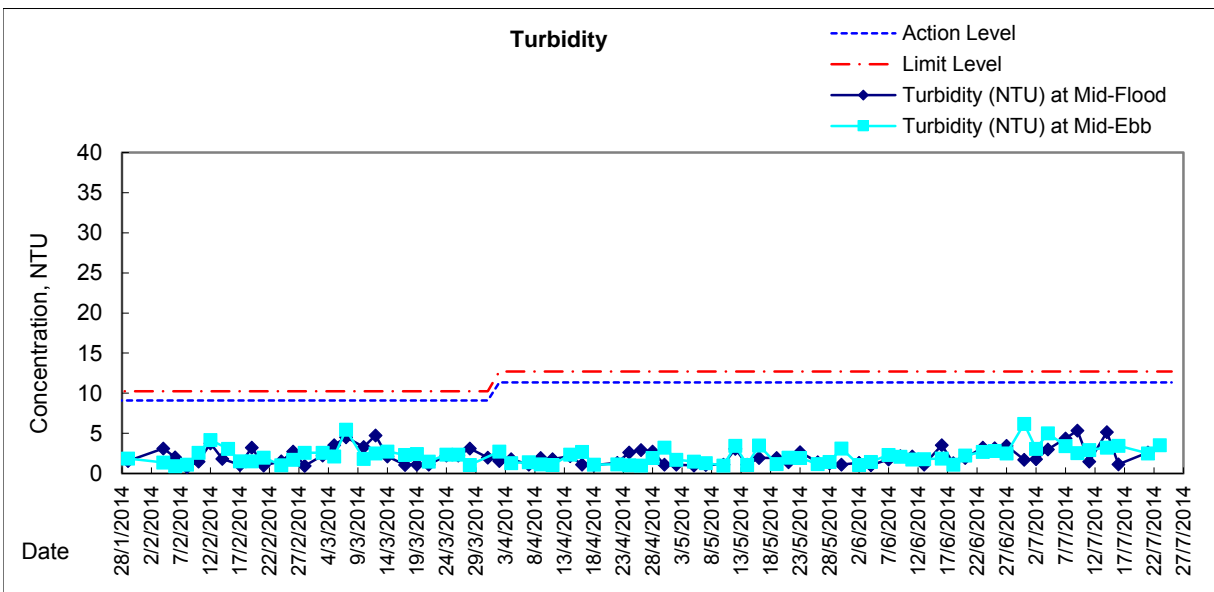
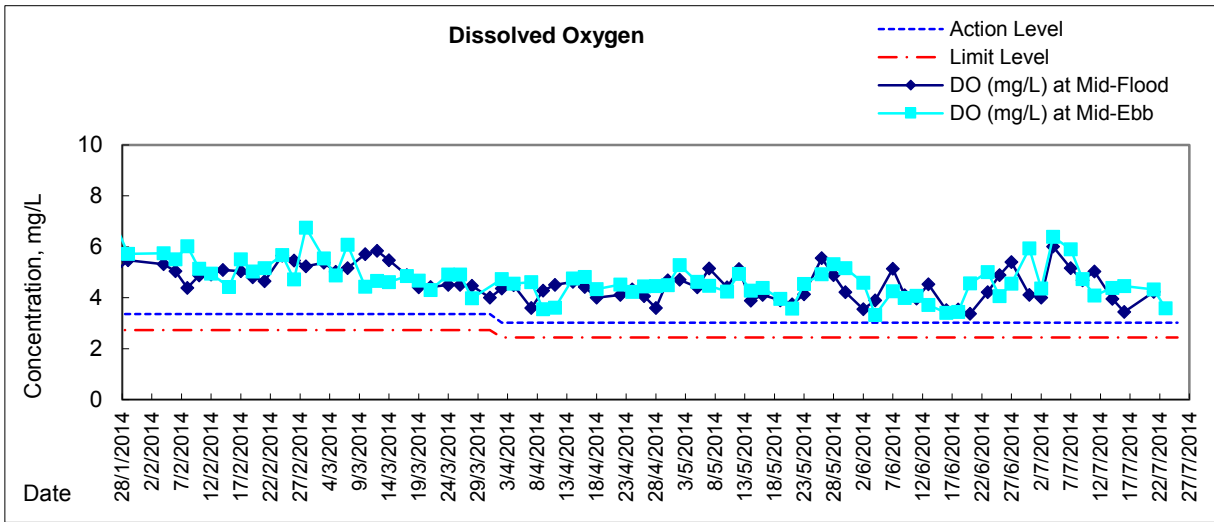


# Graphic Presentation of Water Quality Result of RW21-P789 - GEC/CRC/SHK





# Graphic Presentation of Water Quality Result of C7 - Windsor House





**Water Monitoring Result at C6 - Excelsior Hotel  
Mid-Flood Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6:34		Middle	1.5	29.50	29.50	29.5	8.24	8.24	8.2	24.14	24.14	24.1	64.4	65.5	65.0	4.30	4.38	4.34
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:50		Middle	1.5	29.10	29.10	29.1	8.30	8.30	8.3	26.34	26.34	26.3	72.9	76.1	74.5	4.83	5.05	4.94
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:15		Middle	1.5	29.80	29.80	29.8	8.41	8.41	8.4	26.18	26.18	26.2	94.8	92.1	93.5	6.28	6.10	6.19
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4:10		Middle	1.5	28.70	28.70	28.7	7.83	7.83	7.8	23.62	23.63	23.6	55.3	57.2	56.3	3.77	3.90	3.84
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:00		Middle	1.5	28.50	28.50	28.5	8.33	8.33	8.3	27.35	27.35	27.4	87.4	87.6	87.5	5.38	5.39	5.39
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17:05		Middle	1.5	28.20	28.20	28.2	8.30	8.30	8.3	27.85	27.85	27.9	65.8	66.1	66.0	4.40	4.41	4.41
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7:17		Middle	1.5	27.60	27.60	27.6	7.98	7.98	8.0	27.85	27.85	27.9	67.4	67.8	67.6	4.64	4.65	4.65
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:40		Middle	1.5	28.00	28.00	28.0	8.14	8.14	8.1	28.12	28.12	28.1	85.4	84.5	85.0	5.74	5.67	5.71
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:49		Middle	1.5	27.80	27.80	27.8	8.04	8.04	8.0	29.36	29.36	29.4	54.8	54.4	54.6	3.66	3.63	3.65
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:20		Middle	1.5	29.60	29.60	29.6	8.13	8.13	8.1	27.93	27.93	27.9	81.7	82.5	82.1	5.22	5.27	5.25
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:46		Middle	1.0	27.50	27.50	27.5	7.95	7.95	8.0	29.19	29.19	29.2	72.5	73.3	72.9	4.95	5.00	4.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C7 - Windsor House  
Mid-Flood Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6:23		Middle	1.5	29.30	29.30	29.3	8.04	8.04	8.0	28.67	28.67	28.7	60.4	62.1	61.3	3.97	4.05	4.01
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:00		Middle	1.5	29.00	29.00	29.0	8.30	8.30	8.3	26.19	26.19	26.2	58.7	60.4	59.6	3.89	4.01	3.95
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:25		Middle	1.5	29.50	29.50	29.5	8.42	8.42	8.4	25.76	25.76	25.8	88.4	84.1	86.3	5.85	5.54	5.70
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4:00		Middle	1.5	28.80	28.80	28.8	8.07	8.07	8.1	26.18	26.18	26.2	73.5	75.3	74.4	4.91	5.03	4.97
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:07		Middle	1.5	28.60	28.60	28.6	8.32	8.32	8.3	27.05	27.05	27.1	75.1	77.2	76.2	5.00	5.13	5.07
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17:10		Middle	1.5	28.30	28.30	28.3	8.32	8.32	8.3	27.43	27.43	27.4	69.8	71.1	70.5	4.66	4.75	4.71
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7:10		Middle	1.5	27.60	27.60	27.6	7.99	7.99	8.0	28.14	28.14	28.1	72.0	71.8	71.9	5.13	4.94	5.04
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:50		Middle	1.5	27.70	27.70	27.7	8.17	8.17	8.2	28.10	28.10	28.1	58.1	58.5	58.3	3.91	3.93	3.92
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:40		Middle	1.5	27.80	27.80	27.8	8.05	8.05	8.1	29.86	29.86	29.9	51.0	51.6	51.3	3.39	3.43	3.41
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:25		Middle	1.5	29.50	29.50	29.5	8.14	8.14	8.1	27.37	27.37	27.4	63.1	65.1	64.1	4.13	4.26	4.20
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:36		Middle	1.0	27.30	27.30	27.3	7.99	7.99	8.0	28.79	28.79	28.8	76.7	77.4	77.1	5.27	5.31	5.29
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





**Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area  
Mid-Flood Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6:05		Middle	1.5	29.00	29.00	29.0	8.07	8.07	8.1	21.48	21.48	21.5	53.9	55.2	54.6	3.68	3.77	3.73
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:32		Middle	1.5	28.60	28.60	28.6	8.31	8.31	8.3	25.15	25.15	25.2	83.5	82.4	83.0	5.63	5.56	5.60
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:02		Middle	1.5	28.80	28.80	28.8	8.46	8.46	8.5	24.38	24.38	24.4	97.2	100.7	99.0	6.55	6.79	6.67
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:39		Middle	1.5	28.90	28.90	28.9	8.13	8.13	8.1	18.18	18.18	18.2	15.5	17.5	16.5	1.08	1.22	<u>1.15</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:52		Middle	1.5	28.10	28.10	28.1	8.36	8.36	8.4	26.07	26.07	26.1	87.8	88.1	88.0	5.94	5.96	5.95
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:57		Middle	1.5	27.60	27.60	27.6	8.34	8.34	8.3	27.14	27.14	27.1	79.7	81.5	80.6	5.40	5.52	5.46
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7:58		Middle	1.5	27.60	27.60	27.6	8.00	8.00	8.0	23.04	23.04	23.0	26.3	27.4	26.9	1.86	1.93	<u>1.90</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:32		Middle	1.5	27.30	27.30	27.3	8.15	8.15	8.2	27.07	27.07	27.1	89.3	90.2	89.8	6.07	6.13	6.10
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:22		Middle	1.5	27.70	27.70	27.7	8.05	8.05	8.1	24.91	24.91	24.9	34.0	34.6	34.3	2.33	2.37	<u>2.35</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:02		Middle	1.5	29.30	29.30	29.3	8.15	8.15	8.2	27.51	27.51	27.5	48.8	48.7	48.8	3.20	3.20	3.20
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19:36		Middle	1.5	27.40	27.40	27.4	8.13	8.13	8.1	19.35	19.35	19.4	14.2	15.0	14.6	1.02	1.08	<u>1.05</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area  
Mid-Flood Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6:10		Middle	1.5	29.00	29.10	29.1	7.97	7.97	8.0	21.32	21.32	21.3	52.6	54.0	53.3	3.60	3.69	3.65
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:30		Middle	1.5	28.90	28.90	28.9	8.32	8.32	8.3	25.50	25.50	25.5	65.7	65.8	65.8	4.39	4.40	4.40
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:00		Middle	1.5	29.00	29.00	29.0	8.44	8.44	8.4	24.90	24.90	24.9	104.6	103.5	104.1	7.00	6.95	6.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:47		Middle	1.5	28.70	28.70	28.7	7.96	7.96	8.0	17.88	17.88	17.9	15.9	16.2	16.1	1.12	1.14	<u>1.13</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:50		Middle	1.5	28.50	28.50	28.5	8.37	8.37	8.4	25.82	25.82	25.8	90.1	93.0	91.6	6.05	6.24	6.15
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:55		Middle	1.5	27.70	27.70	27.7	8.36	8.36	8.4	27.50	27.50	27.5	74.2	73.6	73.9	5.00	4.96	4.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8:07		Middle	1.5	27.60	27.60	27.6	7.92	7.92	7.9	22.56	22.58	22.6	35.5	35.0	35.3	2.52	2.48	<u>2.50</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:30		Middle	1.5	27.60	27.60	27.6	8.21	8.21	8.2	25.47	25.47	25.5	73.2	72.1	72.7	4.92	4.81	4.87
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:29		Middle	1.5	27.80	27.80	27.8	7.89	7.89	7.9	24.76	24.76	24.8	38.5	39.3	38.9	2.63	2.69	<u>2.66</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:00		Middle	1.5	29.70	29.70	29.7	8.20	8.20	8.2	27.15	27.15	27.2	74.6	75.2	74.9	4.86	4.90	4.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19:45		Middle	1.5	27.40	27.40	27.4	8.01	8.01	8.0	19.23	19.23	19.2	14.8	15.4	15.1	1.07	1.12	<u>1.10</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C6 - Excelsior Hotel  
Mid-Ebb Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:35		Middle	2	28.90	28.90	28.9	8.34	8.34	8.3	28.28	28.28	28.3	86.6	87.7	87.2	5.70	5.77	5.74
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:25		Middle	2	29.20	29.20	29.2	8.26	8.26	8.3	26.07	26.07	26.1	68.5	67.9	68.2	4.54	4.50	4.52
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:10		Middle	2	30.10	30.10	30.1	8.36	8.36	8.4	25.91	25.91	25.9	82.4	77.4	79.9	5.39	5.06	5.23
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:00		Middle	2	28.90	28.90	28.9	8.40	8.40	8.4	24.51	24.51	24.5	84.7	84.5	84.6	5.68	5.67	5.68
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:10		Middle	2	27.90	27.90	27.9	8.24	8.24	8.2	27.77	27.77	27.8	62.0	63.3	62.7	4.16	4.25	4.21
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:45		Middle	2	27.60	27.60	27.6	8.21	8.21	8.2	26.10	26.10	26.1	70.1	69.8	70.0	4.84	4.80	4.82
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:10		Middle	2	28.40	28.40	28.4	8.23	8.23	8.2	26.68	26.68	26.7	83.3	82.8	83.1	5.57	5.53	5.55
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Sunny	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:35		Middle	2	28.40	28.40	28.4	8.14	8.14	8.1	28.04	28.04	28.0	79.8	80.0	79.9	5.30	5.31	5.31
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:25		Middle	2	27.90	27.90	27.9	8.16	8.16	8.2	28.51	28.51	28.5	87.5	87.3	87.4	5.86	5.84	5.85
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	0:00	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:45		Middle	2	29.00	29.00	29.0	8.15	8.15	8.2	27.80	27.80	27.8	53.4	52.7	53.1	3.52	3.47	3.50
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12:02		Middle	2	28.40	28.40	28.4	8.21	8.21	8.2	27.15	27.15	27.2	68.1	68.4	68.3	4.54	4.56	4.55
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area  
Mid-Ebb Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:27		Middle	1.5	28.70	28.70	28.7	8.41	8.41	8.4	23.14	23.14	23.1	87.7	87.9	87.8	5.97	5.99	5.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:17		Middle	1.5	28.60	28.60	28.6	8.40	8.40	8.4	19.47	19.47	19.5	74.7	77.0	75.9	5.20	5.36	5.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:02		Middle	1.5	29.10	29.10	29.1	8.63	8.63	8.6	16.56	16.56	16.6	67.1	61.5	64.3	4.69	4.28	4.69
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:52		Middle	1.5	28.40	28.40	28.4	8.44	8.44	8.4	23.03	23.03	23.0	91.0	91.4	91.2	6.22	6.25	6.24
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:02		Middle	1.5	27.70	27.70	27.7	8.25	8.25	8.3	24.32	24.32	24.3	85.1	85.4	85.3	5.84	5.85	5.85
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:40		Middle	1.5	27.30	27.30	27.3	8.33	8.33	8.3	25.61	25.61	25.6	82.7	82.6	82.7	5.69	5.69	5.69
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:02		Middle	1.5	27.90	27.90	27.9	8.23	8.23	8.2	25.63	25.63	25.6	85.5	87.4	86.5	5.81	5.97	5.89
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Sunny	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:27		Middle	1.5	28.20	28.20	28.2	8.26	8.26	8.3	21.70	21.70	21.7	76.0	78.0	77.0	5.27	5.40	5.34
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:17		Middle	1.5	27.80	27.80	27.8	8.22	8.22	8.2	26.85	26.85	26.9	82.6	79.9	81.3	5.60	5.41	5.51
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	0:00	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:42		Middle	1.5	29.50	29.50	29.5	8.18	8.18	8.2	26.43	26.43	26.4	57.5	54.9	56.2	3.78	3.60	3.69
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:47		Middle	1.5	28.50	28.50	28.5	8.23	8.23	8.2	25.74	25.74	25.7	85.7	85.8	85.8	5.77	5.78	5.78
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C7 - Windsor House  
Mid-Ebb Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:45		Middle	2	29.20	29.20	29.2	8.38	8.38	8.4	27.37	27.37	27.4	88.0	90.7	89.4	5.79	5.97	5.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:30		Middle	2	29.30	29.30	29.3	8.29	8.29	8.3	26.27	26.27	26.3	64.5	65.7	65.1	4.27	4.28	4.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:20		Middle	2	29.90	29.90	29.9	8.45	8.45	8.5	25.94	25.94	25.9	96.1	95.8	96.0	6.29	6.28	6.29
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:05		Middle	2	29.10	29.10	29.1	8.43	8.43	8.4	24.55	24.55	24.6	86.6	87.3	87.0	5.81	5.86	5.84
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:15		Middle	2	28.30	28.30	28.3	8.25	8.25	8.3	27.14	27.14	27.1	72.7	73.0	72.9	4.87	4.89	4.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:57		Middle	2	28.20	28.20	28.2	8.28	8.28	8.3	26.85	26.85	26.9	58.2	61.9	60.1	3.91	4.15	4.03
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:15		Middle	2	28.80	28.80	28.8	8.23	8.23	8.2	26.05	26.05	26.1	69.1	69.3	69.2	4.61	4.62	4.62
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Sunny	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:45		Middle	2	28.20	28.20	28.2	8.17	8.17	8.2	28.44	28.44	28.4	68.0	68.5	68.3	4.52	4.54	4.53
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:30		Middle	2	27.90	27.90	27.9	8.18	8.18	8.2	27.75	27.75	27.8	66.1	66.8	66.5	4.43	4.48	4.46
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	0:00	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:50		Middle	2	29.20	29.20	29.2	8.13	8.13	8.1	27.79	27.79	27.8	53.0	54.5	53.8	3.48	3.58	3.53
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:52		Middle	2	28.90	28.90	28.9	8.18	8.18	8.2	27.02	27.02	27.0	62.9	63.8	63.4	4.18	4.24	4.21
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



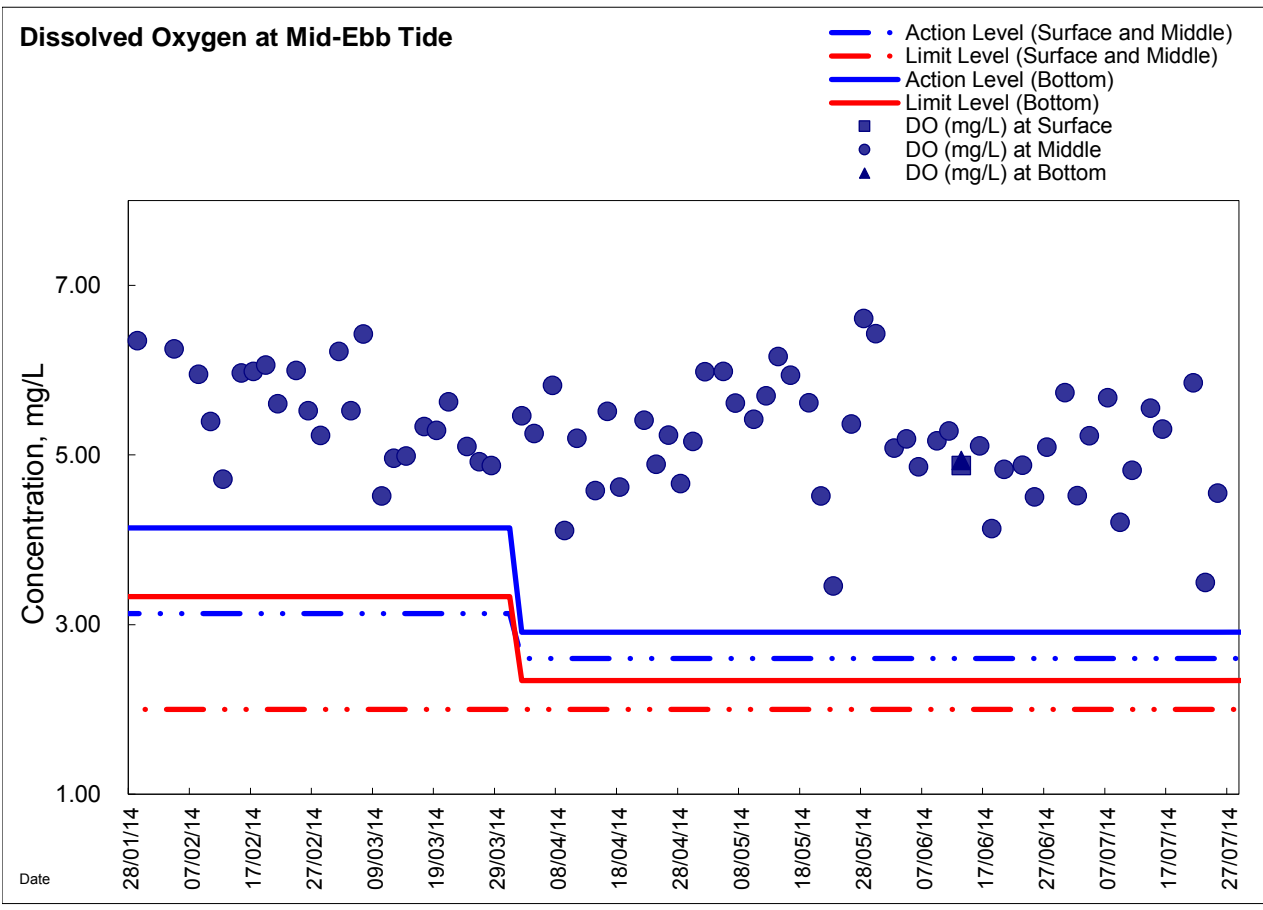
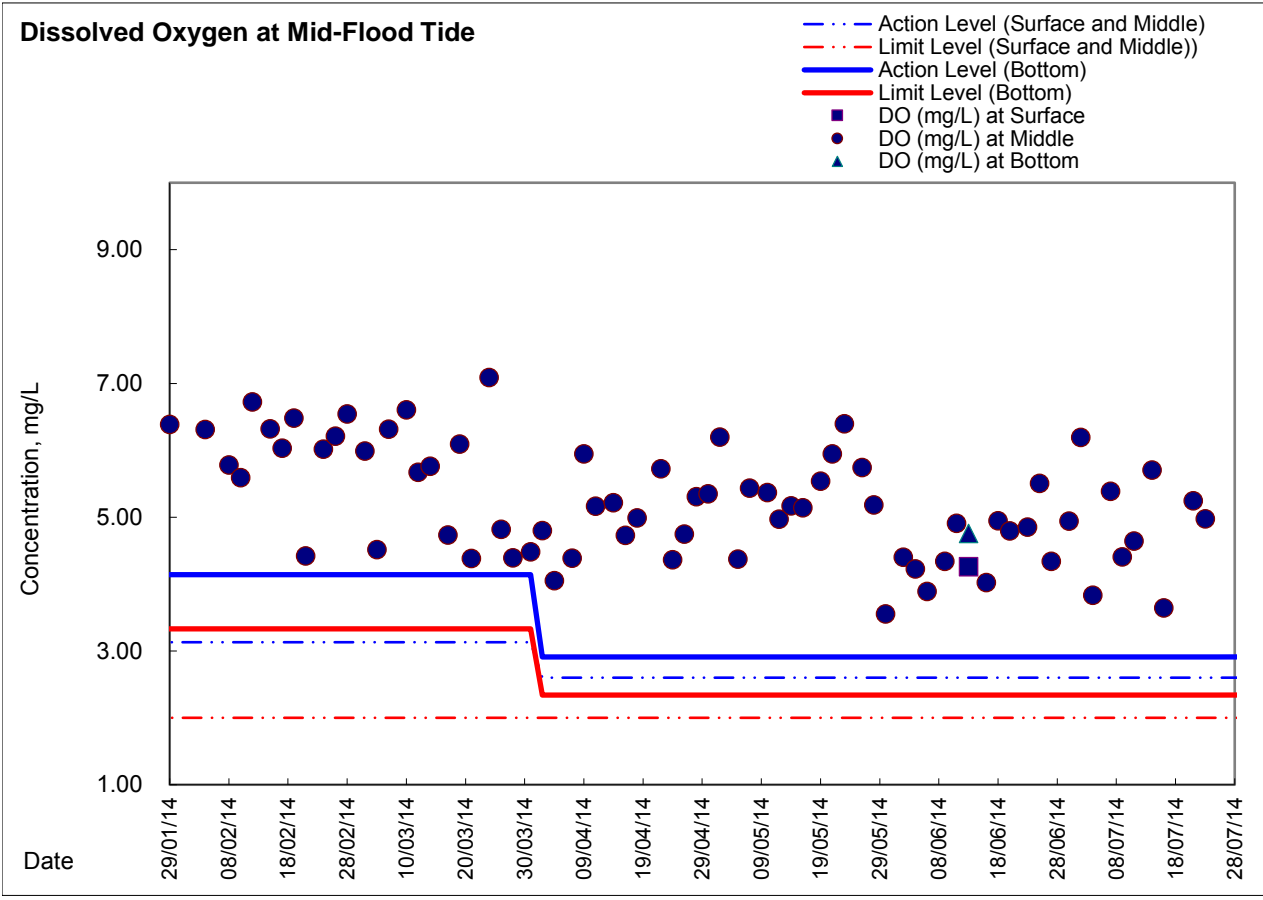
**Water Monitoring Result at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area  
Mid-Ebb Tide**

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
30/6/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:25		Middle	1.5	29.10	29.10	29.1	8.44	8.44	8.4	22.84	22.84	22.8	85.2	86.0	85.6	5.75	5.80	5.78
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:15		Middle	1.5	28.90	28.90	28.9	8.36	8.36	8.4	23.52	23.52	23.5	69.2	67.0	68.1	4.67	4.52	4.60
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:00		Middle	1.5	30.20	30.20	30.2	8.51	8.51	8.5	25.49	25.49	25.5	78.2	77.3	77.8	5.13	5.07	5.10
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:50		Middle	1.5	28.50	28.50	28.5	8.45	8.45	8.5	23.99	23.99	24.0	91.7	93.4	92.6	6.22	6.34	6.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:00		Middle	1.5	27.80	27.80	27.8	8.36	8.36	8.4	21.67	21.67	21.7	63.8	64.2	64.0	4.44	4.47	4.46
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:38		Middle	1.5	27.10	27.10	27.1	8.35	8.35	8.4	25.07	25.07	25.1	63.1	61.0	62.1	4.35	4.20	4.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:00		Middle	1.5	28.10	28.10	28.1	8.26	8.26	8.3	25.69	25.69	25.7	72.5	74.2	73.4	4.91	5.02	4.97
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/7/2014	-	Sunny	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:25		Middle	1.5	29.00	29.00	29.0	8.21	8.21	8.2	26.69	26.69	26.7	86.9	82.4	84.7	5.75	5.44	5.60
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/7/2014	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:15		Middle	1.5	27.80	27.80	27.8	8.26	8.26	8.3	27.36	27.36	27.4	85.7	85.2	85.5	5.77	5.73	5.75
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/7/2014	-	0:00	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:40		Middle	1.5	29.30	29.30	29.3	8.22	8.22	8.2	26.98	26.98	27.0	59.1	60.0	59.6	3.89	3.95	3.92
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/7/2014	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:45		Middle	1.5	28.50	28.50	28.5	8.26	8.26	8.3	25.58	25.58	25.6	63.8	63.7	63.8	4.29	4.29	4.29
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



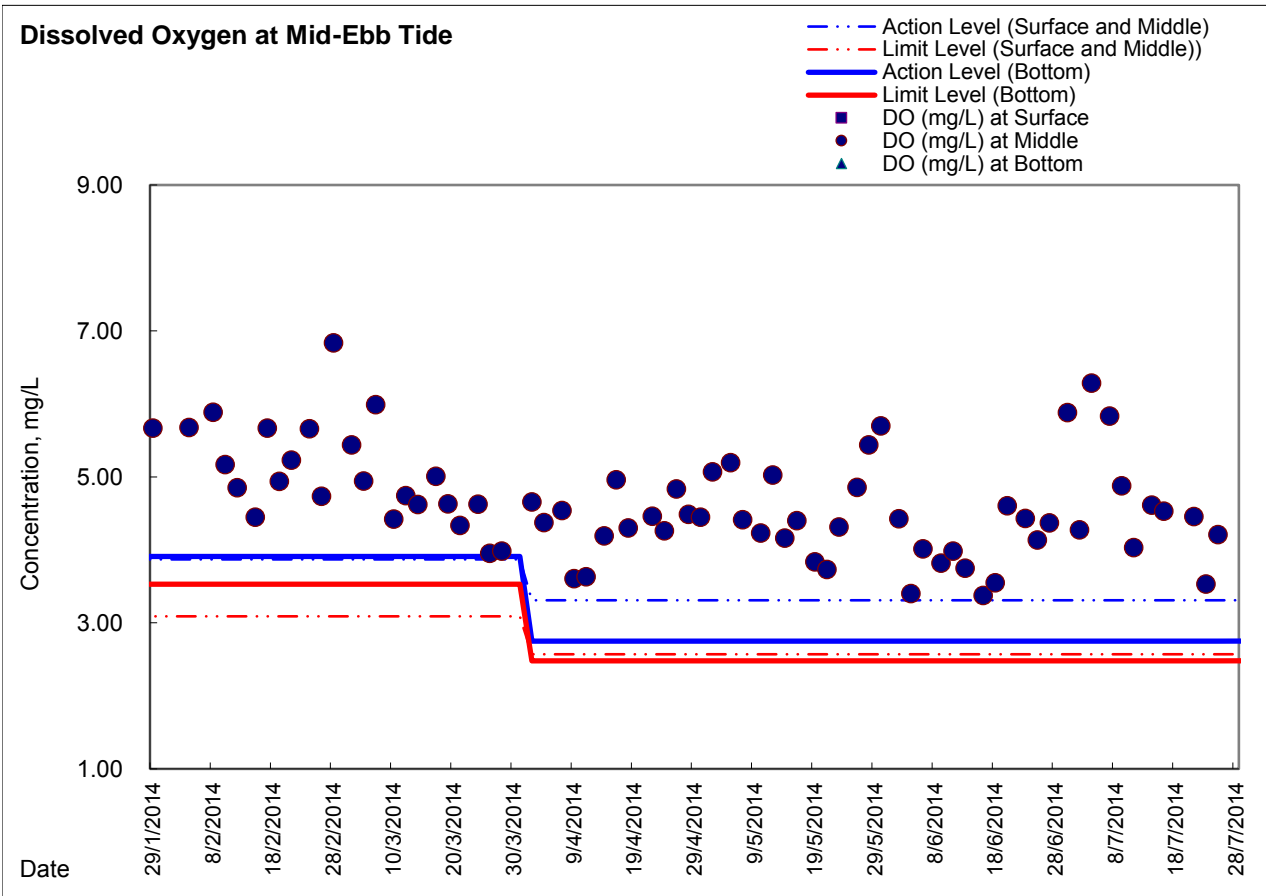
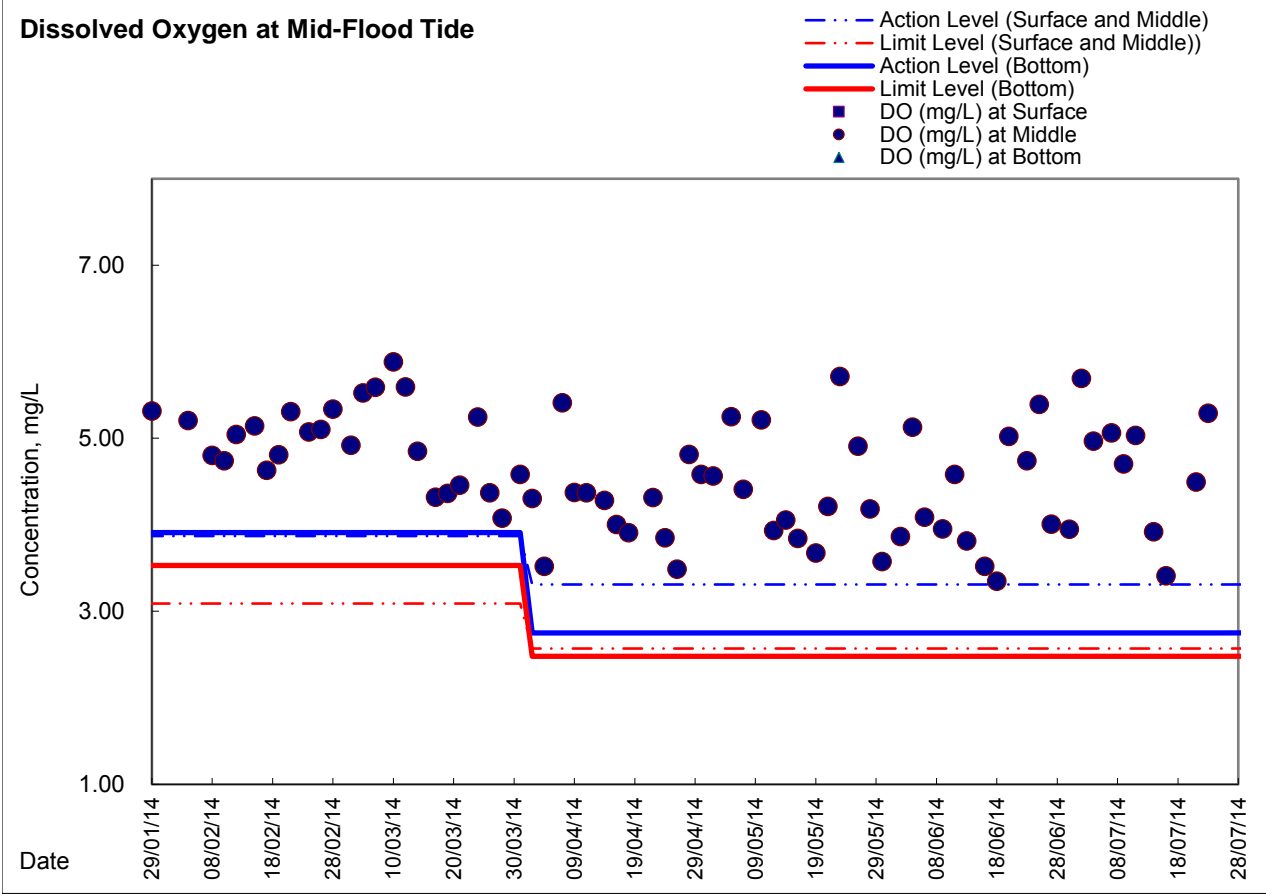
### Graphic Presentation of Enhanced Water Monitoring Results (DO) at C6 - Excelsior Hotel





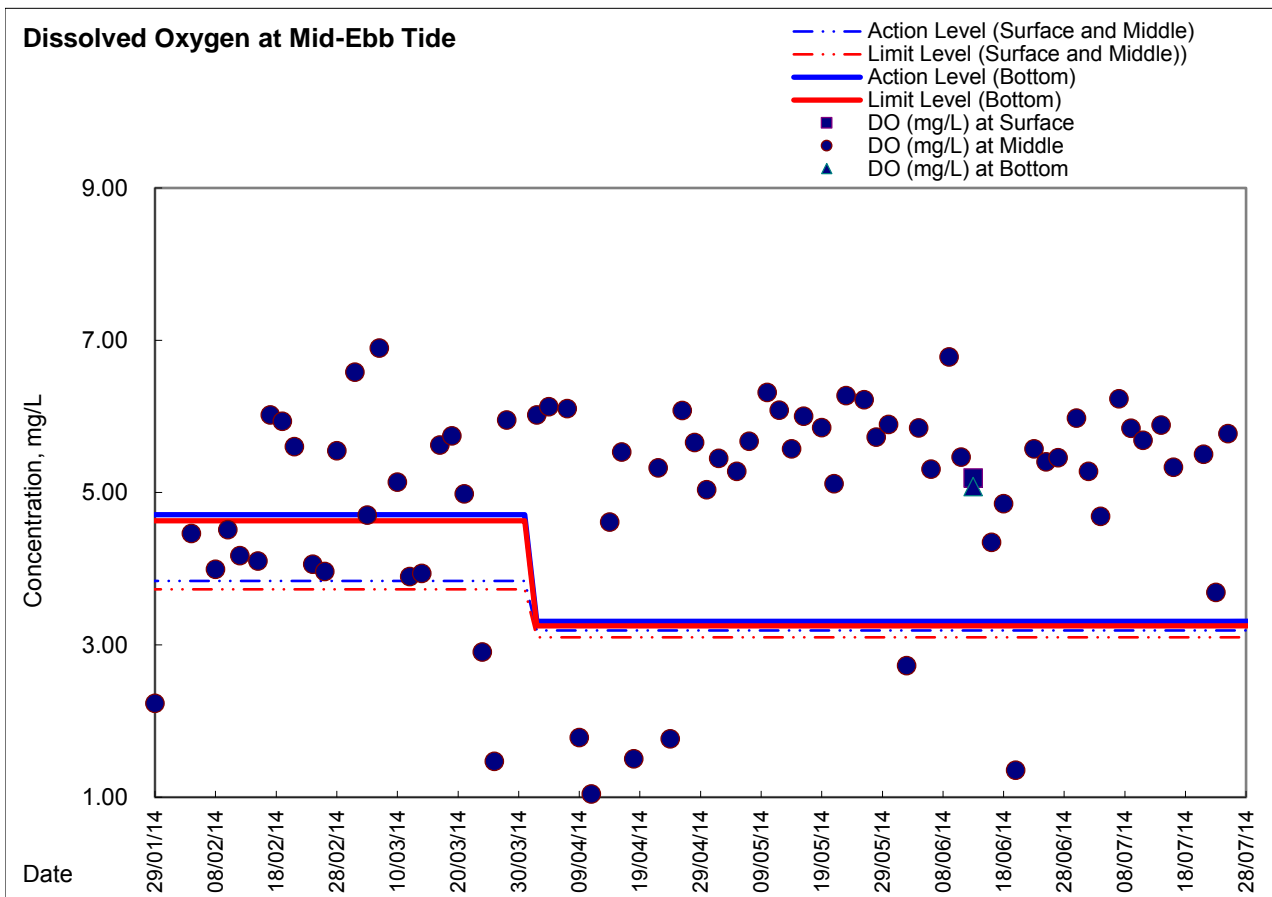
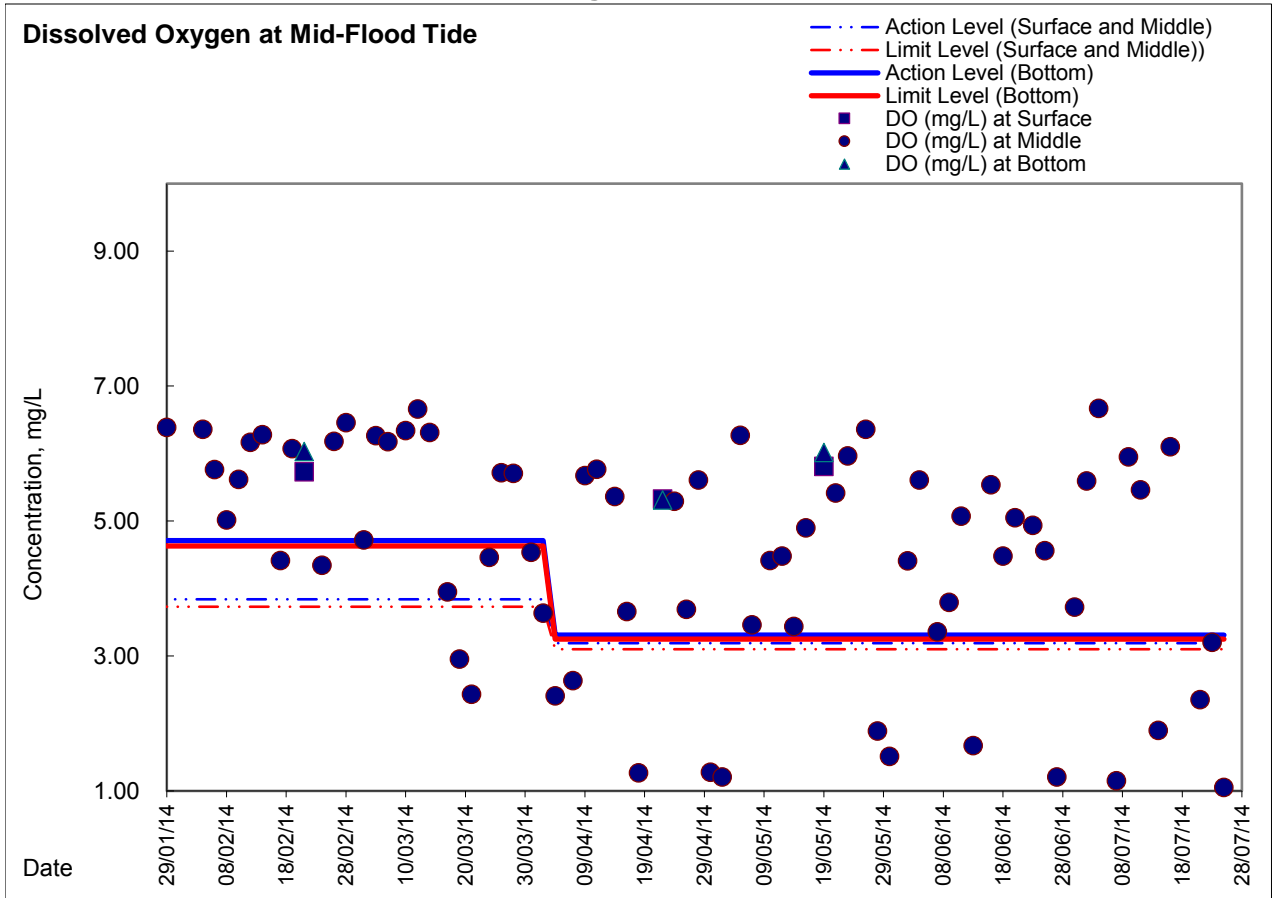


### Graphic Presentation of Enhanced Water Monitoring Results (DO) at C7 - Windsor House



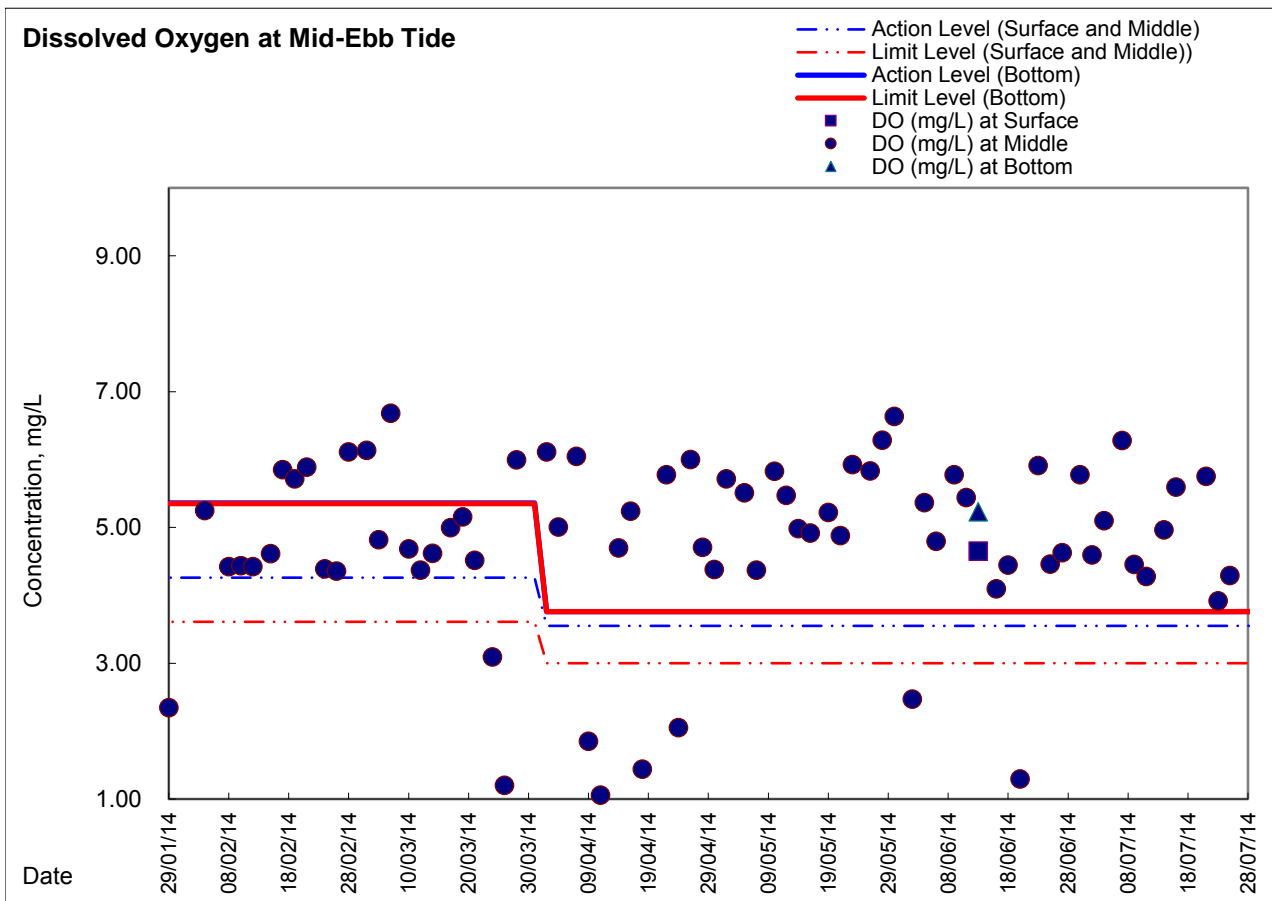
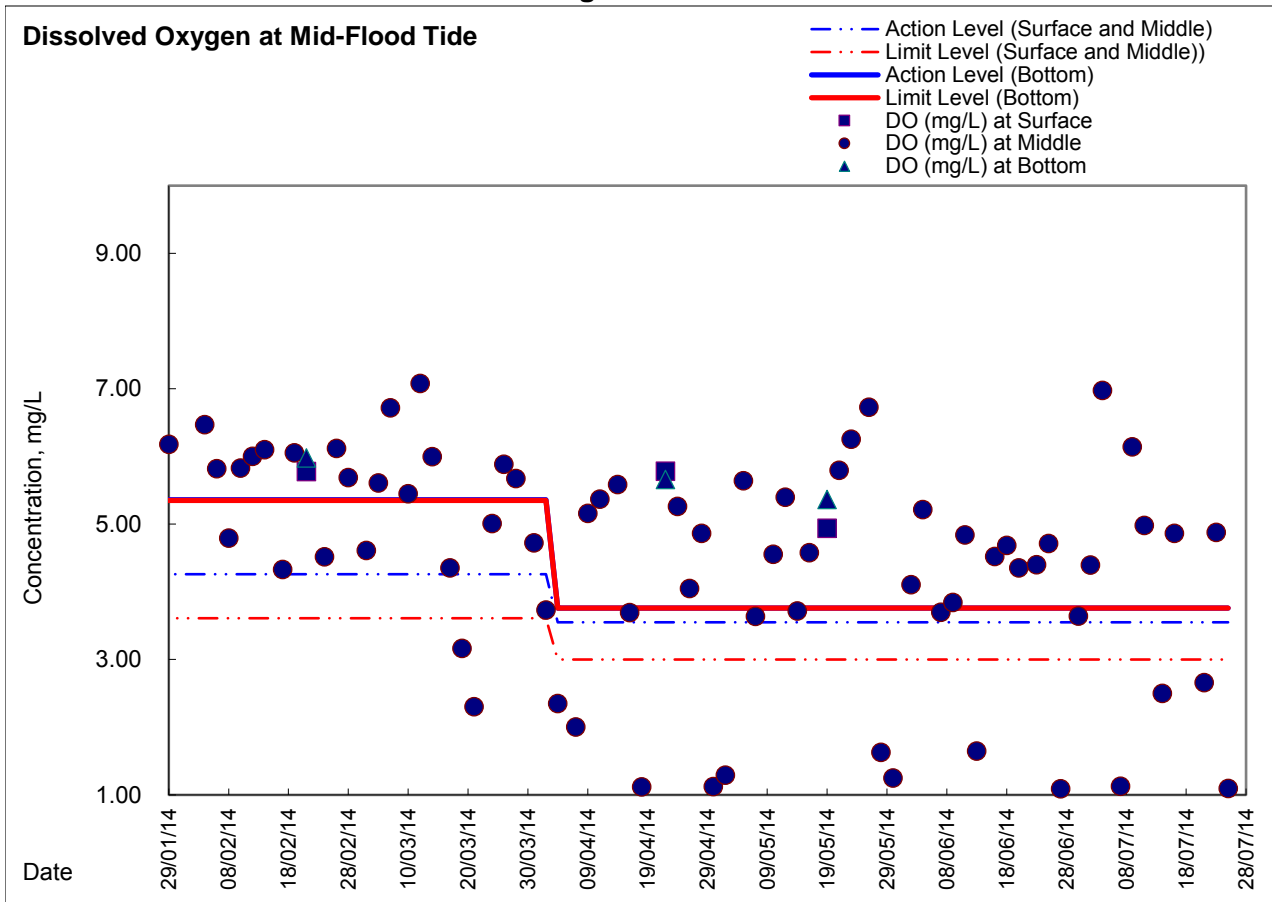


### Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area





### Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area





***Appendix 5.5***

***Real-time Noise Monitoring Results and Graphical Presentations***

Real-time Noise Data	RTN2a (Hong Kong Electric Centre)								
<b>Normal Day 07:00-19:00</b>	4/7/2014 12:01	52.3	9/7/2014 18:31	66.0	15/7/2014 13:01	70.0	21/7/2014 7:31	67.1	
	4/7/2014 12:31	66.9	10/7/2014 7:01	64.4	15/7/2014 13:31	71.1	21/7/2014 8:01	62.6	
	4/7/2014 13:01	66.6	10/7/2014 7:31	65.2	15/7/2014 14:01	70.7	21/7/2014 8:31	69.1	
28/6/2014 7:01	64.1	4/7/2014 13:31	66.9	10/7/2014 8:01	41.4	15/7/2014 14:31	68.8	21/7/2014 9:01	68.2
28/6/2014 7:31	65.3	4/7/2014 14:01	65.9	10/7/2014 8:31	66.8	15/7/2014 15:01	68.2	21/7/2014 9:31	67.1
28/6/2014 8:01	61.8	4/7/2014 14:31	64.7	10/7/2014 9:01	67.1	15/7/2014 15:31	72.1	21/7/2014 10:01	69.9
28/6/2014 8:31	66.6	4/7/2014 15:01	64.9	10/7/2014 9:31	67.2	15/7/2014 16:01	70.8	21/7/2014 10:31	69.3
28/6/2014 9:01	69.5	4/7/2014 15:31	66.0	10/7/2014 10:01	69.0	15/7/2014 16:31	67.4	21/7/2014 11:01	70.3
28/6/2014 9:31	67.9	4/7/2014 16:01	69.0	10/7/2014 10:31	68.9	15/7/2014 17:01	67.9	21/7/2014 11:31	67.9
28/6/2014 10:01	67.7	4/7/2014 16:31	71.4	10/7/2014 11:01	69.1	15/7/2014 17:31	68.4	21/7/2014 12:01	66.4
28/6/2014 10:31	68.2	4/7/2014 17:01	67.4	10/7/2014 11:31	66.5	15/7/2014 18:01	63.9	21/7/2014 12:31	65.8
28/6/2014 11:01	69.5	4/7/2014 17:31	67.7	10/7/2014 12:01	58.1	15/7/2014 18:31	65.9	21/7/2014 13:01	68.4
28/6/2014 11:31	67.2	4/7/2014 18:01	62.0	10/7/2014 12:31	58.6	16/7/2014 7:01	64.5	21/7/2014 13:31	69.8
28/6/2014 12:01	56.1	4/7/2014 18:31	65.6	10/7/2014 13:01	67.0	16/7/2014 7:31	65.9	21/7/2014 14:01	69.8
28/6/2014 12:31	53.3	5/7/2014 7:01	63.6	10/7/2014 13:31	69.3	16/7/2014 8:01	65.0	21/7/2014 14:31	69.6
28/6/2014 13:01	65.4	5/7/2014 7:31	65.1	10/7/2014 14:01	68.3	16/7/2014 8:31	67.1	21/7/2014 15:01	70.1
28/6/2014 13:31	66.7	5/7/2014 8:01	65.7	10/7/2014 14:31	67.7	16/7/2014 9:01	69.4	21/7/2014 15:31	69.8
28/6/2014 14:01	67.4	5/7/2014 8:31	69.8	10/7/2014 15:01	66.7	16/7/2014 9:31	69.5	21/7/2014 16:01	71.1
28/6/2014 14:31	67.0	5/7/2014 9:01	68.4	10/7/2014 15:31	67.9	16/7/2014 10:01	69.9	21/7/2014 16:31	70.9
28/6/2014 15:01	66.5	5/7/2014 9:31	69.8	10/7/2014 16:01	68.3	16/7/2014 10:31	68.7	21/7/2014 17:01	67.8
28/6/2014 15:31	66.8	5/7/2014 10:01	67.7	10/7/2014 16:31	67.9	16/7/2014 11:01	66.7	21/7/2014 17:31	66.0
28/6/2014 16:01	68.4	5/7/2014 10:31	67.7	10/7/2014 17:01	70.4	16/7/2014 11:31	64.5	21/7/2014 18:01	62.4
28/6/2014 16:31	70.7	5/7/2014 11:01	68.8	10/7/2014 17:31	68.0	16/7/2014 12:01	56.7	21/7/2014 18:31	66.0
28/6/2014 17:01	68.8	5/7/2014 11:31	67.6	10/7/2014 18:01	66.2	16/7/2014 12:31	66.8	22/7/2014 7:01	64.4
28/6/2014 17:31	48.7	5/7/2014 12:01	62.0	10/7/2014 18:31	65.2	16/7/2014 13:01	67.7	22/7/2014 7:31	66.6
28/6/2014 18:01	66.8	5/7/2014 12:31	56.0	11/7/2014 7:01	65.5	16/7/2014 13:31	69.2	22/7/2014 8:01	60.9
28/6/2014 18:31	65.8	5/7/2014 13:01	62.3	11/7/2014 7:31	66.4	16/7/2014 14:01	68.8	22/7/2014 8:31	66.8
30/6/2014 7:01	65.7	5/7/2014 13:31	67.0	11/7/2014 8:01	62.9	16/7/2014 14:31	67.7	22/7/2014 9:01	67.8
30/6/2014 7:31	55.5	5/7/2014 14:01	68.5	11/7/2014 8:31	66.6	16/7/2014 15:01	68.9	22/7/2014 9:31	67.8
30/6/2014 8:01	64.7	5/7/2014 14:31	68.7	11/7/2014 9:01	67.2	16/7/2014 15:31	68.0	22/7/2014 10:01	73.1
30/6/2014 8:31	69.1	5/7/2014 15:01	71.9	11/7/2014 9:31	67.1	16/7/2014 16:01	70.7	22/7/2014 10:31	66.2
30/6/2014 9:01	70.2	5/7/2014 15:31	67.3	11/7/2014 10:01	71.6	16/7/2014 16:31	71.3	22/7/2014 11:01	70.0
30/6/2014 9:31	68.5	5/7/2014 16:01	65.3	11/7/2014 10:31	67.9	16/7/2014 17:01	65.0	22/7/2014 11:31	65.7
30/6/2014 10:01	69.7	5/7/2014 16:31	61.1	11/7/2014 11:01	69.5	16/7/2014 17:31	68.5	22/7/2014 12:01	67.1
30/6/2014 10:31	71.5	5/7/2014 17:01	66.6	11/7/2014 11:31	68.5	16/7/2014 18:01	66.9	22/7/2014 12:31	66.9
30/6/2014 11:01	70.1	5/7/2014 17:31	65.7	11/7/2014 12:01	61.6	16/7/2014 18:31	65.8	22/7/2014 13:01	63.9
30/6/2014 11:31	64.7	5/7/2014 18:01	65.5	11/7/2014 12:31	59.3	17/7/2014 7:01	65.6	22/7/2014 13:31	68.7
30/6/2014 12:01	60.2	5/7/2014 18:31	65.0	11/7/2014 13:01	64.9	17/7/2014 7:31	65.8	22/7/2014 14:01	67.0
30/6/2014 12:31	46.6	7/7/2014 7:01	64.8	11/7/2014 13:31	71.1	17/7/2014 8:01	64.8	22/7/2014 14:31	67.3
30/6/2014 13:01	62.3	7/7/2014 7:31	66.4	11/7/2014 14:01	68.1	17/7/2014 8:31	66.8	22/7/2014 15:01	80.5
30/6/2014 13:31	66.0	7/7/2014 8:01	63.2	11/7/2014 14:31	71.2	17/7/2014 9:01	67.7	22/7/2014 15:31	80.4
30/6/2014 14:01	67.6	7/7/2014 8:31	67.2	11/7/2014 15:01	65.6	17/7/2014 9:31	69.0	22/7/2014 16:01	72.0
30/6/2014 14:31	67.8	7/7/2014 9:01	69.2	11/7/2014 15:31	68.1	17/7/2014 10:01	68.1	22/7/2014 16:31	66.7
30/6/2014 15:01	69.7	7/7/2014 9:31	67.4	11/7/2014 16:01	68.3	17/7/2014 10:31	64.3	22/7/2014 17:01	68.7
30/6/2014 15:31	70.1	7/7/2014 10:01	67.9	11/7/2014 16:31	68.0	17/7/2014 11:01	65.5	22/7/2014 17:31	68.1
30/6/2014 16:01	67.2	7/7/2014 10:31	68.7	11/7/2014 17:01	68.2	17/7/2014 11:31	65.3	22/7/2014 18:01	65.6
30/6/2014 16:31	67.8	7/7/2014 11:01	69.0	11/7/2014 17:31	63.2	17/7/2014 12:01	61.1	22/7/2014 18:31	66.5
30/6/2014 17:01	66.3	7/7/2014 11:31	66.3	11/7/2014 18:01	67.0	17/7/2014 12:31	62.5	23/7/2014 7:01	65.0
30/6/2014 17:31	62.6	7/7/2014 12:01	59.2	11/7/2014 18:31	65.6	17/7/2014 13:01	66.9	23/7/2014 7:31	66.1
30/6/2014 18:01	66.7	7/7/2014 12:31	66.5	12/7/2014 7:01	64.6	17/7/2014 13:31	67.9	23/7/2014 8:01	66.0
30/6/2014 18:31	65.9	7/7/2014 13:01	64.1	12/7/2014 7:31	65.9	17/7/2014 14:01	74.5	23/7/2014 8:31	68.7
2/7/2014 7:01	65.5	7/7/2014 13:31	67.2	12/7/2014 8:01	64.6	17/7/2014 14:31	70.4	23/7/2014 9:01	69.2
2/7/2014 7:31	66.6	7/7/2014 14:01	70.7	12/7/2014 8:31	68.2	17/7/2014 15:01	66.9	23/7/2014 9:31	69.3
2/7/2014 8:01	62.8	7/7/2014 14:31	71.5	12/7/2014 9:01	68.7	17/7/2014 15:31	65.7	23/7/2014 10:01	70.0
2/7/2014 8:31	64.7	7/7/2014 15:01	68.1	12/7/2014 9:31	69.9	17/7/2014 16:01	70.0	23/7/2014 10:31	70.9
2/7/2014 9:01	63.7	7/7/2014 15:31	67.9	12/7/2014 10:01	67.7	17/7/2014 16:31	67.2	23/7/2014 11:01	69.2
2/7/2014 9:31	66.7	7/7/2014 16:01	68.0	12/7/2014 10:31	67.3	17/7/2014 17:01	68.0	23/7/2014 11:31	66.9
2/7/2014 10:01	66.1	7/7/2014 16:31	68.4	12/7/2014 11:01	71.0	17/7/2014 17:31	66.3	23/7/2014 12:01	66.9
2/7/2014 10:31	66.3	7/7/2014 17:01	65.9	12/7/2014 11:31	64.6	17/7/2014 18:01	67.1	23/7/2014 12:31	67.1
2/7/2014 11:01	68.4	7/7/2014 17:31	61.9	12/7/2014 12:01	61.8	17/7/2014 18:31	66.9	23/7/2014 13:01	65.4
2/7/2014 11:31	66.0	7/7/2014 18:01	66.7	12/7/2014 12:31	64.4	18/7/2014 7:01	65.4	23/7/2014 13:31	67.5
2/7/2014 12:01	58.7	7/7/2014 18:31	66.0	12/7/2014 13:01	67.7	18/7/2014 7:31	47.4	23/7/2014 14:01	69.7
2/7/2014 12:31	66.6	8/7/2014 7:01	64.5	12/7/2014 13:31	68.3	18/7/2014 8:01	62.5	23/7/2014 14:31	69.3
2/7/2014 13:01	66.7	8/7/2014 7:31	65.5	12/7/2014 14:01	67.0	18/7/2014 8:31	66.7	23/7/2014 15:01	68.7
2/7/2014 13:31	69.6	8/7/2014 8:01	56.3	12/7/2014 14:31	65.8	18/7/2014 9:01	68.2	23/7/2014 15:31	68.7
2/7/2014 14:01	67.5	8/7/2014 8:31	68.0	12/7/2014 15:01	66.0	18/7/2014 9:31	69.0	23/7/2014 16:01	71.1
2/7/2014 14:31	68.6	8/7/2014 9:01	68.3	12/7/2014 15:31	69.6	18/7/2014 10:01	70.3	23/7/2014 16:31	74.4
2/7/2014 15:01	68.5	8/7/2014 9:31	67.9	12/7/2014 16:01	65.0	18/7/2014 10:31	68.7	23/7/2014 17:01	70.5
2/7/2014 15:31	67.5	8/7/2014 10:01	67.9	12/7/2014 16:31	63.9	18/7/2014 11:01	68.7	23/7/2014 17:31	69.5
2/7/2014 16:01	66.7	8/7/2014 10:31	69.9	12/7/2014 17:01	65.2	18/7/2014 11:31	67.0	23/7/2014 18:01	68.1
2/7/2014 16:31	66.6	8/7/2014 11:01	69.5	12/7/2014 17:31	58.2	18/7/2014 12:01	70.1	23/7/2014 18:31	65.9
2/7/2014 17:01	68.1	8/7/2014 11:31	67.7	12/7/2014 18:01	65.6	18/7/2014 12:31	66.4	24/7/2014 7:01	64.8
2/7/2014 17:31	70.0	8/7/2014 12:01	66.2	12/7/2014 18:31	65.5	18/7/2014 13:01	65.3	24/7/2014 7:31	66.7
2/7/2014 18:01	58.3	8/7/2014 12:31	66.3	14/7/2014 7:01	65.6	18/7/2014 13:31	66.6	24/7/2014 8:01	68.0
2/7/2014 18:31	65.2	8/7/2014 13:01	64.4	14/7/2014 7:31	67.1	18/7/2014 14:01	67.0	24/7/2014 8:31	70.5
3/7/2014 7:01	65.3	8/7/2014 13:31	68.2	14/7/2014 8:01	61.3	18/7/2014 14:31	68.2	24/7/2014 9:01	70.6
3/7/2014 7:31	66.5	8/7/2014 14:01	68.0	14/7/2014 8:31	66.3	18/7/2014 15:01	68.4	24/7/2014 9:31	68.6
3/7/2014 8:01	58.7	8/7/2014 14:31	69.0	14/7/2					

Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
29/6/2014 8:51	62.2	29/6/2014 17:56	64.6	1/7/2014 7:01	61.0	1/7/2014 16:06	62.0	2/7/2014 21:11	61.1	4/7/2014 22:16	61.2
29/6/2014 8:56	60.4	29/6/2014 18:01	63.3	1/7/2014 7:06	58.7	1/7/2014 16:11	61.4	2/7/2014 21:16	61.5	4/7/2014 22:21	61.1
29/6/2014 9:01	60.2	29/6/2014 18:06	63.5	1/7/2014 7:11	60.0	1/7/2014 16:16	61.6	2/7/2014 21:21	61.5	4/7/2014 22:26	60.6
29/6/2014 9:06	61.4	29/6/2014 18:11	63.8	1/7/2014 7:16	58.5	1/7/2014 16:21	61.1	2/7/2014 21:26	62.2	4/7/2014 22:31	61.2
29/6/2014 9:11	62.2	29/6/2014 18:16	64.9	1/7/2014 7:21	58.0	1/7/2014 16:26	61.2	2/7/2014 21:31	61.5	4/7/2014 22:36	62.0
29/6/2014 9:16	62.4	29/6/2014 18:21	64.4	1/7/2014 7:26	60.4	1/7/2014 16:31	60.3	2/7/2014 21:36	61.3	4/7/2014 22:41	61.1
29/6/2014 9:21	61.7	29/6/2014 18:26	64.1	1/7/2014 7:31	58.4	1/7/2014 16:36	61.1	2/7/2014 21:41	61.9	4/7/2014 22:46	61.0
29/6/2014 9:26	62.2	29/6/2014 18:31	64.8	1/7/2014 7:36	58.8	1/7/2014 16:41	60.7	2/7/2014 21:46	60.5	4/7/2014 22:51	61.4
29/6/2014 9:31	61.8	29/6/2014 18:36	64.5	1/7/2014 7:41	59.1	1/7/2014 16:46	62.3	2/7/2014 21:51	61.4	4/7/2014 22:56	61.0
29/6/2014 9:36	61.3	29/6/2014 18:41	65.0	1/7/2014 7:46	59.8	1/7/2014 16:51	61.3	2/7/2014 21:56	61.7	5/7/2014 19:01	62.4
29/6/2014 9:41	60.8	29/6/2014 18:46	64.5	1/7/2014 7:51	61.0	1/7/2014 16:56	61.4	2/7/2014 22:01	61.0	5/7/2014 19:06	62.6
29/6/2014 9:46	60.8	29/6/2014 18:51	64.0	1/7/2014 7:56	60.6	1/7/2014 17:01	62.7	2/7/2014 22:06	60.2	5/7/2014 19:11	63.1
29/6/2014 9:51	60.6	29/6/2014 18:56	64.0	1/7/2014 8:01	66.1	1/7/2014 17:06	62.5	2/7/2014 22:11	60.7	5/7/2014 19:16	63.0
29/6/2014 9:56	60.8	29/6/2014 19:01	63.3	1/7/2014 8:06	60.1	1/7/2014 17:11	62.1	2/7/2014 22:16	61.4	5/7/2014 19:21	63.0
29/6/2014 10:01	61.1	29/6/2014 19:06	64.2	1/7/2014 8:11	60.9	1/7/2014 17:16	61.9	2/7/2014 22:21	61.1	5/7/2014 19:26	64.4
29/6/2014 10:06	61.1	29/6/2014 19:11	63.6	1/7/2014 8:16	60.9	1/7/2014 17:21	62.1	2/7/2014 22:26	61.7	5/7/2014 19:31	62.2
29/6/2014 10:11	61.7	29/6/2014 19:16	63.3	1/7/2014 8:21	60.6	1/7/2014 17:26	62.1	2/7/2014 22:31	61.4	5/7/2014 19:36	62.2
29/6/2014 10:16	61.3	29/6/2014 19:21	63.5	1/7/2014 8:26	61.6	1/7/2014 17:31	63.0	2/7/2014 22:36	60.8	5/7/2014 19:41	62.1
29/6/2014 10:21	62.6	29/6/2014 19:26	63.2	1/7/2014 8:31	60.8	1/7/2014 17:36	62.4	2/7/2014 22:41	61.5	5/7/2014 19:46	61.9
29/6/2014 10:26	61.7	29/6/2014 19:31	63.6	1/7/2014 8:36	61.8	1/7/2014 17:41	65.0	2/7/2014 22:46	61.7	5/7/2014 19:51	62.0
29/6/2014 10:31	61.4	29/6/2014 19:36	62.9	1/7/2014 8:41	61.7	1/7/2014 17:46	65.3	2/7/2014 22:51	61.7	5/7/2014 19:56	61.8
29/6/2014 10:36	62.5	29/6/2014 19:41	63.7	1/7/2014 8:46	62.3	1/7/2014 17:51	64.2	2/7/2014 22:56	61.7	5/7/2014 20:01	61.9
29/6/2014 10:41	62.0	29/6/2014 19:46	63.2	1/7/2014 8:51	62.3	1/7/2014 17:56	64.5	3/7/2014 19:01	62.8	5/7/2014 20:06	62.4
29/6/2014 10:46	64.1	29/6/2014 19:51	62.6	1/7/2014 8:56	61.9	1/7/2014 18:01	62.7	3/7/2014 19:06	62.7	5/7/2014 20:11	62.5
29/6/2014 10:51	61.8	29/6/2014 19:56	64.2	1/7/2014 9:01	62.6	1/7/2014 18:06	62.6	3/7/2014 19:11	62.6	5/7/2014 20:16	61.8
29/6/2014 10:56	62.7	29/6/2014 20:01	62.5	1/7/2014 9:06	61.9	1/7/2014 18:11	63.0	3/7/2014 19:16	62.2	5/7/2014 20:21	61.4
29/6/2014 11:01	61.8	29/6/2014 20:06	62.5	1/7/2014 9:11	63.0	1/7/2014 18:16	63.7	3/7/2014 19:21	61.9	5/7/2014 20:26	62.6
29/6/2014 11:06	62.2	29/6/2014 20:11	62.8	1/7/2014 9:16	62.6	1/7/2014 18:21	63.0	3/7/2014 19:26	62.5	5/7/2014 20:31	62.6
29/6/2014 11:11	63.1	29/6/2014 20:16	62.7	1/7/2014 9:21	62.8	1/7/2014 18:26	65.6	3/7/2014 19:31	62.5	5/7/2014 20:36	61.0
29/6/2014 11:16	62.5	29/6/2014 20:21	63.1	1/7/2014 9:26	62.3	1/7/2014 18:31	63.6	3/7/2014 19:36	62.9	5/7/2014 20:41	61.8
29/6/2014 11:21	62.7	29/6/2014 20:26	62.2	1/7/2014 9:31	63.3	1/7/2014 18:36	65.2	3/7/2014 19:41	63.0	5/7/2014 20:46	62.2
29/6/2014 11:26	63.2	29/6/2014 20:31	63.4	1/7/2014 9:36	63.3	1/7/2014 18:41	63.7	3/7/2014 19:46	63.0	5/7/2014 20:51	61.1
29/6/2014 11:31	61.1	29/6/2014 20:36	62.2	1/7/2014 9:41	63.3	1/7/2014 18:46	67.9	3/7/2014 19:51	62.9	5/7/2014 20:56	60.9
29/6/2014 11:36	62.1	29/6/2014 20:41	61.9	1/7/2014 9:46	62.4	1/7/2014 18:51	63.1	3/7/2014 19:56	62.3	5/7/2014 21:01	60.9
29/6/2014 11:41	61.3	29/6/2014 20:46	61.6	1/7/2014 9:51	62.8	1/7/2014 18:56	62.4	3/7/2014 20:01	63.0	5/7/2014 21:06	61.0
29/6/2014 11:46	62.3	29/6/2014 20:51	62.2	1/7/2014 9:56	62.8	1/7/2014 19:01	63.1	3/7/2014 20:06	62.8	5/7/2014 21:11	60.7
29/6/2014 11:51	66.3	29/6/2014 20:56	64.7	1/7/2014 10:01	63.2	1/7/2014 19:06	62.3	3/7/2014 20:11	62.1	5/7/2014 21:16	60.5
29/6/2014 11:56	63.8	29/6/2014 21:01	66.5	1/7/2014 10:06	63.5	1/7/2014 19:11	61.4	3/7/2014 20:16	62.6	5/7/2014 21:21	62.0
29/6/2014 12:01	62.2	29/6/2014 21:06	65.0	1/7/2014 10:11	63.0	1/7/2014 19:16	62.4	3/7/2014 20:21	62.2	5/7/2014 21:26	60.9
29/6/2014 12:06	63.6	29/6/2014 21:11	63.6	1/7/2014 10:16	62.8	1/7/2014 19:21	62.0	3/7/2014 20:26	62.4	5/7/2014 21:31	61.6
29/6/2014 12:11	62.6	29/6/2014 21:16	64.0	1/7/2014 10:21	62.9	1/7/2014 19:26	62.1	3/7/2014 20:31	62.2	5/7/2014 21:36	61.4
29/6/2014 12:16	61.5	29/6/2014 21:21	64.1	1/7/2014 10:26	63.7	1/7/2014 19:31	61.9	3/7/2014 20:36	60.9	5/7/2014 21:41	61.4
29/6/2014 12:21	62.1	29/6/2014 21:26	63.7	1/7/2014 10:31	62.4	1/7/2014 19:36	61.5	3/7/2014 20:41	61.8	5/7/2014 21:46	59.8
29/6/2014 12:26	61.9	29/6/2014 21:31	63.8	1/7/2014 10:36	62.4	1/7/2014 19:41	61.9	3/7/2014 20:46	62.0	5/7/2014 21:51	60.3
29/6/2014 12:31	61.8	29/6/2014 21:36	63.8	1/7/2014 10:41	62.8	1/7/2014 19:46	61.9	3/7/2014 20:51	62.1	5/7/2014 21:56	60.2
29/6/2014 12:36	62.5	29/6/2014 21:41	62.2	1/7/2014 10:46	62.6	1/7/2014 19:51	61.1	3/7/2014 20:56	61.0	5/7/2014 22:01	60.7
29/6/2014 12:41	61.0	29/6/2014 21:46	61.0	1/7/2014 10:51	62.6	1/7/2014 19:56	61.7	3/7/2014 21:01	61.2	5/7/2014 22:06	60.9
29/6/2014 12:46	62.1	29/6/2014 21:51	64.2	1/7/2014 10:56	63.5	1/7/2014 20:01	61.9	3/7/2014 21:06	60.7	5/7/2014 22:11	60.3
29/6/2014 12:51	61.6	29/6/2014 21:56	63.0	1/7/2014 11:01	62.4	1/7/2014 20:06	61.2	3/7/2014 21:11	60.4	5/7/2014 22:16	62.6
29/6/2014 12:56	62.0	29/6/2014 22:01	61.7	1/7/2014 11:06	63.5	1/7/2014 20:11	62.6	3/7/2014 21:16	61.3	5/7/2014 22:21	60.7
29/6/2014 13:01	63.3	29/6/2014 22:06	59.3	1/7/2014 11:11	62.8	1/7/2014 20:16	64.1	3/7/2014 21:21	62.0	5/7/2014 22:26	61.0
29/6/2014 13:06	62.3	29/6/2014 22:11	56.0	1/7/2014 11:16	63.5	1/7/2014 20:21	62.1	3/7/2014 21:26	62.1	5/7/2014 22:31	61.3
29/6/2014 13:11	61.9	29/6/2014 22:16	59.5	1/7/2014 11:21	63.8	1/7/2014 20:26	62.1	3/7/2014 21:31	61.2	5/7/2014 22:36	62.7
29/6/2014 13:16	62.2	29/6/2014 22:21	56.5	1/7/2014 11:26	62.7	1/7/2014 20:31	62.4	3/7/2014 21:36	61.0	5/7/2014 22:41	61.4
29/6/2014 13:21	61.7	29/6/2014 22:26	58.7	1/7/2014 11:31	63.1	1/7/2014 20:36	61.7	3/7/2014 21:41	62.0	5/7/2014 22:46	61.3
29/6/2014 13:26	64.9	29/6/2014 22:31	52.9	1/7/2014 11:36	62.8	1/7/2014 20:41	61.8	3/7/2014 21:46	60.7	5/7/2014 22:51	60.8
29/6/2014 13:31	63.9	29/6/2014 22:36	55.6	1/7/2014 11:41	62.5	1/7/2014 20:46	62.2	3/7/2014 21:51	61.6	5/7/2014 22:56	61.6
29/6/2014 13:36	64.3	29/6/2014 22:41	56.4	1/7/2014 11:46	62.6	1/7/2014 20:51	61.9	3/7/2014 21:56	61.4	6/7/2014 7:01	55.1
29/6/2014 13:41	64.3	29/6/2014 22:46	56.1	1/7/2014 11:51	62.9	1/7/2014 20:56	61.4	3/7/2014 22:01	61.3	6/7/2014 7:06	53.1
29/6/2014 13:46	63.4	29/6/2014 22:51	60.1	1/7/2014 11:56	63.4	1/7/2014 21:01	62.5	3/7/2014 22:06	61.5	6/7/2014 7:11	61.7
29/6/2014 13:51	64.0	29/6/2014 22:56	56.0	1/7/2014 12:01	63.4	1/7/2014 21:06	62.1	3/7/2014 22:11	62.2	6/7/2014 7:16	57.7
29/6/2014 13:56	63.8	30/6/2014 19:01	61.8	1/7/2014 12:06	63.3	1/7/2014 21:11	62.9	3/7/2014 22:16	61.2	6/7/2014 7:21	62.6
29/6/2014 14:01	64.6	30/6/2014 19:06	61.2	1/7/2014 12:11	62.8	1/7/2014 21:16	62.9	3/7/2014 22:21	61.8	6/7/2014 7:26	58.1
29/6/2014 14:06	63.9	30/6/2014 19:11	61.2	1/7/2014 12:16	62.5	1/7/2014 21:21	62.3	3/7/2014 22:26	60.9	6/7/2014 7:31	55.4
29/6/2014 14:11	63.7	30/6/2014 19:16	60.3	1/7/2014 12:21	62.9	1/7/2014 21:26	62.9	3/7/2014 22:31	61.0	6/7/2014 7:36	55.3
29/6/2014 14:16	64.2	30/6/2014 19:21	61.2	1/7/2014 12:26	62.3	1/7/2014 21:31	63.2	3/7/2014 22:36	60.7	6/7/2014 7:41	57.2
29/6/2014 14:21	63.9	30/6/2014 19:26	61.8	1/7/2014 12:31	63.0	1/7/2014 21:36	63.2	3/7/2014 22:41	60.8	6/7/2014 7:46	57.3
29/6/2014 14:26	63.6	30/6/2014 19:31	62.6	1/7/2014 12:36	62.9	1/7/2014 21:41	62.3	3/7/2014 22:46	61.6	6/7/2014 7:51	55.0
29/6/2014 14:31	63.9	30/6/2014 19:36	62.6	1/7/2014 12:41	62.8	1/7/2014 21:46	62.5	3/7/2014 22:51	61.7	6/7/2014 7:56	56.9
29/6/2014 14:36	64.4	30/6/2014 19:41	63.2	1/7/2014 12:46	63.1	1/7/2014 21:51	62.1	3/7/2014 22:56	61.0	6/7/2014 8:01	59.2
29/6/2014 14:41	63.8	30/6/2014 19:46	63.6	1/7/2014 12:51	62.6	1/7/2014 21:56	63.4</				

Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
6/7/2014 11:21	63.4	6/7/2014 20:26	61.0	8/7/2014 21:31	61.3	10/7/2014 22:36	61.4	13/7/2014 7:41	58.5	13/7/2014 16:46	63.6
6/7/2014 11:26	62.6	6/7/2014 20:31	60.8	8/7/2014 21:36	60.1	10/7/2014 22:41	61.6	13/7/2014 7:46	58.6	13/7/2014 16:51	63.6
6/7/2014 11:31	63.1	6/7/2014 20:36	61.4	8/7/2014 21:41	61.0	10/7/2014 22:46	61.5	13/7/2014 7:51	58.6	13/7/2014 16:56	64.0
6/7/2014 11:36	63.3	6/7/2014 20:41	61.9	8/7/2014 21:46	61.2	10/7/2014 22:51	62.4	13/7/2014 7:56	58.8	13/7/2014 17:01	63.4
6/7/2014 11:41	62.8	6/7/2014 20:46	61.2	8/7/2014 21:51	61.3	10/7/2014 22:56	61.4	13/7/2014 8:01	59.4	13/7/2014 17:06	63.2
6/7/2014 11:46	62.9	6/7/2014 20:51	60.3	8/7/2014 21:56	61.4	11/7/2014 19:01	63.2	13/7/2014 8:06	59.2	13/7/2014 17:11	63.2
6/7/2014 11:51	62.6	6/7/2014 20:56	61.0	8/7/2014 22:01	61.4	11/7/2014 19:06	63.2	13/7/2014 8:11	59.6	13/7/2014 17:16	63.7
6/7/2014 11:56	63.9	6/7/2014 21:01	61.1	8/7/2014 22:06	61.0	11/7/2014 19:11	62.9	13/7/2014 8:16	60.6	13/7/2014 17:21	63.1
6/7/2014 12:01	61.7	6/7/2014 21:06	60.9	8/7/2014 22:11	61.3	11/7/2014 19:16	63.1	13/7/2014 8:21	61.3	13/7/2014 17:26	63.1
6/7/2014 12:06	62.1	6/7/2014 21:11	60.7	8/7/2014 22:16	61.9	11/7/2014 19:21	62.3	13/7/2014 8:26	61.4	13/7/2014 17:31	62.8
6/7/2014 12:11	61.4	6/7/2014 21:16	61.8	8/7/2014 22:21	61.7	11/7/2014 19:26	62.6	13/7/2014 8:31	60.8	13/7/2014 17:36	63.0
6/7/2014 12:16	61.8	6/7/2014 21:21	61.7	8/7/2014 22:26	63.6	11/7/2014 19:31	63.7	13/7/2014 8:36	61.4	13/7/2014 17:41	63.7
6/7/2014 12:21	61.8	6/7/2014 21:26	61.7	8/7/2014 22:31	61.4	11/7/2014 19:36	62.8	13/7/2014 8:41	60.9	13/7/2014 17:46	63.5
6/7/2014 12:26	62.3	6/7/2014 21:31	61.2	8/7/2014 22:36	60.2	11/7/2014 19:41	63.3	13/7/2014 8:46	61.4	13/7/2014 17:51	63.4
6/7/2014 12:31	62.0	6/7/2014 21:36	60.8	8/7/2014 22:41	61.2	11/7/2014 19:46	62.8	13/7/2014 8:51	62.0	13/7/2014 17:56	63.9
6/7/2014 12:36	62.8	6/7/2014 21:41	61.1	8/7/2014 22:46	60.7	11/7/2014 19:51	64.0	13/7/2014 8:56	62.6	13/7/2014 18:01	63.4
6/7/2014 12:41	62.0	6/7/2014 21:46	61.7	8/7/2014 22:51	61.5	11/7/2014 19:56	62.4	13/7/2014 9:01	61.7	13/7/2014 18:06	63.3
6/7/2014 12:46	62.9	6/7/2014 21:51	61.0	8/7/2014 22:56	60.2	11/7/2014 20:01	63.3	13/7/2014 9:06	62.0	13/7/2014 18:11	62.5
6/7/2014 12:51	62.6	6/7/2014 21:56	61.5	9/7/2014 19:01	63.8	11/7/2014 20:06	63.0	13/7/2014 9:11	62.9	13/7/2014 18:16	62.6
6/7/2014 12:56	62.9	6/7/2014 22:01	62.0	9/7/2014 19:06	63.1	11/7/2014 20:11	61.9	13/7/2014 9:16	62.5	13/7/2014 18:21	63.5
6/7/2014 13:01	62.5	6/7/2014 22:06	63.0	9/7/2014 19:11	63.3	11/7/2014 20:16	62.9	13/7/2014 9:21	61.7	13/7/2014 18:26	64.7
6/7/2014 13:06	62.7	6/7/2014 22:11	60.4	9/7/2014 19:16	63.1	11/7/2014 20:21	63.5	13/7/2014 9:26	62.2	13/7/2014 18:31	64.2
6/7/2014 13:11	60.8	6/7/2014 22:16	61.1	9/7/2014 19:21	62.9	11/7/2014 20:26	64.4	13/7/2014 9:31	62.7	13/7/2014 18:36	64.2
6/7/2014 13:16	60.7	6/7/2014 22:21	62.8	9/7/2014 19:26	62.5	11/7/2014 20:31	62.8	13/7/2014 9:36	62.6	13/7/2014 18:41	63.8
6/7/2014 13:21	62.4	6/7/2014 22:26	61.6	9/7/2014 19:31	62.2	11/7/2014 20:36	62.8	13/7/2014 9:41	62.3	13/7/2014 18:46	63.3
6/7/2014 13:26	62.1	6/7/2014 22:31	61.5	9/7/2014 19:36	62.7	11/7/2014 20:41	62.7	13/7/2014 9:46	62.4	13/7/2014 18:51	62.8
6/7/2014 13:31	61.8	6/7/2014 22:36	60.2	9/7/2014 19:41	63.0	11/7/2014 20:46	61.9	13/7/2014 9:51	62.6	13/7/2014 18:56	63.0
6/7/2014 13:36	61.8	6/7/2014 22:41	62.5	9/7/2014 19:46	62.3	11/7/2014 20:51	62.5	13/7/2014 9:56	63.5	13/7/2014 19:01	62.9
6/7/2014 13:41	62.9	6/7/2014 22:46	60.9	9/7/2014 19:51	61.6	11/7/2014 20:56	62.1	13/7/2014 10:01	63.2	13/7/2014 19:06	62.5
6/7/2014 13:46	62.1	6/7/2014 22:51	59.8	9/7/2014 19:56	62.0	11/7/2014 21:01	61.5	13/7/2014 10:06	63.9	13/7/2014 19:11	63.0
6/7/2014 13:51	62.8	6/7/2014 22:56	60.8	9/7/2014 20:01	61.9	11/7/2014 21:06	62.8	13/7/2014 10:11	64.2	13/7/2014 19:16	61.4
6/7/2014 13:56	62.9	7/7/2014 19:01	63.3	9/7/2014 20:06	62.5	11/7/2014 21:11	62.1	13/7/2014 10:16	63.0	13/7/2014 19:21	62.1
6/7/2014 14:01	62.2	7/7/2014 19:06	63.4	9/7/2014 20:11	62.0	11/7/2014 21:16	61.9	13/7/2014 10:21	63.0	13/7/2014 19:26	62.3
6/7/2014 14:06	62.3	7/7/2014 19:11	63.5	9/7/2014 20:16	62.1	11/7/2014 21:21	61.4	13/7/2014 10:26	63.8	13/7/2014 19:31	61.8
6/7/2014 14:11	61.7	7/7/2014 19:16	63.0	9/7/2014 20:21	61.4	11/7/2014 21:26	62.6	13/7/2014 10:31	63.5	13/7/2014 19:36	62.1
6/7/2014 14:16	61.9	7/7/2014 19:21	63.4	9/7/2014 20:26	62.1	11/7/2014 21:31	61.7	13/7/2014 10:36	63.9	13/7/2014 19:41	61.9
6/7/2014 14:21	60.9	7/7/2014 19:26	62.7	9/7/2014 20:31	63.2	11/7/2014 21:36	62.9	13/7/2014 10:41	63.2	13/7/2014 19:46	61.1
6/7/2014 14:26	62.4	7/7/2014 19:31	62.9	9/7/2014 20:36	62.8	11/7/2014 21:41	61.3	13/7/2014 10:46	63.0	13/7/2014 19:51	62.0
6/7/2014 14:31	62.1	7/7/2014 19:36	63.8	9/7/2014 20:41	61.6	11/7/2014 21:46	61.8	13/7/2014 10:51	62.9	13/7/2014 19:56	62.2
6/7/2014 14:36	62.0	7/7/2014 19:41	62.6	9/7/2014 20:46	61.2	11/7/2014 21:51	62.2	13/7/2014 10:56	64.0	13/7/2014 20:01	61.3
6/7/2014 14:41	62.9	7/7/2014 19:46	63.2	9/7/2014 20:51	61.2	11/7/2014 21:56	62.3	13/7/2014 11:01	63.8	13/7/2014 20:06	62.3
6/7/2014 14:46	63.0	7/7/2014 19:51	63.0	9/7/2014 20:56	61.1	11/7/2014 22:01	62.5	13/7/2014 11:06	63.7	13/7/2014 20:11	60.8
6/7/2014 14:51	63.4	7/7/2014 19:56	63.9	9/7/2014 21:01	61.7	11/7/2014 22:06	62.4	13/7/2014 11:11	64.9	13/7/2014 20:16	62.2
6/7/2014 14:56	62.7	7/7/2014 20:01	62.6	9/7/2014 21:06	61.1	11/7/2014 22:11	62.2	13/7/2014 11:16	63.9	13/7/2014 20:21	61.6
6/7/2014 15:01	62.3	7/7/2014 20:06	62.2	9/7/2014 21:11	61.3	11/7/2014 22:16	62.4	13/7/2014 11:21	63.4	13/7/2014 20:26	60.7
6/7/2014 15:06	62.7	7/7/2014 20:11	62.6	9/7/2014 21:16	61.8	11/7/2014 22:21	63.0	13/7/2014 11:26	62.6	13/7/2014 20:31	60.8
6/7/2014 15:11	62.9	7/7/2014 20:16	62.6	9/7/2014 21:21	61.6	11/7/2014 22:26	62.5	13/7/2014 11:31	63.0	13/7/2014 20:36	61.7
6/7/2014 15:16	62.8	7/7/2014 20:21	62.4	9/7/2014 21:26	61.6	11/7/2014 22:31	62.4	13/7/2014 11:36	62.4	13/7/2014 20:41	62.1
6/7/2014 15:21	62.5	7/7/2014 20:26	61.9	9/7/2014 21:31	61.8	11/7/2014 22:36	62.6	13/7/2014 11:41	61.9	13/7/2014 20:46	61.6
6/7/2014 15:26	62.4	7/7/2014 20:31	62.0	9/7/2014 21:36	61.3	11/7/2014 22:41	61.4	13/7/2014 11:46	62.3	13/7/2014 20:51	62.3
6/7/2014 15:31	62.6	7/7/2014 20:36	61.6	9/7/2014 21:41	62.3	11/7/2014 22:46	61.0	13/7/2014 11:51	62.6	13/7/2014 20:56	60.9
6/7/2014 15:36	62.0	7/7/2014 20:41	61.8	9/7/2014 21:46	60.9	11/7/2014 22:51	61.7	13/7/2014 11:56	62.6	13/7/2014 21:01	62.0
6/7/2014 15:41	66.2	7/7/2014 20:46	61.1	9/7/2014 21:51	61.2	11/7/2014 22:56	62.3	13/7/2014 12:01	63.1	13/7/2014 21:06	62.8
6/7/2014 15:46	62.7	7/7/2014 20:51	61.9	9/7/2014 21:56	61.4	12/7/2014 19:01	62.5	13/7/2014 12:06	63.3	13/7/2014 21:11	61.8
6/7/2014 15:51	62.5	7/7/2014 20:56	61.7	9/7/2014 22:01	60.8	12/7/2014 19:06	62.6	13/7/2014 12:11	63.1	13/7/2014 21:16	61.6
6/7/2014 15:56	62.1	7/7/2014 21:01	61.4	9/7/2014 22:06	60.0	12/7/2014 19:11	62.7	13/7/2014 12:16	62.9	13/7/2014 21:21	61.5
6/7/2014 16:01	62.5	7/7/2014 21:06	61.0	9/7/2014 22:11	60.9	12/7/2014 19:16	63.4	13/7/2014 12:21	62.1	13/7/2014 21:26	62.4
6/7/2014 16:06	62.8	7/7/2014 21:11	60.9	9/7/2014 22:16	60.3	12/7/2014 19:21	63.2	13/7/2014 12:26	62.5	13/7/2014 21:31	61.1
6/7/2014 16:11	63.0	7/7/2014 21:16	61.4	9/7/2014 22:21	60.5	12/7/2014 19:26	62.0	13/7/2014 12:31	62.3	13/7/2014 21:36	61.6
6/7/2014 16:16	62.1	7/7/2014 21:21	62.5	9/7/2014 22:26	61.4	12/7/2014 19:31	62.3	13/7/2014 12:36	63.7	13/7/2014 21:41	62.1
6/7/2014 16:21	62.3	7/7/2014 21:26	62.0	9/7/2014 22:31	61.6	12/7/2014 19:36	62.6	13/7/2014 12:41	62.2	13/7/2014 21:46	61.4
6/7/2014 16:26	62.3	7/7/2014 21:31	62.2	9/7/2014 22:36	61.1	12/7/2014 19:41	62.3	13/7/2014 12:46	63.5	13/7/2014 21:51	61.8
6/7/2014 16:31	62.4	7/7/2014 21:36	61.5	9/7/2014 22:41	61.3	12/7/2014 19:46	62.5	13/7/2014 12:51	61.9	13/7/2014 21:56	61.5
6/7/2014 16:36	61.8	7/7/2014 21:41	62.1	9/7/2014 22:46	61.7	12/7/2014 19:51	62.6	13/7/2014 12:56	62.2	13/7/2014 22:01	60.5
6/7/2014 16:41	62.3	7/7/2014 21:46	61.8	9/7/2014 22:51	61.2	12/7/2014 19:56	62.7	13/7/2014 13:01	63.0	13/7/2014 22:06	61.1
6/7/2014 16:46	62.2	7/7/2014 21:51	60.7	9/7/2014 22:56	60.7	12/7/2014 20:01	61.6	13/7/2014 13:06	63.0	13/7/2014 22:11	61.4
6/7/2014 16:51	62.2	7/7/2014 21:56	61.2	10/7/2014 19:01	61.8	12/7/2014 20:06	62.6	13/7/2014 13:11	63.1	13/7/2014 22:16	61.8
6/7/2014 16:56	61.9	7/7/2014 22:01	62.6	10/7/2014 19:06	61.4	12/7/2014 20:11	62.3	13/7/2014 13:16	62.8	13/7/2014 22:21	62.1
6/7/2014 17:01	62.1	7/7/2014 22:06	61.4	10/7/2014 19:11	61.3	12/7/2014 20:16	62.2	13/7/2014 13:21	63.1	13/7/2014 22:26	61.5
6/7/2014 17:06	64.3	7/7/2014 22:11	60.6	10/7/2014 19:16	61.6	12/7/2014 20:21	61.7	13/7/2014 13:26	63.2	13/	



Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
14/7/2014 21:51	61.9	16/7/2014 22:56	61.5	19/7/2014 20:01	65.7	20/7/2014 13:06	63.2	20/7/2014 22:11	61.9	23/7/2014 19:16	61.1
14/7/2014 21:56	61.9	17/7/2014 19:01	65.1	19/7/2014 20:06	63.5	20/7/2014 13:11	64.0	20/7/2014 22:16	61.7	23/7/2014 19:21	62.0
14/7/2014 22:01	61.8	17/7/2014 19:06	64.9	19/7/2014 20:11	63.6	20/7/2014 13:16	63.2	20/7/2014 22:21	62.2	23/7/2014 19:26	61.7
14/7/2014 22:06	62.4	17/7/2014 19:11	64.2	19/7/2014 20:16	63.3	20/7/2014 13:21	63.3	20/7/2014 22:26	62.9	23/7/2014 19:31	62.0
14/7/2014 22:11	62.9	17/7/2014 19:16	64.2	19/7/2014 20:21	63.8	20/7/2014 13:26	63.1	20/7/2014 22:31	62.9	23/7/2014 19:36	62.4
14/7/2014 22:16	62.1	17/7/2014 19:21	63.9	19/7/2014 20:26	63.1	20/7/2014 13:31	64.2	20/7/2014 22:36	61.4	23/7/2014 19:41	63.1
14/7/2014 22:21	62.6	17/7/2014 19:26	66.3	19/7/2014 20:31	62.9	20/7/2014 13:36	63.8	20/7/2014 22:41	61.5	23/7/2014 19:46	62.9
14/7/2014 22:26	62.0	17/7/2014 19:31	69.5	19/7/2014 20:36	63.0	20/7/2014 13:41	63.0	20/7/2014 22:46	61.6	23/7/2014 19:51	62.7
14/7/2014 22:31	61.6	17/7/2014 19:36	69.2	19/7/2014 20:41	62.6	20/7/2014 13:46	64.1	20/7/2014 22:51	61.8	23/7/2014 19:56	63.9
14/7/2014 22:36	61.7	17/7/2014 19:41	68.6	19/7/2014 20:46	62.8	20/7/2014 13:51	63.7	20/7/2014 22:56	61.8	23/7/2014 20:01	64.9
14/7/2014 22:41	61.9	17/7/2014 19:46	67.0	19/7/2014 20:51	62.5	20/7/2014 13:56	62.9	21/7/2014 19:01	63.6	23/7/2014 20:06	62.8
14/7/2014 22:46	61.5	17/7/2014 19:51	64.6	19/7/2014 20:56	61.2	20/7/2014 14:01	62.4	21/7/2014 19:06	64.0	23/7/2014 20:11	63.0
14/7/2014 22:51	61.6	17/7/2014 19:56	64.1	19/7/2014 21:01	62.4	20/7/2014 14:06	63.9	21/7/2014 19:11	63.3	23/7/2014 20:16	62.8
14/7/2014 22:56	60.9	17/7/2014 20:01	62.6	19/7/2014 21:06	62.2	20/7/2014 14:11	63.2	21/7/2014 19:16	63.6	23/7/2014 20:21	63.1
15/7/2014 19:01	62.6	17/7/2014 20:06	63.6	19/7/2014 21:11	61.8	20/7/2014 14:16	63.2	21/7/2014 19:21	63.3	23/7/2014 20:26	62.2
15/7/2014 19:06	63.1	17/7/2014 20:11	64.3	19/7/2014 21:16	61.3	20/7/2014 14:21	64.0	21/7/2014 19:26	63.4	23/7/2014 20:31	62.1
15/7/2014 19:11	63.4	17/7/2014 20:16	64.0	19/7/2014 21:21	64.3	20/7/2014 14:26	64.5	21/7/2014 19:31	63.1	23/7/2014 20:36	62.0
15/7/2014 19:16	62.7	17/7/2014 20:21	64.5	19/7/2014 21:26	61.8	20/7/2014 14:31	64.0	21/7/2014 19:36	62.7	23/7/2014 20:41	62.5
15/7/2014 19:21	61.9	17/7/2014 20:26	64.1	19/7/2014 21:31	62.5	20/7/2014 14:36	63.1	21/7/2014 19:41	63.1	23/7/2014 20:46	63.3
15/7/2014 19:26	61.9	17/7/2014 20:31	64.3	19/7/2014 21:36	62.2	20/7/2014 14:41	63.3	21/7/2014 19:46	63.0	23/7/2014 20:51	62.5
15/7/2014 19:31	61.1	17/7/2014 20:36	64.3	19/7/2014 21:41	67.2	20/7/2014 14:46	64.5	21/7/2014 19:51	62.3	23/7/2014 20:56	61.6
15/7/2014 19:36	63.0	17/7/2014 20:41	64.0	19/7/2014 21:46	62.0	20/7/2014 14:51	63.9	21/7/2014 19:56	63.2	23/7/2014 21:01	62.6
15/7/2014 19:41	62.1	17/7/2014 20:46	64.1	19/7/2014 21:51	61.5	20/7/2014 14:56	63.7	21/7/2014 20:01	63.0	23/7/2014 21:06	61.9
15/7/2014 19:46	64.4	17/7/2014 20:51	64.0	19/7/2014 21:56	62.6	20/7/2014 15:01	63.3	21/7/2014 20:06	63.2	23/7/2014 21:11	62.3
15/7/2014 19:51	63.1	17/7/2014 20:56	63.5	19/7/2014 22:01	62.7	20/7/2014 15:06	63.2	21/7/2014 20:11	62.1	23/7/2014 21:16	62.1
15/7/2014 19:56	63.0	17/7/2014 21:01	63.9	19/7/2014 22:06	61.7	20/7/2014 15:11	62.9	21/7/2014 20:16	62.5	23/7/2014 21:21	61.9
15/7/2014 20:01	62.7	17/7/2014 21:06	67.5	19/7/2014 22:11	62.8	20/7/2014 15:16	64.0	21/7/2014 20:21	62.0	23/7/2014 21:26	63.0
15/7/2014 20:06	61.7	17/7/2014 21:11	66.4	19/7/2014 22:16	61.7	20/7/2014 15:21	63.2	21/7/2014 20:26	61.9	23/7/2014 21:31	61.8
15/7/2014 20:11	62.7	17/7/2014 21:16	64.8	19/7/2014 22:21	61.9	20/7/2014 15:26	63.8	21/7/2014 20:31	62.9	23/7/2014 21:36	61.4
15/7/2014 20:16	62.4	17/7/2014 21:21	63.4	19/7/2014 22:26	62.0	20/7/2014 15:31	63.7	21/7/2014 20:36	62.0	23/7/2014 21:41	61.7
15/7/2014 20:21	62.8	17/7/2014 21:26	63.9	19/7/2014 22:31	61.8	20/7/2014 15:36	64.0	21/7/2014 20:41	61.9	23/7/2014 21:46	61.6
15/7/2014 20:26	62.2	17/7/2014 21:31	63.5	19/7/2014 22:36	61.8	20/7/2014 15:41	63.4	21/7/2014 20:46	62.7	23/7/2014 21:51	61.6
15/7/2014 20:31	62.0	17/7/2014 21:36	63.6	19/7/2014 22:41	61.4	20/7/2014 15:46	63.4	21/7/2014 20:51	61.5	23/7/2014 21:56	62.9
15/7/2014 20:36	61.5	17/7/2014 21:41	63.8	19/7/2014 22:46	61.9	20/7/2014 15:51	63.0	21/7/2014 20:56	61.4	23/7/2014 22:01	62.8
15/7/2014 20:41	61.9	17/7/2014 21:46	63.6	19/7/2014 22:51	60.4	20/7/2014 15:56	62.8	21/7/2014 21:01	61.3	23/7/2014 22:06	61.8
15/7/2014 20:46	61.9	17/7/2014 21:51	63.1	19/7/2014 22:56	62.0	20/7/2014 16:01	63.6	21/7/2014 21:06	60.6	23/7/2014 22:11	61.6
15/7/2014 20:51	61.3	17/7/2014 21:56	63.5	20/7/2014 7:01	57.7	20/7/2014 16:06	63.2	21/7/2014 21:11	61.8	23/7/2014 22:16	61.9
15/7/2014 20:56	61.6	17/7/2014 22:01	63.4	20/7/2014 7:06	57.6	20/7/2014 16:11	63.1	21/7/2014 21:16	61.9	23/7/2014 22:21	62.0
15/7/2014 21:01	61.3	17/7/2014 22:06	64.1	20/7/2014 7:11	57.2	20/7/2014 16:16	63.0	21/7/2014 21:21	61.9	23/7/2014 22:26	63.0
15/7/2014 21:06	61.0	17/7/2014 22:11	63.1	20/7/2014 7:16	61.4	20/7/2014 16:21	64.6	21/7/2014 21:26	61.9	23/7/2014 22:31	62.4
15/7/2014 21:11	60.8	17/7/2014 22:16	64.1	20/7/2014 7:21	64.1	20/7/2014 16:26	63.6	21/7/2014 21:31	61.2	23/7/2014 22:36	61.8
15/7/2014 21:16	61.6	17/7/2014 22:21	63.7	20/7/2014 7:26	63.4	20/7/2014 16:31	63.2	21/7/2014 21:36	61.3	23/7/2014 22:41	62.1
15/7/2014 21:21	61.1	17/7/2014 22:26	63.3	20/7/2014 7:31	60.5	20/7/2014 16:36	63.0	21/7/2014 21:41	62.5	23/7/2014 22:46	62.5
15/7/2014 21:26	61.7	17/7/2014 22:31	64.2	20/7/2014 7:36	59.5	20/7/2014 16:41	63.1	21/7/2014 21:46	62.0	23/7/2014 22:51	61.8
15/7/2014 21:31	63.0	17/7/2014 22:36	63.1	20/7/2014 7:41	59.5	20/7/2014 16:46	63.3	21/7/2014 21:51	61.8	23/7/2014 22:56	62.2
15/7/2014 21:36	61.3	17/7/2014 22:41	64.3	20/7/2014 7:46	59.3	20/7/2014 16:51	63.4	21/7/2014 21:56	61.9	24/7/2014 19:01	63.9
15/7/2014 21:41	61.1	17/7/2014 22:46	63.9	20/7/2014 7:51	60.5	20/7/2014 16:56	63.2	21/7/2014 22:01	61.8	24/7/2014 19:06	63.7
15/7/2014 21:46	61.6	17/7/2014 22:51	63.2	20/7/2014 7:56	59.9	20/7/2014 17:01	63.1	21/7/2014 22:06	61.8	24/7/2014 19:11	63.1
15/7/2014 21:51	61.8	17/7/2014 22:56	63.7	20/7/2014 8:01	60.1	20/7/2014 17:06	62.8	21/7/2014 22:11	62.0	24/7/2014 19:16	62.8
15/7/2014 21:56	60.6	18/7/2014 19:01	63.8	20/7/2014 8:06	60.8	20/7/2014 17:11	62.7	21/7/2014 22:16	63.0	24/7/2014 19:21	63.9
15/7/2014 22:01	61.4	18/7/2014 19:06	62.5	20/7/2014 8:11	60.7	20/7/2014 17:16	63.3	21/7/2014 22:21	61.3	24/7/2014 19:26	63.4
15/7/2014 22:06	61.7	18/7/2014 19:11	63.9	20/7/2014 8:16	61.5	20/7/2014 17:21	63.5	21/7/2014 22:26	62.0	24/7/2014 19:31	62.8
15/7/2014 22:11	61.6	18/7/2014 19:16	64.6	20/7/2014 8:21	62.3	20/7/2014 17:26	63.3	21/7/2014 22:31	61.4	24/7/2014 19:36	63.6
15/7/2014 22:16	61.1	18/7/2014 19:21	64.8	20/7/2014 8:26	63.1	20/7/2014 17:31	63.1	21/7/2014 22:36	61.1	24/7/2014 19:41	63.4
15/7/2014 22:21	62.3	18/7/2014 19:26	64.2	20/7/2014 8:31	63.2	20/7/2014 17:36	63.0	21/7/2014 22:41	61.2	24/7/2014 19:46	63.6
15/7/2014 22:26	61.6	18/7/2014 19:31	64.9	20/7/2014 8:36	63.1	20/7/2014 17:41	63.8	21/7/2014 22:46	61.1	24/7/2014 19:51	63.8
15/7/2014 22:31	62.0	18/7/2014 19:36	65.4	20/7/2014 8:41	63.2	20/7/2014 17:46	62.7	21/7/2014 22:51	60.0	24/7/2014 19:56	63.3
15/7/2014 22:36	61.5	18/7/2014 19:41	64.7	20/7/2014 8:46	62.1	20/7/2014 17:51	62.8	21/7/2014 22:56	60.5	24/7/2014 20:01	63.1
15/7/2014 22:41	61.2	18/7/2014 19:46	64.8	20/7/2014 8:51	63.1	20/7/2014 17:56	62.5	22/7/2014 19:01	62.7	24/7/2014 20:06	63.5
15/7/2014 22:46	59.7	18/7/2014 19:51	64.6	20/7/2014 8:56	63.3	20/7/2014 18:01	62.9	22/7/2014 19:06	63.0	24/7/2014 20:11	64.1
15/7/2014 22:51	57.9	18/7/2014 19:56	64.2	20/7/2014 9:01	63.2	20/7/2014 18:06	63.3	22/7/2014 19:11	63.6	24/7/2014 20:16	63.9
15/7/2014 22:56	57.6	18/7/2014 20:01	64.1	20/7/2014 9:06	62.8	20/7/2014 18:11	63.3	22/7/2014 19:16	63.6	24/7/2014 20:21	63.6
16/7/2014 19:01	61.7	18/7/2014 20:06	64.3	20/7/2014 9:11	62.6	20/7/2014 18:16	63.4	22/7/2014 19:21	64.1	24/7/2014 20:26	62.9
16/7/2014 19:06	61.0	18/7/2014 20:11	64.0	20/7/2014 9:16	63.7	20/7/2014 18:21	63.2	22/7/2014 19:26	64.2	24/7/2014 20:31	63.0
16/7/2014 19:11	59.4	18/7/2014 20:16	64.8	20/7/2014 9:21	63.4	20/7/2014 18:26	63.5	22/7/2014 19:31	63.3	24/7/2014 20:36	62.4
16/7/2014 19:16	59.9	18/7/2014 20:21	64.8	20/7/2014 9:26	64.5	20/7/2014 18:31	63.6	22/7/2014 19:36	62.2	24/7/2014 20:41	62.7
16/7/2014 19:21	61.1	18/7/2014 20:26	63.9	20/7/2014 9:31	63.9	20/7/2014 18:36	63.3	22/7/2014 19:41	63.1	24/7/2014 20:46	63.1
16/7/2014 19:26	61.0	18/7/2014 20:31	64.2	20/7/2014 9:36	63.2	20/7/2014 18:41	63.7	22/7/2014 19:46	63.1	24/7/2014 20:51	62.5
16/7/2014 19:31	61.9	18/7/2014 20:36	63.5	20/7/2014 9:41	64.3	20/7/2014 18:46	63.4	22/7/2014 19:51			

Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
25/7/2014 20:21	62.0	27/7/2014 9:26	63.9	27/7/2014 18:31	64.1	28/6/2014 4:21	56.8	29/6/2014 5:26	54.4	30/6/2014 6:31	62.2
25/7/2014 20:26	62.3	27/7/2014 9:31	64.1	27/7/2014 18:36	62.6	28/6/2014 4:26	56.4	29/6/2014 5:31	56.9	30/6/2014 6:36	63.0
25/7/2014 20:31	62.3	27/7/2014 9:36	63.8	27/7/2014 18:41	63.6	28/6/2014 4:31	57.3	29/6/2014 5:36	57.7	30/6/2014 6:41	63.5
25/7/2014 20:36	62.1	27/7/2014 9:41	63.5	27/7/2014 18:46	63.7	28/6/2014 4:36	55.5	29/6/2014 5:41	57.7	30/6/2014 6:46	64.1
25/7/2014 20:41	61.2	27/7/2014 9:46	63.9	27/7/2014 18:51	63.2	28/6/2014 4:41	56.8	29/6/2014 5:46	58.4	30/6/2014 6:51	64.1
25/7/2014 20:46	62.3	27/7/2014 9:51	64.0	27/7/2014 18:56	62.8	28/6/2014 4:46	57.1	29/6/2014 5:51	57.9	30/6/2014 6:56	64.4
25/7/2014 20:51	62.1	27/7/2014 9:56	63.1	27/7/2014 19:01	63.3	28/6/2014 4:51	55.8	29/6/2014 5:56	63.4	30/6/2014 7:01	63.5
25/7/2014 20:56	61.2	27/7/2014 10:01	63.7	27/7/2014 19:06	62.5	28/6/2014 4:56	57.8	29/6/2014 6:01	57.7	30/6/2014 7:06	63.4
25/7/2014 21:01	62.1	27/7/2014 10:06	66.1	27/7/2014 19:11	63.1	28/6/2014 5:01	55.9	29/6/2014 6:06	58.4	30/6/2014 7:11	63.1
25/7/2014 21:06	61.5	27/7/2014 10:11	64.4	27/7/2014 19:16	62.2	28/6/2014 5:06	57.4	29/6/2014 6:11	59.1	30/6/2014 7:16	62.9
25/7/2014 21:11	61.8	27/7/2014 10:16	66.5	27/7/2014 19:21	62.8	28/6/2014 5:11	55.7	29/6/2014 6:16	59.8	30/6/2014 7:21	63.5
25/7/2014 21:16	61.0	27/7/2014 10:21	66.9	27/7/2014 19:26	63.4	28/6/2014 5:16	58.3	29/6/2014 6:21	59.1	30/6/2014 7:26	63.1
25/7/2014 21:21	61.9	27/7/2014 10:26	65.5	27/7/2014 19:31	63.8	28/6/2014 5:21	57.0	29/6/2014 6:26	59.2	30/6/2014 7:31	62.8
25/7/2014 21:26	62.7	27/7/2014 10:31	64.2	27/7/2014 19:36	62.5	28/6/2014 5:26	57.7	29/6/2014 6:31	59.5	30/6/2014 7:36	63.0
25/7/2014 21:31	61.9	27/7/2014 10:36	64.7	27/7/2014 19:41	63.0	28/6/2014 5:31	58.0	29/6/2014 6:36	59.8	30/6/2014 7:41	62.8
25/7/2014 21:36	61.3	27/7/2014 10:41	65.6	27/7/2014 19:46	62.9	28/6/2014 5:36	57.6	29/6/2014 6:41	61.0	30/6/2014 7:46	63.0
25/7/2014 21:41	62.1	27/7/2014 10:46	64.8	27/7/2014 19:51	62.0	28/6/2014 5:41	58.1	29/6/2014 6:46	62.2	30/6/2014 7:51	62.7
25/7/2014 21:46	62.1	27/7/2014 10:51	63.1	27/7/2014 19:56	62.4	28/6/2014 5:46	58.1	29/6/2014 6:51	60.6	30/6/2014 7:56	63.1
25/7/2014 21:51	62.4	27/7/2014 10:56	61.9	27/7/2014 20:01	64.4	28/6/2014 5:51	58.1	29/6/2014 6:56	61.2	1/7/2014 0:01	62.4
25/7/2014 21:56	61.8	27/7/2014 11:01	61.8	27/7/2014 20:06	61.6	28/6/2014 5:56	58.7	29/6/2014 7:01	60.9	1/7/2014 0:06	62.6
25/7/2014 22:01	61.6	27/7/2014 11:06	62.9	27/7/2014 20:11	61.7	28/6/2014 6:01	58.8	29/6/2014 7:06	63.6	1/7/2014 0:11	61.9
25/7/2014 22:06	61.3	27/7/2014 11:11	63.6	27/7/2014 20:16	63.2	28/6/2014 6:06	59.4	29/6/2014 7:11	63.6	1/7/2014 0:16	62.1
25/7/2014 22:11	62.2	27/7/2014 11:16	65.1	27/7/2014 20:21	61.2	28/6/2014 6:11	59.7	29/6/2014 7:16	68.4	1/7/2014 0:21	62.7
25/7/2014 22:16	63.3	27/7/2014 11:21	67.2	27/7/2014 20:26	61.5	28/6/2014 6:16	59.1	29/6/2014 7:21	66.3	1/7/2014 0:26	62.0
25/7/2014 22:21	61.2	27/7/2014 11:26	65.9	27/7/2014 20:31	61.5	28/6/2014 6:21	60.3	29/6/2014 7:26	65.0	1/7/2014 0:31	61.9
25/7/2014 22:26	61.6	27/7/2014 11:31	63.9	27/7/2014 20:36	61.9	28/6/2014 6:26	61.5	29/6/2014 7:31	63.9	1/7/2014 0:36	61.7
25/7/2014 22:31	61.8	27/7/2014 11:36	63.5	27/7/2014 20:41	61.9	28/6/2014 6:31	60.0	29/6/2014 7:36	63.3	1/7/2014 0:41	61.9
25/7/2014 22:36	61.9	27/7/2014 11:41	64.3	27/7/2014 20:46	61.7	28/6/2014 6:36	61.1	29/6/2014 7:41	63.4	1/7/2014 0:46	61.6
25/7/2014 22:41	61.8	27/7/2014 11:46	64.8	27/7/2014 20:51	61.8	28/6/2014 6:41	61.7	29/6/2014 7:46	63.5	1/7/2014 0:51	62.8
25/7/2014 22:46	61.9	27/7/2014 11:51	65.2	27/7/2014 20:56	62.0	28/6/2014 6:46	62.1	29/6/2014 7:51	62.6	1/7/2014 0:56	62.3
25/7/2014 22:51	62.1	27/7/2014 11:56	65.7	27/7/2014 21:01	61.5	28/6/2014 6:51	62.2	29/6/2014 7:56	63.1	1/7/2014 1:01	62.1
25/7/2014 22:56	62.1	27/7/2014 12:01	63.7	27/7/2014 21:06	62.0	28/6/2014 6:56	62.2	30/6/2014 0:01	62.9	1/7/2014 1:06	61.5
26/7/2014 19:01	62.6	27/7/2014 12:06	62.6	27/7/2014 21:11	62.6	28/6/2014 7:01	63.1	30/6/2014 0:06	62.6	1/7/2014 1:11	61.7
26/7/2014 19:06	62.9	27/7/2014 12:11	61.7	27/7/2014 21:16	62.6	28/6/2014 7:06	63.3	30/6/2014 0:11	62.0	1/7/2014 1:16	61.5
26/7/2014 19:11	65.1	27/7/2014 12:16	60.0	27/7/2014 21:21	62.2	28/6/2014 7:11	63.0	30/6/2014 0:16	62.1	1/7/2014 1:21	62.3
26/7/2014 19:16	63.0	27/7/2014 12:21	59.5	27/7/2014 21:26	63.0	28/6/2014 7:16	62.7	30/6/2014 0:21	62.1	1/7/2014 1:26	62.1
26/7/2014 19:21	66.0	27/7/2014 12:26	57.8	27/7/2014 21:31	63.1	28/6/2014 7:21	63.0	30/6/2014 0:26	61.8	1/7/2014 1:31	61.4
26/7/2014 19:26	63.1	27/7/2014 12:31	57.4	27/7/2014 21:36	62.6	28/6/2014 7:26	63.3	30/6/2014 0:31	61.5	1/7/2014 1:36	61.3
26/7/2014 19:31	64.1	27/7/2014 12:36	59.1	27/7/2014 21:41	63.0	28/6/2014 7:31	62.9	30/6/2014 0:36	61.8	1/7/2014 1:41	62.5
26/7/2014 19:36	62.9	27/7/2014 12:41	64.3	27/7/2014 21:46	62.8	28/6/2014 7:36	63.1	30/6/2014 0:41	62.4	1/7/2014 1:46	60.2
26/7/2014 19:41	63.1	27/7/2014 12:46	64.5	27/7/2014 21:51	62.3	28/6/2014 7:41	62.7	30/6/2014 0:46	60.6	1/7/2014 1:51	62.6
26/7/2014 19:46	63.0	27/7/2014 12:51	64.4	27/7/2014 21:56	62.9	28/6/2014 7:46	62.9	30/6/2014 0:51	60.3	1/7/2014 1:56	60.6
26/7/2014 19:51	63.4	27/7/2014 12:56	64.8	27/7/2014 22:01	62.2	28/6/2014 7:51	62.7	30/6/2014 0:56	60.8	1/7/2014 2:01	61.5
26/7/2014 19:56	62.7	27/7/2014 13:01	64.5	27/7/2014 22:06	61.8	28/6/2014 7:56	62.3	30/6/2014 1:01	59.7	1/7/2014 2:06	62.2
26/7/2014 20:01	63.3	27/7/2014 13:06	63.8	27/7/2014 22:11	62.2	29/6/2014 0:01	62.6	30/6/2014 1:06	60.0	1/7/2014 2:11	62.5
26/7/2014 20:06	63.0	27/7/2014 13:11	72.7	27/7/2014 22:16	62.8	29/6/2014 0:06	62.5	30/6/2014 1:11	59.3	1/7/2014 2:16	62.4
26/7/2014 20:11	62.0	27/7/2014 13:16	66.7	27/7/2014 22:21	63.1	29/6/2014 0:11	61.9	30/6/2014 1:16	60.2	1/7/2014 2:21	60.9
26/7/2014 20:16	61.4	27/7/2014 13:21	64.1	27/7/2014 22:26	62.1	29/6/2014 0:16	61.7	30/6/2014 1:21	59.5	1/7/2014 2:26	61.8
26/7/2014 20:21	62.3	27/7/2014 13:26	62.5	27/7/2014 22:31	62.4	29/6/2014 0:21	63.6	30/6/2014 1:26	59.7	1/7/2014 2:31	61.4
26/7/2014 20:26	62.9	27/7/2014 13:31	62.8	27/7/2014 22:36	61.5	29/6/2014 0:26	61.2	30/6/2014 1:31	58.0	1/7/2014 2:36	60.8
26/7/2014 20:31	61.8	27/7/2014 13:36	64.0	27/7/2014 22:41	62.0	29/6/2014 0:31	62.1	30/6/2014 1:36	59.1	1/7/2014 2:41	60.9
26/7/2014 20:36	62.0	27/7/2014 13:41	64.7	27/7/2014 22:46	62.2	29/6/2014 0:36	61.8	30/6/2014 1:41	58.9	1/7/2014 2:46	61.2
26/7/2014 20:41	61.6	27/7/2014 13:46	63.6	27/7/2014 22:51	61.0	29/6/2014 0:41	60.8	30/6/2014 1:46	57.5	1/7/2014 2:51	61.6
26/7/2014 20:46	62.6	27/7/2014 13:51	64.2	27/7/2014 22:56	60.9	29/6/2014 0:46	60.1	30/6/2014 1:51	56.6	1/7/2014 2:56	60.8
26/7/2014 20:51	62.5	27/7/2014 13:56	64.4			29/6/2014 0:51	60.5	30/6/2014 1:56	56.2	1/7/2014 3:01	62.0
26/7/2014 20:56	62.8	27/7/2014 14:01	64.6			29/6/2014 0:56	61.0	30/6/2014 2:01	55.9	1/7/2014 3:06	59.6
26/7/2014 21:01	62.4	27/7/2014 14:06	65.6			29/6/2014 1:01	61.2	30/6/2014 2:06	58.8	1/7/2014 3:11	60.3
26/7/2014 21:06	62.7	27/7/2014 14:11	64.9			29/6/2014 1:06	60.4	30/6/2014 2:11	60.6	1/7/2014 3:16	60.3
26/7/2014 21:11	62.7	27/7/2014 14:16	64.5			29/6/2014 1:11	60.5	30/6/2014 2:16	59.8	1/7/2014 3:21	59.8
26/7/2014 21:16	63.0	27/7/2014 14:21	64.8			29/6/2014 1:16	60.1	30/6/2014 2:21	60.1	1/7/2014 3:26	61.1
26/7/2014 21:21	62.5	27/7/2014 14:26	66.0			29/6/2014 1:21	59.4	30/6/2014 2:26	59.3	1/7/2014 3:31	58.8
26/7/2014 21:26	62.7	27/7/2014 14:31	64.7			29/6/2014 1:26	59.9	30/6/2014 2:31	58.5	1/7/2014 3:36	59.7
26/7/2014 21:31	62.9	27/7/2014 14:36	65.1			29/6/2014 1:31	59.6	30/6/2014 2:36	61.9	1/7/2014 3:41	59.6
26/7/2014 21:36	63.4	27/7/2014 14:41	64.8			29/6/2014 1:36	58.5	30/6/2014 2:41	56.3	1/7/2014 3:46	58.8
26/7/2014 21:41	62.6	27/7/2014 14:46	65.4			29/6/2014 1:41	58.9	30/6/2014 2:46	59.9	1/7/2014 3:51	59.5
26/7/2014 21:46	64.2	27/7/2014 14:51	65.3			29/6/2014 1:46	58.4	30/6/2014 2:51	56.9	1/7/2014 3:56	59.2
26/7/2014 21:51	63.0	27/7/2014 14:56	65.6			29/6/2014 1:51	58.1	30/6/2014 2:56	57.3	1/7/2014 4:01	58.9
26/7/2014 21:56	63.1	27/7/2014 15:01	64.9			29/6/2014 1:56	58.2	30/6/2014 3:01	53.4	1/7/2014 4:06	59.6
26/7/2014 22:01	63.0	27/7/2014 15:06	64.5			29/6/2014 2:01	58.5	30/6/2014 3:06	56.2	1/7/2014 4:11	58.2
26/7/2014 22:06	63.4	27/7/2014 15:11	65.1			29/6/2014 2:06	59.0	30/6/2014 3:11	53.8	1/7/2014 4:16	58.7
26/7/2014 22:11	63.1	27/7/2014 15:16	64.9			29/6/2014 2:11	60.6	30/6/2014 3:16	53.9	1/7/2014 4:21	59.0
26/7/2014 22:16	62.7	27/7/2014 15:21	65.3			29/6/2014 2:16	58.9	30/6/2014 3:21	55.1	1/7/2014 4:26	58.8
26/7/2014 22:21	63.8	27/									

Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
1/7/2014 23:36	63.1	3/7/2014 0:41	60.7	4/7/2014 1:46	58.6	5/7/2014 2:51	60.1	6/7/2014 3:56	58.1	7/7/2014 5:01	49.3
1/7/2014 23:41	62.3	3/7/2014 0:46	59.4	4/7/2014 1:51	57.2	5/7/2014 2:56	59.7	6/7/2014 4:01	55.8	7/7/2014 5:06	52.4
1/7/2014 23:46	63.0	3/7/2014 0:51	60.1	4/7/2014 1:56	57.1	5/7/2014 3:01	61.0	6/7/2014 4:06	56.3	7/7/2014 5:11	42.0
1/7/2014 23:51	62.7	3/7/2014 0:56	59.5	4/7/2014 2:01	56.8	5/7/2014 3:06	59.6	6/7/2014 4:11	56.4	7/7/2014 5:16	55.0
1/7/2014 23:56	62.0	3/7/2014 1:01	58.7	4/7/2014 2:06	57.1	5/7/2014 3:11	59.4	6/7/2014 4:16	55.8	7/7/2014 5:21	53.3
2/7/2014 0:01	62.3	3/7/2014 1:06	59.7	4/7/2014 2:11	57.2	5/7/2014 3:16	58.8	6/7/2014 4:21	54.0	7/7/2014 5:26	55.6
2/7/2014 0:06	62.4	3/7/2014 1:11	59.4	4/7/2014 2:16	56.0	5/7/2014 3:21	58.0	6/7/2014 4:26	55.7	7/7/2014 5:31	56.1
2/7/2014 0:11	61.4	3/7/2014 1:16	59.3	4/7/2014 2:21	59.2	5/7/2014 3:26	59.2	6/7/2014 4:31	53.4	7/7/2014 5:36	55.9
2/7/2014 0:16	62.0	3/7/2014 1:21	59.1	4/7/2014 2:26	56.8	5/7/2014 3:31	58.6	6/7/2014 4:36	54.0	7/7/2014 5:41	54.9
2/7/2014 0:21	61.4	3/7/2014 1:26	58.9	4/7/2014 2:31	56.4	5/7/2014 3:36	58.7	6/7/2014 4:41	56.9	7/7/2014 5:46	56.1
2/7/2014 0:26	61.5	3/7/2014 1:31	59.0	4/7/2014 2:36	56.7	5/7/2014 3:41	59.1	6/7/2014 4:46	53.9	7/7/2014 5:51	56.0
2/7/2014 0:31	60.5	3/7/2014 1:36	58.9	4/7/2014 2:41	55.4	5/7/2014 3:46	58.3	6/7/2014 4:51	53.9	7/7/2014 5:56	57.0
2/7/2014 0:36	60.8	3/7/2014 1:41	58.3	4/7/2014 2:46	55.0	5/7/2014 3:51	58.1	6/7/2014 4:56	54.5	7/7/2014 6:01	61.4
2/7/2014 0:41	60.9	3/7/2014 1:46	58.7	4/7/2014 2:51	55.2	5/7/2014 3:56	58.4	6/7/2014 5:01	55.5	7/7/2014 6:06	58.0
2/7/2014 0:46	61.1	3/7/2014 1:51	57.6	4/7/2014 2:56	56.7	5/7/2014 4:01	58.2	6/7/2014 5:06	54.8	7/7/2014 6:11	59.8
2/7/2014 0:51	59.7	3/7/2014 1:56	57.9	4/7/2014 3:01	54.1	5/7/2014 4:06	57.8	6/7/2014 5:11	56.6	7/7/2014 6:16	60.8
2/7/2014 0:56	60.8	3/7/2014 2:01	57.0	4/7/2014 3:06	55.9	5/7/2014 4:11	55.7	6/7/2014 5:16	53.5	7/7/2014 6:21	60.4
2/7/2014 1:01	58.6	3/7/2014 2:06	58.5	4/7/2014 3:11	53.2	5/7/2014 4:16	56.4	6/7/2014 5:21	55.6	7/7/2014 6:26	60.1
2/7/2014 1:06	59.7	3/7/2014 2:11	57.8	4/7/2014 3:16	51.5	5/7/2014 4:21	57.2	6/7/2014 5:26	56.3	7/7/2014 6:31	61.0
2/7/2014 1:11	58.9	3/7/2014 2:16	57.8	4/7/2014 3:21	55.2	5/7/2014 4:26	55.0	6/7/2014 5:31	51.1	7/7/2014 6:36	61.7
2/7/2014 1:16	58.3	3/7/2014 2:21	58.2	4/7/2014 3:26	53.8	5/7/2014 4:31	57.6	6/7/2014 5:36	56.5	7/7/2014 6:41	63.7
2/7/2014 1:21	60.5	3/7/2014 2:26	57.4	4/7/2014 3:31	45.2	5/7/2014 4:36	56.5	6/7/2014 5:41	56.3	7/7/2014 6:46	63.1
2/7/2014 1:26	59.3	3/7/2014 2:31	56.3	4/7/2014 3:36	51.9	5/7/2014 4:41	54.5	6/7/2014 5:46	54.7	7/7/2014 6:51	63.1
2/7/2014 1:31	58.9	3/7/2014 2:36	55.8	4/7/2014 3:41	54.5	5/7/2014 4:46	55.6	6/7/2014 5:51	57.0	7/7/2014 6:56	69.4
2/7/2014 1:36	57.0	3/7/2014 2:41	55.9	4/7/2014 3:46	51.2	5/7/2014 4:51	54.8	6/7/2014 5:56	56.4	7/7/2014 23:01	62.0
2/7/2014 1:41	57.9	3/7/2014 2:46	56.1	4/7/2014 3:51	56.5	5/7/2014 4:56	55.9	6/7/2014 6:01	55.8	7/7/2014 23:06	62.6
2/7/2014 1:46	57.1	3/7/2014 2:51	54.4	4/7/2014 3:56	55.5	5/7/2014 5:01	56.6	6/7/2014 6:06	57.0	7/7/2014 23:11	63.0
2/7/2014 1:51	56.9	3/7/2014 2:56	54.9	4/7/2014 4:01	53.6	5/7/2014 5:06	57.5	6/7/2014 6:11	57.2	7/7/2014 23:16	62.7
2/7/2014 1:56	58.3	3/7/2014 3:01	55.3	4/7/2014 4:06	51.9	5/7/2014 5:11	56.0	6/7/2014 6:16	57.3	7/7/2014 23:21	62.6
2/7/2014 2:01	57.3	3/7/2014 3:06	54.1	4/7/2014 4:11	52.3	5/7/2014 5:16	56.7	6/7/2014 6:21	58.2	7/7/2014 23:26	62.3
2/7/2014 2:06	57.7	3/7/2014 3:11	54.9	4/7/2014 4:16	39.7	5/7/2014 5:21	58.9	6/7/2014 6:26	59.4	7/7/2014 23:31	62.3
2/7/2014 2:11	56.3	3/7/2014 3:16	52.0	4/7/2014 4:21	53.8	5/7/2014 5:26	57.5	6/7/2014 6:31	58.1	7/7/2014 23:36	62.4
2/7/2014 2:16	57.6	3/7/2014 3:21	52.1	4/7/2014 4:26	53.5	5/7/2014 5:31	56.7	6/7/2014 6:36	59.0	7/7/2014 23:41	62.0
2/7/2014 2:21	57.3	3/7/2014 3:26	53.9	4/7/2014 4:31	51.0	5/7/2014 5:36	58.9	6/7/2014 6:41	59.3	7/7/2014 23:46	61.7
2/7/2014 2:26	57.0	3/7/2014 3:31	52.1	4/7/2014 4:36	53.3	5/7/2014 5:41	56.9	6/7/2014 6:46	58.8	7/7/2014 23:51	62.0
2/7/2014 2:31	55.7	3/7/2014 3:36	54.3	4/7/2014 4:41	50.9	5/7/2014 5:46	56.3	6/7/2014 6:51	60.1	7/7/2014 23:56	62.2
2/7/2014 2:36	55.7	3/7/2014 3:41	55.1	4/7/2014 4:46	53.0	5/7/2014 5:51	57.4	6/7/2014 6:56	60.3	8/7/2014 0:01	61.5
2/7/2014 2:41	56.2	3/7/2014 3:46	48.8	4/7/2014 4:51	53.9	5/7/2014 5:56	57.0	6/7/2014 23:01	62.6	8/7/2014 0:06	62.0
2/7/2014 2:46	61.0	3/7/2014 3:51	46.7	4/7/2014 4:56	50.5	5/7/2014 6:01	58.4	6/7/2014 23:06	62.6	8/7/2014 0:11	62.8
2/7/2014 2:51	59.5	3/7/2014 3:56	53.8	4/7/2014 5:01	54.7	5/7/2014 6:06	58.4	6/7/2014 23:11	62.5	8/7/2014 0:16	61.6
2/7/2014 2:56	58.1	3/7/2014 4:01	45.5	4/7/2014 5:06	54.9	5/7/2014 6:11	60.1	6/7/2014 23:16	62.3	8/7/2014 0:21	61.5
2/7/2014 3:01	57.3	3/7/2014 4:06	49.0	4/7/2014 5:11	55.3	5/7/2014 6:16	59.2	6/7/2014 23:21	62.2	8/7/2014 0:26	61.1
2/7/2014 3:06	56.4	3/7/2014 4:11	50.3	4/7/2014 5:16	55.4	5/7/2014 6:21	60.7	6/7/2014 23:26	61.6	8/7/2014 0:31	60.8
2/7/2014 3:11	55.8	3/7/2014 4:16	51.1	4/7/2014 5:21	56.5	5/7/2014 6:26	60.1	6/7/2014 23:31	61.3	8/7/2014 0:36	60.6
2/7/2014 3:16	54.5	3/7/2014 4:21	54.2	4/7/2014 5:26	55.0	5/7/2014 6:31	60.3	6/7/2014 23:36	61.6	8/7/2014 0:41	60.1
2/7/2014 3:21	54.8	3/7/2014 4:26	54.3	4/7/2014 5:31	55.9	5/7/2014 6:36	60.4	6/7/2014 23:41	61.6	8/7/2014 0:46	60.2
2/7/2014 3:26	55.2	3/7/2014 4:31	55.0	4/7/2014 5:36	57.6	5/7/2014 6:41	61.7	6/7/2014 23:46	61.5	8/7/2014 0:51	59.9
2/7/2014 3:31	54.6	3/7/2014 4:36	52.3	4/7/2014 5:41	57.8	5/7/2014 6:46	61.2	6/7/2014 23:51	61.6	8/7/2014 0:56	59.3
2/7/2014 3:36	49.8	3/7/2014 4:41	48.6	4/7/2014 5:46	56.1	5/7/2014 6:51	61.8	6/7/2014 23:56	61.8	8/7/2014 1:01	59.2
2/7/2014 3:41	55.6	3/7/2014 4:46	54.0	4/7/2014 5:51	57.5	5/7/2014 6:56	61.2	7/7/2014 0:01	60.9	8/7/2014 1:06	59.3
2/7/2014 3:46	53.5	3/7/2014 4:51	51.1	4/7/2014 5:56	57.7	5/7/2014 23:01	63.1	7/7/2014 0:06	63.8	8/7/2014 1:11	59.6
2/7/2014 3:51	54.6	3/7/2014 4:56	50.3	4/7/2014 6:01	57.8	5/7/2014 23:06	62.6	7/7/2014 0:11	61.5	8/7/2014 1:16	57.7
2/7/2014 3:56	51.9	3/7/2014 5:01	53.4	4/7/2014 6:06	58.2	5/7/2014 23:11	63.1	7/7/2014 0:16	60.7	8/7/2014 1:21	59.4
2/7/2014 4:01	52.9	3/7/2014 5:06	54.8	4/7/2014 6:11	58.8	5/7/2014 23:16	63.2	7/7/2014 0:21	60.3	8/7/2014 1:26	58.2
2/7/2014 4:06	53.2	3/7/2014 5:11	54.2	4/7/2014 6:16	60.0	5/7/2014 23:21	62.5	7/7/2014 0:26	61.0	8/7/2014 1:31	57.8
2/7/2014 4:11	52.7	3/7/2014 5:16	58.1	4/7/2014 6:21	59.4	5/7/2014 23:26	62.7	7/7/2014 0:31	59.4	8/7/2014 1:36	57.8
2/7/2014 4:16	48.4	3/7/2014 5:21	55.1	4/7/2014 6:26	60.2	5/7/2014 23:31	62.6	7/7/2014 0:36	59.5	8/7/2014 1:41	57.9
2/7/2014 4:21	52.6	3/7/2014 5:26	57.0	4/7/2014 6:31	60.8	5/7/2014 23:36	62.9	7/7/2014 0:41	60.7	8/7/2014 1:46	58.9
2/7/2014 4:26	51.4	3/7/2014 5:31	55.9	4/7/2014 6:36	61.0	5/7/2014 23:41	62.3	7/7/2014 0:46	59.0	8/7/2014 1:51	55.9
2/7/2014 4:31	52.9	3/7/2014 5:36	57.9	4/7/2014 6:41	61.4	5/7/2014 23:46	62.4	7/7/2014 0:51	59.0	8/7/2014 1:56	55.2
2/7/2014 4:36	50.5	3/7/2014 5:41	57.5	4/7/2014 6:46	62.2	5/7/2014 23:51	62.9	7/7/2014 0:56	57.9	8/7/2014 2:01	56.8
2/7/2014 4:41	54.4	3/7/2014 5:46	57.0	4/7/2014 6:51	62.5	5/7/2014 23:56	62.8	7/7/2014 1:01	59.4	8/7/2014 2:06	55.6
2/7/2014 4:46	50.3	3/7/2014 5:51	56.8	4/7/2014 6:56	63.0	6/7/2014 0:01	62.3	7/7/2014 1:06	58.4	8/7/2014 2:11	56.7
2/7/2014 4:51	53.4	3/7/2014 5:56	58.3	4/7/2014 23:01	63.4	6/7/2014 0:06	62.8	7/7/2014 1:11	57.9	8/7/2014 2:16	54.3
2/7/2014 4:56	54.3	3/7/2014 6:01	56.9	4/7/2014 23:06	62.7	6/7/2014 0:11	62.0	7/7/2014 1:16	58.1	8/7/2014 2:21	57.6
2/7/2014 5:01	54.5	3/7/2014 6:06	58.6	4/7/2014 23:11	63.5	6/7/2014 0:16	61.9	7/7/2014 1:21	58.5	8/7/2014 2:26	54.5
2/7/2014 5:06	53.1	3/7/2014 6:11	60.2	4/7/2014 23:16	63.3	6/7/2014 0:21	61.1	7/7/2014 1:26	57.3	8/7/2014 2:31	53.5
2/7/2014 5:11	54.8	3/7/2014 6:16	59.8	4/7/2014 23:21	63.2	6/7/2014 0:26	60.9	7/7/2014 1:31	57.8	8/7/2014 2:36	51.9
2/7/2014 5:16	55.5	3/7/2014 6:21	60.1	4/7/2014 23:26	62.8	6/7/2014 0:31	61.6	7/7/2014 1:36	56.6	8/7/2014 2:41	55.3
2/7/2014 5:21	59.1	3/7/2014 6:26	60.6	4/7/2014 23:31	62.7	6/7/2014 0:36	60.3	7/7/2014 1:41	56.6	8/7/2014 2:46	52.3
2/7/2014 5:26	57.0	3/7/2014 6:31	61.4	4/7/2014 23:36	63.2	6/7/2014 0:41	60.7	7/7/2014 1:46	56.7	8/7/2014 2:51	54.6
2/7/2014 5:31	58.5	3/7/2014 6:36	61.5	4/7/2014 23:41	62.4	6/7/2014 0:46	59.9	7/7/2014 1:51	56.1	8/7/2014 2:56	52.0
2/7/2014 5:36	59.7	3/7/2014 6:41	62.3	4/7/2014 23:46	62.9	6/7/2014 0:51	59.6	7/7/2014 1:56	57.2	8/7/2014 3:01	54.4
2/7/2014 5:41	58.0</										

Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
8/7/2014 6:06	58.5	9/7/2014 23:11	62.5	11/7/2014 0:16	62.8	12/7/2014 1:21	61.1	13/7/2014 2:26	60.5	14/7/2014 3:31	58.1
8/7/2014 6:11	59.5	9/7/2014 23:16	63.6	11/7/2014 0:21	61.8	12/7/2014 1:26	60.8	13/7/2014 2:31	60.1	14/7/2014 3:36	47.9
8/7/2014 6:16	59.6	9/7/2014 23:21	62.3	11/7/2014 0:26	61.8	12/7/2014 1:31	61.1	13/7/2014 2:36	59.7	14/7/2014 3:41	52.8
8/7/2014 6:21	60.1	9/7/2014 23:26	62.4	11/7/2014 0:31	61.7	12/7/2014 1:36	61.0	13/7/2014 2:41	59.6	14/7/2014 3:46	58.1
8/7/2014 6:26	60.3	9/7/2014 23:31	62.5	11/7/2014 0:36	61.4	12/7/2014 1:41	61.5	13/7/2014 2:46	59.2	14/7/2014 3:51	50.0
8/7/2014 6:31	60.5	9/7/2014 23:36	62.4	11/7/2014 0:41	60.7	12/7/2014 1:46	61.4	13/7/2014 2:51	60.7	14/7/2014 3:56	49.4
8/7/2014 6:36	61.1	9/7/2014 23:41	62.4	11/7/2014 0:46	60.2	12/7/2014 1:51	60.8	13/7/2014 2:56	59.3	14/7/2014 4:01	51.4
8/7/2014 6:41	61.7	9/7/2014 23:46	62.2	11/7/2014 0:51	59.9	12/7/2014 1:56	61.4	13/7/2014 3:01	60.5	14/7/2014 4:06	51.5
8/7/2014 6:46	61.7	9/7/2014 23:51	62.1	11/7/2014 0:56	60.4	12/7/2014 2:01	59.8	13/7/2014 3:06	59.2	14/7/2014 4:11	45.0
8/7/2014 6:51	62.9	9/7/2014 23:56	61.9	11/7/2014 1:01	60.7	12/7/2014 2:06	61.2	13/7/2014 3:11	60.1	14/7/2014 4:16	45.2
8/7/2014 6:56	62.5	10/7/2014 0:01	61.6	11/7/2014 1:06	60.5	12/7/2014 2:11	60.0	13/7/2014 3:16	60.0	14/7/2014 4:21	51.4
8/7/2014 23:01	62.9	10/7/2014 0:06	61.9	11/7/2014 1:11	60.2	12/7/2014 2:16	60.1	13/7/2014 3:21	59.1	14/7/2014 4:26	42.0
8/7/2014 23:06	62.7	10/7/2014 0:11	61.8	11/7/2014 1:16	60.2	12/7/2014 2:21	60.0	13/7/2014 3:26	59.5	14/7/2014 4:31	44.0
8/7/2014 23:11	62.8	10/7/2014 0:16	61.7	11/7/2014 1:21	58.1	12/7/2014 2:26	60.5	13/7/2014 3:31	59.5	14/7/2014 4:36	57.9
8/7/2014 23:16	63.2	10/7/2014 0:21	61.0	11/7/2014 1:26	59.7	12/7/2014 2:31	60.9	13/7/2014 3:36	59.3	14/7/2014 4:41	48.3
8/7/2014 23:21	62.4	10/7/2014 0:26	61.1	11/7/2014 1:31	57.8	12/7/2014 2:36	60.1	13/7/2014 3:41	58.5	14/7/2014 4:46	58.2
8/7/2014 23:26	62.6	10/7/2014 0:31	62.1	11/7/2014 1:36	58.0	12/7/2014 2:41	59.3	13/7/2014 3:46	59.4	14/7/2014 4:51	49.3
8/7/2014 23:31	61.9	10/7/2014 0:36	60.8	11/7/2014 1:41	60.1	12/7/2014 2:46	59.3	13/7/2014 3:51	59.1	14/7/2014 4:56	48.7
8/7/2014 23:36	62.5	10/7/2014 0:41	60.2	11/7/2014 1:46	61.6	12/7/2014 2:51	59.0	13/7/2014 3:56	59.6	14/7/2014 5:01	55.6
8/7/2014 23:41	63.6	10/7/2014 0:46	61.2	11/7/2014 1:51	58.5	12/7/2014 2:56	59.0	13/7/2014 4:01	58.1	14/7/2014 5:06	55.9
8/7/2014 23:46	62.8	10/7/2014 0:51	59.4	11/7/2014 1:56	58.3	12/7/2014 3:01	58.2	13/7/2014 4:06	57.5	14/7/2014 5:11	53.1
8/7/2014 23:51	62.1	10/7/2014 0:56	61.1	11/7/2014 2:01	58.0	12/7/2014 3:06	58.6	13/7/2014 4:11	59.0	14/7/2014 5:16	54.5
8/7/2014 23:56	62.0	10/7/2014 1:01	59.8	11/7/2014 2:06	59.1	12/7/2014 3:11	58.9	13/7/2014 4:16	58.5	14/7/2014 5:21	55.9
9/7/2014 0:01	61.9	10/7/2014 1:06	59.3	11/7/2014 2:11	57.4	12/7/2014 3:16	59.2	13/7/2014 4:21	59.5	14/7/2014 5:26	56.2
9/7/2014 0:06	62.5	10/7/2014 1:11	58.8	11/7/2014 2:16	56.7	12/7/2014 3:21	58.9	13/7/2014 4:26	57.7	14/7/2014 5:31	54.4
9/7/2014 0:11	61.5	10/7/2014 1:16	58.2	11/7/2014 2:21	57.8	12/7/2014 3:26	59.0	13/7/2014 4:31	59.9	14/7/2014 5:36	55.6
9/7/2014 0:16	60.5	10/7/2014 1:21	58.3	11/7/2014 2:26	57.7	12/7/2014 3:31	58.3	13/7/2014 4:36	57.0	14/7/2014 5:41	55.0
9/7/2014 0:21	60.5	10/7/2014 1:26	57.3	11/7/2014 2:31	55.7	12/7/2014 3:36	58.2	13/7/2014 4:41	57.1	14/7/2014 5:46	59.9
9/7/2014 0:26	61.0	10/7/2014 1:31	58.0	11/7/2014 2:36	56.9	12/7/2014 3:41	58.3	13/7/2014 4:46	56.2	14/7/2014 5:51	61.5
9/7/2014 0:31	61.2	10/7/2014 1:36	58.2	11/7/2014 2:41	55.3	12/7/2014 3:46	57.3	13/7/2014 4:51	57.0	14/7/2014 5:56	61.8
9/7/2014 0:36	60.6	10/7/2014 1:41	57.7	11/7/2014 2:46	54.9	12/7/2014 3:51	57.7	13/7/2014 4:56	57.6	14/7/2014 6:01	61.4
9/7/2014 0:41	60.7	10/7/2014 1:46	58.0	11/7/2014 2:51	56.4	12/7/2014 3:56	57.3	13/7/2014 5:01	59.6	14/7/2014 6:06	60.8
9/7/2014 0:46	60.3	10/7/2014 1:51	57.2	11/7/2014 2:56	52.5	12/7/2014 4:01	57.3	13/7/2014 5:06	57.1	14/7/2014 6:11	61.6
9/7/2014 0:51	59.8	10/7/2014 1:56	58.1	11/7/2014 3:01	54.5	12/7/2014 4:06	56.2	13/7/2014 5:11	59.9	14/7/2014 6:16	61.7
9/7/2014 0:56	60.3	10/7/2014 2:01	56.8	11/7/2014 3:06	56.9	12/7/2014 4:11	56.7	13/7/2014 5:16	58.6	14/7/2014 6:21	61.2
9/7/2014 1:01	59.5	10/7/2014 2:06	56.9	11/7/2014 3:11	55.3	12/7/2014 4:16	58.6	13/7/2014 5:21	55.2	14/7/2014 6:26	61.4
9/7/2014 1:06	59.9	10/7/2014 2:11	55.6	11/7/2014 3:16	55.6	12/7/2014 4:21	57.6	13/7/2014 5:26	58.9	14/7/2014 6:31	64.3
9/7/2014 1:11	59.5	10/7/2014 2:16	56.5	11/7/2014 3:21	53.2	12/7/2014 4:26	57.8	13/7/2014 5:31	56.5	14/7/2014 6:36	62.1
9/7/2014 1:16	59.5	10/7/2014 2:21	56.7	11/7/2014 3:26	54.7	12/7/2014 4:31	55.8	13/7/2014 5:36	57.2	14/7/2014 6:41	62.8
9/7/2014 1:21	58.6	10/7/2014 2:26	56.7	11/7/2014 3:31	54.5	12/7/2014 4:36	56.6	13/7/2014 5:41	56.8	14/7/2014 6:46	62.4
9/7/2014 1:26	59.4	10/7/2014 2:31	55.6	11/7/2014 3:36	58.4	12/7/2014 4:41	56.4	13/7/2014 5:46	57.6	14/7/2014 6:51	62.9
9/7/2014 1:31	57.1	10/7/2014 2:36	55.5	11/7/2014 3:41	52.8	12/7/2014 4:46	56.6	13/7/2014 5:51	57.7	14/7/2014 6:56	63.0
9/7/2014 1:36	56.9	10/7/2014 2:41	55.0	11/7/2014 3:46	53.2	12/7/2014 4:51	56.4	13/7/2014 5:56	58.4	14/7/2014 23:01	63.1
9/7/2014 1:41	57.8	10/7/2014 2:46	54.4	11/7/2014 3:51	54.5	12/7/2014 4:56	57.5	13/7/2014 6:01	59.0	14/7/2014 23:06	63.0
9/7/2014 1:46	58.7	10/7/2014 2:51	55.8	11/7/2014 3:56	54.4	12/7/2014 5:01	55.2	13/7/2014 6:06	63.8	14/7/2014 23:11	63.1
9/7/2014 1:51	57.5	10/7/2014 2:56	54.7	11/7/2014 4:01	53.2	12/7/2014 5:06	65.6	13/7/2014 6:11	60.1	14/7/2014 23:16	62.7
9/7/2014 1:56	59.1	10/7/2014 3:01	54.9	11/7/2014 4:06	50.7	12/7/2014 5:11	59.7	13/7/2014 6:16	61.0	14/7/2014 23:21	62.5
9/7/2014 2:01	57.1	10/7/2014 3:06	55.2	11/7/2014 4:11	45.0	12/7/2014 5:16	58.9	13/7/2014 6:21	59.4	14/7/2014 23:26	63.3
9/7/2014 2:06	57.3	10/7/2014 3:11	54.3	11/7/2014 4:16	52.9	12/7/2014 5:21	58.8	13/7/2014 6:26	61.1	14/7/2014 23:31	62.6
9/7/2014 2:11	56.0	10/7/2014 3:16	55.3	11/7/2014 4:21	36.7	12/7/2014 5:26	58.1	13/7/2014 6:31	59.6	14/7/2014 23:36	62.5
9/7/2014 2:16	56.5	10/7/2014 3:21	55.5	11/7/2014 4:26	58.4	12/7/2014 5:31	58.5	13/7/2014 6:36	59.5	14/7/2014 23:41	62.0
9/7/2014 2:21	56.4	10/7/2014 3:26	55.9	11/7/2014 4:31	63.4	12/7/2014 5:36	58.9	13/7/2014 6:41	60.4	14/7/2014 23:46	61.8
9/7/2014 2:26	57.3	10/7/2014 3:31	55.7	11/7/2014 4:36	60.4	12/7/2014 5:41	58.9	13/7/2014 6:46	61.9	14/7/2014 23:51	62.0
9/7/2014 2:31	55.6	10/7/2014 3:36	55.5	11/7/2014 4:41	59.8	12/7/2014 5:46	60.3	13/7/2014 6:51	60.3	14/7/2014 23:56	61.4
9/7/2014 2:36	57.2	10/7/2014 3:41	58.1	11/7/2014 4:46	56.8	12/7/2014 5:51	60.8	13/7/2014 6:56	61.3	15/7/2014 0:01	62.4
9/7/2014 2:41	54.4	10/7/2014 3:46	56.9	11/7/2014 4:51	56.2	12/7/2014 5:56	60.7	13/7/2014 23:01	62.5	15/7/2014 0:06	61.9
9/7/2014 2:46	57.1	10/7/2014 3:51	52.8	11/7/2014 4:56	56.9	12/7/2014 6:01	58.7	13/7/2014 23:06	62.6	15/7/2014 0:11	61.1
9/7/2014 2:51	56.3	10/7/2014 3:56	56.5	11/7/2014 5:01	55.0	12/7/2014 6:06	59.7	13/7/2014 23:11	63.0	15/7/2014 0:16	61.6
9/7/2014 2:56	55.5	10/7/2014 4:01	54.1	11/7/2014 5:06	56.9	12/7/2014 6:11	61.1	13/7/2014 23:16	62.6	15/7/2014 0:21	60.8
9/7/2014 3:01	55.6	10/7/2014 4:06	53.8	11/7/2014 5:11	56.3	12/7/2014 6:16	61.1	13/7/2014 23:21	62.8	15/7/2014 0:26	61.6
9/7/2014 3:06	55.3	10/7/2014 4:11	45.8	11/7/2014 5:16	56.3	12/7/2014 6:21	60.6	13/7/2014 23:26	63.1	15/7/2014 0:31	61.4
9/7/2014 3:11	54.9	10/7/2014 4:16	53.7	11/7/2014 5:21	57.4	12/7/2014 6:26	63.1	13/7/2014 23:31	62.6	15/7/2014 0:36	60.8
9/7/2014 3:16	56.1	10/7/2014 4:21	54.7	11/7/2014 5:26	57.0	12/7/2014 6:31	62.1	13/7/2014 23:36	62.7	15/7/2014 0:41	60.4
9/7/2014 3:21	57.1	10/7/2014 4:26	50.7	11/7/2014 5:31	57.2	12/7/2014 6:36	61.9	13/7/2014 23:41	62.7	15/7/2014 0:46	60.4
9/7/2014 3:26	54.2	10/7/2014 4:31	54.5	11/7/2014 5:36	55.1	12/7/2014 6:41	62.9	13/7/2014 23:46	62.1	15/7/2014 0:51	60.3
9/7/2014 3:31	55.5	10/7/2014 4:36	51.2	11/7/2014 5:41	61.8	12/7/2014 6:46	62.5	13/7/2014 23:51	61.6	15/7/2014 0:56	59.0
9/7/2014 3:36	53.5	10/7/2014 4:41	51.5	11/7/2014 5:46	65.6	12/7/2014 6:51	62.7	13/7/2014 23:56	61.5	15/7/2014 1:01	58.8
9/7/2014 3:41	54.7	10/7/2014 4:46	47.4	11/7/2014 5:51	64.9	12/7/2014 6:56	62.8	14/7/2014 0:01	61.6	15/7/2014 1:06	59.8
9/7/2014 3:46	53.6	10/7/2014 4:51	52.5	11/7/2014 5:56	65.1	12/7/2014 23:01	64.9	14/7/2014 0:06	61.5	15/7/2014 1:11	60.2
9/7/2014 3:51	53.6	10/7/2014 4:56	52.5	11/7/2014 6:01	62.6	12/7/2014 23:06	64.5	14/7/2014 0:11	60.7	15/7/2014 1:16	59.2
9/7/2014 3:56	54.8	10/7/2014 5:01	55.0	11/7/2014 6:06	60.6	12/7/2014 23:11	64.7	14/7/2014 0:16	61.6	15/7/2014 1:21	58.6
9/7/2014 4:01</											

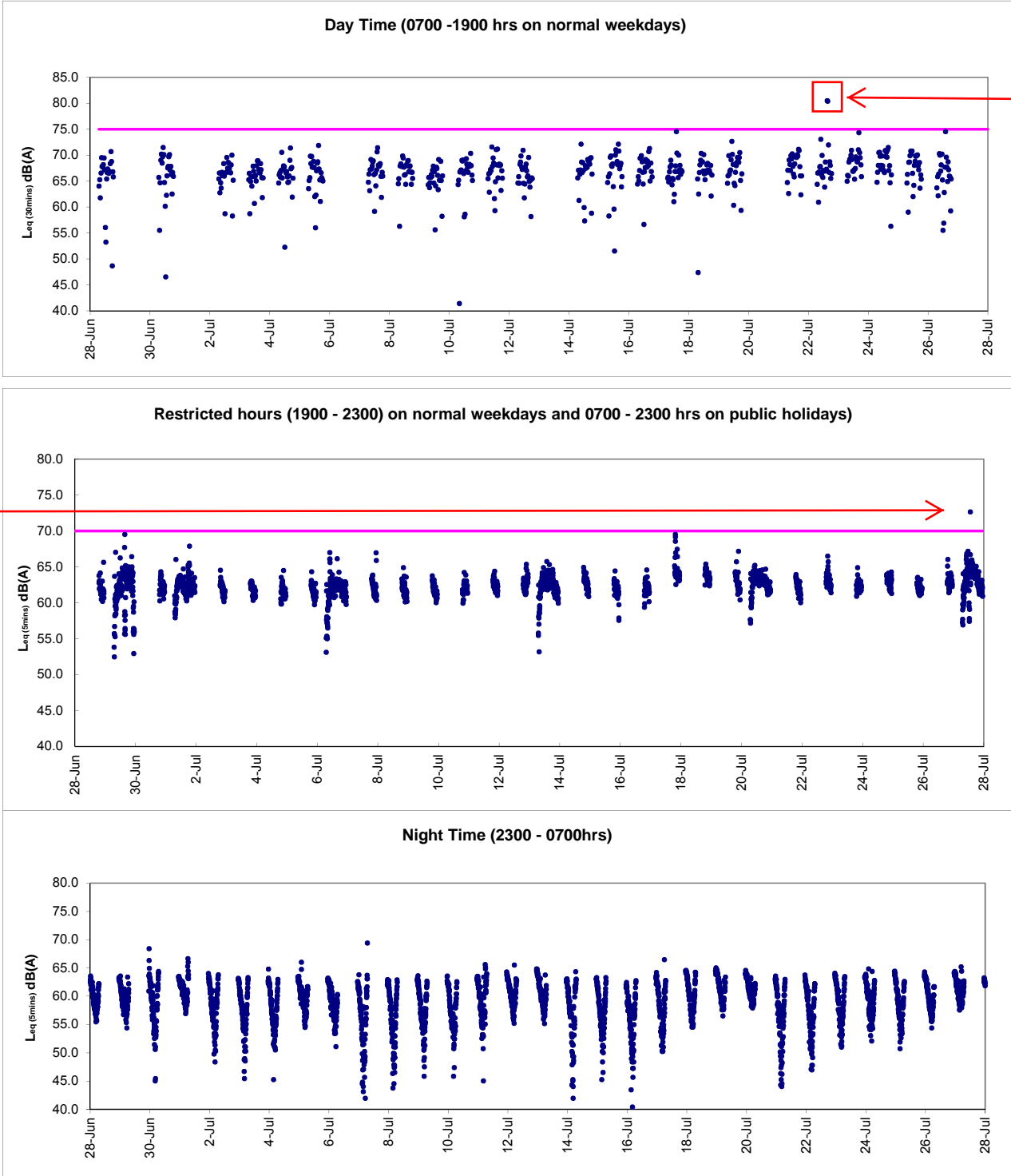
Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
15/7/2014 4:36	50.0	16/7/2014 5:41	58.3	17/7/2014 6:46	62.2	18/7/2014 23:51	64.5	20/7/2014 0:56	62.7	21/7/2014 2:01	57.2
15/7/2014 4:41	52.7	16/7/2014 5:46	56.9	17/7/2014 6:51	62.7	18/7/2014 23:56	64.5	20/7/2014 1:01	62.5	21/7/2014 2:06	57.2
15/7/2014 4:46	51.1	16/7/2014 5:51	57.2	17/7/2014 6:56	62.8	19/7/2014 0:01	64.7	20/7/2014 1:06	62.3	21/7/2014 2:11	54.7
15/7/2014 4:51	54.1	16/7/2014 5:56	58.5	17/7/2014 23:01	64.6	19/7/2014 0:06	64.6	20/7/2014 1:11	61.9	21/7/2014 2:16	57.2
15/7/2014 4:56	51.1	16/7/2014 6:01	56.6	17/7/2014 23:06	64.1	19/7/2014 0:11	64.3	20/7/2014 1:16	61.4	21/7/2014 2:21	56.4
15/7/2014 5:01	52.5	16/7/2014 6:06	57.7	17/7/2014 23:11	64.4	19/7/2014 0:16	64.0	20/7/2014 1:21	61.4	21/7/2014 2:26	55.6
15/7/2014 5:06	53.4	16/7/2014 6:11	58.7	17/7/2014 23:16	64.6	19/7/2014 0:21	64.2	20/7/2014 1:26	61.4	21/7/2014 2:31	53.3
15/7/2014 5:11	56.2	16/7/2014 6:16	59.8	17/7/2014 23:21	64.3	19/7/2014 0:26	63.9	20/7/2014 1:31	62.0	21/7/2014 2:36	56.1
15/7/2014 5:16	59.3	16/7/2014 6:21	59.8	17/7/2014 23:26	64.1	19/7/2014 0:31	64.1	20/7/2014 1:36	61.9	21/7/2014 2:41	56.4
15/7/2014 5:21	55.3	16/7/2014 6:26	60.5	17/7/2014 23:31	64.2	19/7/2014 0:36	63.7	20/7/2014 1:41	61.8	21/7/2014 2:46	55.4
15/7/2014 5:26	55.8	16/7/2014 6:31	59.6	17/7/2014 23:36	64.1	19/7/2014 0:41	64.0	20/7/2014 1:46	60.9	21/7/2014 2:51	53.5
15/7/2014 5:31	55.2	16/7/2014 6:36	60.3	17/7/2014 23:41	64.3	19/7/2014 0:46	63.9	20/7/2014 1:51	60.8	21/7/2014 2:56	53.2
15/7/2014 5:36	54.4	16/7/2014 6:41	61.5	17/7/2014 23:46	64.2	19/7/2014 0:51	63.0	20/7/2014 1:56	61.3	21/7/2014 3:01	51.5
15/7/2014 5:41	57.0	16/7/2014 6:46	62.4	17/7/2014 23:51	63.6	19/7/2014 0:56	63.4	20/7/2014 2:01	61.0	21/7/2014 3:06	50.2
15/7/2014 5:46	56.0	16/7/2014 6:51	62.5	17/7/2014 23:56	63.7	19/7/2014 1:01	63.3	20/7/2014 2:06	60.7	21/7/2014 3:11	51.4
15/7/2014 5:51	57.4	16/7/2014 6:56	62.8	18/7/2014 0:01	63.0	19/7/2014 1:06	63.0	20/7/2014 2:11	60.8	21/7/2014 3:16	49.4
15/7/2014 5:56	57.3	16/7/2014 23:01	63.4	18/7/2014 0:06	63.5	19/7/2014 1:11	62.4	20/7/2014 2:16	61.3	21/7/2014 3:21	44.3
15/7/2014 6:01	58.9	16/7/2014 23:06	63.1	18/7/2014 0:11	63.5	19/7/2014 1:16	62.8	20/7/2014 2:21	60.3	21/7/2014 3:26	46.4
15/7/2014 6:06	58.6	16/7/2014 23:11	63.6	18/7/2014 0:16	63.7	19/7/2014 1:21	62.9	20/7/2014 2:26	59.9	21/7/2014 3:31	58.2
15/7/2014 6:11	58.2	16/7/2014 23:16	62.2	18/7/2014 0:21	63.1	19/7/2014 1:26	63.3	20/7/2014 2:31	60.6	21/7/2014 3:36	48.7
15/7/2014 6:16	59.1	16/7/2014 23:21	63.6	18/7/2014 0:26	63.4	19/7/2014 1:31	62.6	20/7/2014 2:36	60.2	21/7/2014 3:41	47.4
15/7/2014 6:21	60.3	16/7/2014 23:26	64.2	18/7/2014 0:31	63.0	19/7/2014 1:36	62.4	20/7/2014 2:41	59.7	21/7/2014 3:46	58.3
15/7/2014 6:26	59.5	16/7/2014 23:31	63.2	18/7/2014 0:36	63.3	19/7/2014 1:41	62.9	20/7/2014 2:46	60.3	21/7/2014 3:51	45.2
15/7/2014 6:31	61.4	16/7/2014 23:36	62.6	18/7/2014 0:41	62.4	19/7/2014 1:46	62.4	20/7/2014 2:51	60.0	21/7/2014 3:56	51.6
15/7/2014 6:36	60.8	16/7/2014 23:41	62.4	18/7/2014 0:46	61.9	19/7/2014 1:51	61.5	20/7/2014 2:56	61.1	21/7/2014 4:01	47.8
15/7/2014 6:41	62.2	16/7/2014 23:46	62.8	18/7/2014 0:51	62.0	19/7/2014 1:56	61.8	20/7/2014 3:01	59.8	21/7/2014 4:06	51.1
15/7/2014 6:46	62.3	16/7/2014 23:51	63.6	18/7/2014 0:56	62.1	19/7/2014 2:01	61.5	20/7/2014 3:06	60.0	21/7/2014 4:11	44.0
15/7/2014 6:51	63.3	16/7/2014 23:56	62.7	18/7/2014 1:01	61.0	19/7/2014 2:06	61.7	20/7/2014 3:11	59.8	21/7/2014 4:16	49.4
15/7/2014 6:56	62.7	17/7/2014 0:01	62.4	18/7/2014 1:06	61.9	19/7/2014 2:11	62.3	20/7/2014 3:16	59.4	21/7/2014 4:21	46.2
15/7/2014 23:01	61.5	17/7/2014 0:06	62.6	18/7/2014 1:11	61.8	19/7/2014 2:16	61.1	20/7/2014 3:21	63.3	21/7/2014 4:26	51.8
15/7/2014 23:06	62.0	17/7/2014 0:11	62.3	18/7/2014 1:16	61.6	19/7/2014 2:21	60.9	20/7/2014 3:26	63.0	21/7/2014 4:31	44.6
15/7/2014 23:11	61.8	17/7/2014 0:16	62.2	18/7/2014 1:21	61.1	19/7/2014 2:26	62.4	20/7/2014 3:31	62.1	21/7/2014 4:36	48.3
15/7/2014 23:16	62.0	17/7/2014 0:21	62.4	18/7/2014 1:26	61.4	19/7/2014 2:31	61.4	20/7/2014 3:36	60.7	21/7/2014 4:41	51.6
15/7/2014 23:21	62.5	17/7/2014 0:26	61.8	18/7/2014 1:31	61.4	19/7/2014 2:36	61.0	20/7/2014 3:41	59.8	21/7/2014 4:46	51.6
15/7/2014 23:26	61.8	17/7/2014 0:31	61.9	18/7/2014 1:36	60.0	19/7/2014 2:41	61.1	20/7/2014 3:46	58.2	21/7/2014 4:51	52.5
15/7/2014 23:31	61.5	17/7/2014 0:36	61.1	18/7/2014 1:41	60.5	19/7/2014 2:46	60.8	20/7/2014 3:51	59.4	21/7/2014 4:56	51.8
15/7/2014 23:36	61.9	17/7/2014 0:41	61.2	18/7/2014 1:46	59.4	19/7/2014 2:51	60.7	20/7/2014 3:56	60.2	21/7/2014 5:01	50.2
15/7/2014 23:41	61.6	17/7/2014 0:46	60.6	18/7/2014 1:51	60.1	19/7/2014 2:56	60.7	20/7/2014 4:01	58.6	21/7/2014 5:06	55.6
15/7/2014 23:46	60.6	17/7/2014 0:51	60.5	18/7/2014 1:56	60.1	19/7/2014 3:01	60.3	20/7/2014 4:06	59.3	21/7/2014 5:11	56.6
15/7/2014 23:51	60.9	17/7/2014 0:56	61.9	18/7/2014 2:01	60.2	19/7/2014 3:06	61.1	20/7/2014 4:11	60.6	21/7/2014 5:16	54.4
15/7/2014 23:56	59.1	17/7/2014 1:01	61.7	18/7/2014 2:06	60.6	19/7/2014 3:11	60.4	20/7/2014 4:16	59.4	21/7/2014 5:21	57.1
16/7/2014 0:01	58.8	17/7/2014 1:06	60.7	18/7/2014 2:11	60.1	19/7/2014 3:16	59.8	20/7/2014 4:21	59.0	21/7/2014 5:26	55.6
16/7/2014 0:06	58.9	17/7/2014 1:11	60.3	18/7/2014 2:16	60.1	19/7/2014 3:21	58.9	20/7/2014 4:26	60.0	21/7/2014 5:31	52.9
16/7/2014 0:11	58.6	17/7/2014 1:16	59.2	18/7/2014 2:21	60.2	19/7/2014 3:26	59.9	20/7/2014 4:31	58.8	21/7/2014 5:36	54.8
16/7/2014 0:16	58.3	17/7/2014 1:21	59.1	18/7/2014 2:26	59.8	19/7/2014 3:31	59.5	20/7/2014 4:36	58.3	21/7/2014 5:41	57.6
16/7/2014 0:21	57.4	17/7/2014 1:26	60.1	18/7/2014 2:31	58.5	19/7/2014 3:36	59.3	20/7/2014 4:41	61.8	21/7/2014 5:46	55.6
16/7/2014 0:26	58.8	17/7/2014 1:31	60.0	18/7/2014 2:36	57.7	19/7/2014 3:41	59.0	20/7/2014 4:46	57.9	21/7/2014 5:51	58.2
16/7/2014 0:31	58.6	17/7/2014 1:36	58.5	18/7/2014 2:41	60.4	19/7/2014 3:46	59.0	20/7/2014 4:51	58.5	21/7/2014 5:56	56.4
16/7/2014 0:36	59.3	17/7/2014 1:41	58.6	18/7/2014 2:46	59.5	19/7/2014 3:51	59.2	20/7/2014 4:56	60.5	21/7/2014 6:01	57.0
16/7/2014 0:41	59.9	17/7/2014 1:46	58.4	18/7/2014 2:51	58.3	19/7/2014 3:56	58.7	20/7/2014 5:01	58.7	21/7/2014 6:06	58.7
16/7/2014 0:46	59.2	17/7/2014 1:51	58.0	18/7/2014 2:56	56.7	19/7/2014 4:01	57.6	20/7/2014 5:06	60.9	21/7/2014 6:11	60.2
16/7/2014 0:51	59.3	17/7/2014 1:56	57.6	18/7/2014 3:01	57.5	19/7/2014 4:06	58.4	20/7/2014 5:11	59.4	21/7/2014 6:16	59.2
16/7/2014 0:56	59.2	17/7/2014 2:01	57.8	18/7/2014 3:06	57.6	19/7/2014 4:11	59.4	20/7/2014 5:16	59.2	21/7/2014 6:21	60.1
16/7/2014 1:01	59.0	17/7/2014 2:06	58.7	18/7/2014 3:11	57.5	19/7/2014 4:16	59.2	20/7/2014 5:21	58.4	21/7/2014 6:26	60.3
16/7/2014 1:06	60.0	17/7/2014 2:11	58.6	18/7/2014 3:16	57.3	19/7/2014 4:21	59.4	20/7/2014 5:26	58.9	21/7/2014 6:31	61.7
16/7/2014 1:11	58.6	17/7/2014 2:16	56.3	18/7/2014 3:21	57.4	19/7/2014 4:26	59.0	20/7/2014 5:31	58.8	21/7/2014 6:36	61.1
16/7/2014 1:16	57.9	17/7/2014 2:21	57.3	18/7/2014 3:26	55.9	19/7/2014 4:31	58.3	20/7/2014 5:36	59.2	21/7/2014 6:41	61.6
16/7/2014 1:21	58.1	17/7/2014 2:26	56.6	18/7/2014 3:31	55.6	19/7/2014 4:36	58.4	20/7/2014 5:41	59.5	21/7/2014 6:46	62.3
16/7/2014 1:26	58.5	17/7/2014 2:31	57.1	18/7/2014 3:36	57.0	19/7/2014 4:41	59.2	20/7/2014 5:46	60.5	21/7/2014 6:51	62.5
16/7/2014 1:31	57.8	17/7/2014 2:36	57.1	18/7/2014 3:41	57.1	19/7/2014 4:46	58.5	20/7/2014 5:51	58.7	21/7/2014 6:56	63.0
16/7/2014 1:36	56.9	17/7/2014 2:41	53.8	18/7/2014 3:46	57.2	19/7/2014 4:51	59.3	20/7/2014 5:56	60.3	21/7/2014 23:01	63.8
16/7/2014 1:41	56.0	17/7/2014 2:46	56.7	18/7/2014 3:51	56.2	19/7/2014 4:56	59.5	20/7/2014 6:01	61.4	21/7/2014 23:06	62.7
16/7/2014 1:46	55.8	17/7/2014 2:51	56.9	18/7/2014 3:56	56.8	19/7/2014 5:01	56.5	20/7/2014 6:06	61.1	21/7/2014 23:11	63.3
16/7/2014 1:51	56.7	17/7/2014 2:56	56.5	18/7/2014 4:01	54.5	19/7/2014 5:06	57.7	20/7/2014 6:11	61.7	21/7/2014 23:16	62.8
16/7/2014 1:56	57.1	17/7/2014 3:01	57.5	18/7/2014 4:06	56.7	19/7/2014 5:11	59.3	20/7/2014 6:16	61.1	21/7/2014 23:21	62.7
16/7/2014 2:01	54.4	17/7/2014 3:06	56.9	18/7/2014 4:11	56.8	19/7/2014 5:16	57.6	20/7/2014 6:21	60.9	21/7/2014 23:26	62.6
16/7/2014 2:06	56.4	17/7/2014 3:11	54.5	18/7/2014 4:16	54.9	19/7/2014 5:21	58.1	20/7/2014 6:26	61.7	21/7/2014 23:31	62.5
16/7/2014 2:11	55.6	17/7/2014 3:16	53.9	18/7/2014 4:21	56.1	19/7/2014 5:26	58.1	20/7/2014 6:31	60.4	21/7/2014 23:36	62.8
16/7/2014 2:16	55.1	17/7/2014 3:21	53.8	18/7/2014 4:26	55.8	19/7/2014 5:31	57.8	20/7/2014 6:36	61.2	21/7/2014 23:41	62.1
16/7/2014 2:21	55.8	17/7/2014 3:26	51.3	18/7/2014 4:31	57.5	19/7/2014 5:36	58.4	20/7/2014 6:41	62.1	21/7/2014 23:46	62.0
16/7/2014 2:26	57.0	17/7/2014 3:31	53.2	18/7/2014 4:36	54.6	19/7/2014 5:41	59.2				

Real-time Noise Data RTN2a (Hong Kong Electric Centre)

22/7/2014 3:06	54.9	23/7/2014 4:11	53.5	24/7/2014 5:16	55.8	25/7/2014 6:21	60.9	26/7/2014 23:26	64.2
22/7/2014 3:11	50.7	23/7/2014 4:16	52.8	24/7/2014 5:21	54.3	25/7/2014 6:26	61.0	26/7/2014 23:31	63.7
22/7/2014 3:16	50.9	23/7/2014 4:21	51.0	24/7/2014 5:26	56.1	25/7/2014 6:31	62.3	26/7/2014 23:36	63.6
22/7/2014 3:21	53.7	23/7/2014 4:26	53.2	24/7/2014 5:31	56.9	25/7/2014 6:36	61.9	26/7/2014 23:41	63.6
22/7/2014 3:26	53.0	23/7/2014 4:31	51.2	24/7/2014 5:36	56.6	25/7/2014 6:41	61.5	26/7/2014 23:46	63.7
22/7/2014 3:31	51.5	23/7/2014 4:36	52.0	24/7/2014 5:41	57.3	25/7/2014 6:46	62.2	26/7/2014 23:51	63.8
22/7/2014 3:36	52.4	23/7/2014 4:41	53.1	24/7/2014 5:46	56.7	25/7/2014 6:51	62.5	26/7/2014 23:56	64.3
22/7/2014 3:41	53.0	23/7/2014 4:46	54.0	24/7/2014 5:51	57.3	25/7/2014 6:56	62.6	27/7/2014 0:01	63.9
22/7/2014 3:46	52.2	23/7/2014 4:51	55.9	24/7/2014 5:56	57.4	25/7/2014 23:01	63.5	27/7/2014 0:06	63.4
22/7/2014 3:51	57.2	23/7/2014 4:56	53.3	24/7/2014 6:01	57.9	25/7/2014 23:06	63.9	27/7/2014 0:11	63.8
22/7/2014 3:56	47.1	23/7/2014 5:01	55.5	24/7/2014 6:06	57.5	25/7/2014 23:11	64.3	27/7/2014 0:16	64.0
22/7/2014 4:01	51.9	23/7/2014 5:06	56.8	24/7/2014 6:11	58.8	25/7/2014 23:16	63.9	27/7/2014 0:21	63.0
22/7/2014 4:06	54.6	23/7/2014 5:11	55.1	24/7/2014 6:16	60.0	25/7/2014 23:21	63.6	27/7/2014 0:26	62.8
22/7/2014 4:11	51.1	23/7/2014 5:16	56.4	24/7/2014 6:21	59.5	25/7/2014 23:26	63.7	27/7/2014 0:31	62.2
22/7/2014 4:16	51.6	23/7/2014 5:21	56.9	24/7/2014 6:26	60.3	25/7/2014 23:31	63.7	27/7/2014 0:36	61.7
22/7/2014 4:21	49.8	23/7/2014 5:26	56.2	24/7/2014 6:31	60.6	25/7/2014 23:36	63.1	27/7/2014 0:41	62.0
22/7/2014 4:26	47.8	23/7/2014 5:31	57.7	24/7/2014 6:36	61.2	25/7/2014 23:41	63.6	27/7/2014 0:46	62.5
22/7/2014 4:31	50.2	23/7/2014 5:36	56.5	24/7/2014 6:41	61.5	25/7/2014 23:46	63.0	27/7/2014 0:51	63.0
22/7/2014 4:36	47.0	23/7/2014 5:41	58.3	24/7/2014 6:46	62.2	25/7/2014 23:51	63.0	27/7/2014 0:56	62.7
22/7/2014 4:41	51.2	23/7/2014 5:46	59.9	24/7/2014 6:51	62.6	25/7/2014 23:56	63.0	27/7/2014 1:01	62.0
22/7/2014 4:46	50.9	23/7/2014 5:51	57.4	24/7/2014 6:56	62.8	26/7/2014 0:01	63.4	27/7/2014 1:06	61.9
22/7/2014 4:51	52.0	23/7/2014 5:56	58.9	24/7/2014 23:01	64.4	26/7/2014 0:06	63.0	27/7/2014 1:11	61.8
22/7/2014 4:56	47.8	23/7/2014 6:01	58.5	24/7/2014 23:06	64.4	26/7/2014 0:11	62.8	27/7/2014 1:16	60.9
22/7/2014 5:01	49.2	23/7/2014 6:06	60.0	24/7/2014 23:11	63.8	26/7/2014 0:16	63.4	27/7/2014 1:21	61.7
22/7/2014 5:06	54.5	23/7/2014 6:11	60.0	24/7/2014 23:16	63.8	26/7/2014 0:21	62.8	27/7/2014 1:26	61.1
22/7/2014 5:11	53.1	23/7/2014 6:16	59.1	24/7/2014 23:21	63.8	26/7/2014 0:26	63.0	27/7/2014 1:31	62.9
22/7/2014 5:16	53.4	23/7/2014 6:21	61.2	24/7/2014 23:26	63.7	26/7/2014 0:31	62.7	27/7/2014 1:36	61.4
22/7/2014 5:21	55.3	23/7/2014 6:26	60.9	24/7/2014 23:31	64.1	26/7/2014 0:36	62.6	27/7/2014 1:41	61.4
22/7/2014 5:26	56.5	23/7/2014 6:31	61.3	24/7/2014 23:36	63.5	26/7/2014 0:41	62.4	27/7/2014 1:46	61.7
22/7/2014 5:31	54.5	23/7/2014 6:36	62.0	24/7/2014 23:41	63.2	26/7/2014 0:46	62.9	27/7/2014 1:51	60.5
22/7/2014 5:36	55.8	23/7/2014 6:41	63.1	24/7/2014 23:46	63.1	26/7/2014 0:51	61.8	27/7/2014 1:56	60.8
22/7/2014 5:41	56.2	23/7/2014 6:46	62.4	24/7/2014 23:51	62.8	26/7/2014 0:56	62.1	27/7/2014 2:01	60.9
22/7/2014 5:46	58.1	23/7/2014 6:51	63.3	24/7/2014 23:56	62.3	26/7/2014 1:01	62.0	27/7/2014 2:06	59.6
22/7/2014 5:51	58.4	23/7/2014 6:56	63.5	25/7/2014 0:01	62.8	26/7/2014 1:06	61.5	27/7/2014 2:11	61.1
22/7/2014 5:56	58.3	23/7/2014 23:01	63.5	25/7/2014 0:06	62.5	26/7/2014 1:11	61.9	27/7/2014 2:16	59.6
22/7/2014 6:01	56.6	23/7/2014 23:06	63.3	25/7/2014 0:11	63.0	26/7/2014 1:16	61.6	27/7/2014 2:21	60.7
22/7/2014 6:06	56.3	23/7/2014 23:11	63.2	25/7/2014 0:16	62.6	26/7/2014 1:21	61.1	27/7/2014 2:26	59.8
22/7/2014 6:11	58.9	23/7/2014 23:16	63.2	25/7/2014 0:21	62.2	26/7/2014 1:26	61.5	27/7/2014 2:31	60.3
22/7/2014 6:16	59.6	23/7/2014 23:21	63.3	25/7/2014 0:26	62.4	26/7/2014 1:31	60.9	27/7/2014 2:36	60.3
22/7/2014 6:21	59.4	23/7/2014 23:26	63.5	25/7/2014 0:31	61.5	26/7/2014 1:36	60.5	27/7/2014 2:41	59.7
22/7/2014 6:26	61.0	23/7/2014 23:31	63.6	25/7/2014 0:36	61.3	26/7/2014 1:41	61.2	27/7/2014 2:46	59.2
22/7/2014 6:31	60.9	23/7/2014 23:36	63.5	25/7/2014 0:41	60.9	26/7/2014 1:46	60.9	27/7/2014 2:51	59.6
22/7/2014 6:36	61.6	23/7/2014 23:41	63.7	25/7/2014 0:46	61.2	26/7/2014 1:51	62.2	27/7/2014 2:56	58.6
22/7/2014 6:41	61.5	23/7/2014 23:46	63.7	25/7/2014 0:51	61.3	26/7/2014 1:56	60.5	27/7/2014 3:01	59.2
22/7/2014 6:46	62.3	23/7/2014 23:51	63.6	25/7/2014 0:56	61.1	26/7/2014 2:01	61.1	27/7/2014 3:06	59.1
22/7/2014 6:51	62.2	23/7/2014 23:56	63.9	25/7/2014 1:01	61.1	26/7/2014 2:06	60.7	27/7/2014 3:11	60.1
22/7/2014 6:56	62.1	24/7/2014 0:01	63.4	25/7/2014 1:06	61.2	26/7/2014 2:11	59.9	27/7/2014 3:16	58.5
22/7/2014 23:01	64.1	24/7/2014 0:06	62.5	25/7/2014 1:11	60.8	26/7/2014 2:16	59.7	27/7/2014 3:21	57.7
22/7/2014 23:06	63.8	24/7/2014 0:11	62.6	25/7/2014 1:16	59.4	26/7/2014 2:21	60.3	27/7/2014 3:26	57.6
22/7/2014 23:11	63.5	24/7/2014 0:16	62.4	25/7/2014 1:21	60.6	26/7/2014 2:26	59.2	27/7/2014 3:31	58.2
22/7/2014 23:16	63.2	24/7/2014 0:21	62.2	25/7/2014 1:26	59.7	26/7/2014 2:31	60.2	27/7/2014 3:36	58.9
22/7/2014 23:21	63.7	24/7/2014 0:26	62.4	25/7/2014 1:31	58.8	26/7/2014 2:36	59.0	27/7/2014 3:41	62.6
22/7/2014 23:26	63.0	24/7/2014 0:31	62.2	25/7/2014 1:36	59.4	26/7/2014 2:41	58.8	27/7/2014 3:46	61.0
22/7/2014 23:31	63.7	24/7/2014 0:36	60.8	25/7/2014 1:41	59.0	26/7/2014 2:46	59.9	27/7/2014 3:51	60.0
22/7/2014 23:36	63.6	24/7/2014 0:41	62.0	25/7/2014 1:46	60.2	26/7/2014 2:51	58.7	27/7/2014 3:56	58.6
22/7/2014 23:41	62.9	24/7/2014 0:46	61.5	25/7/2014 1:51	59.0	26/7/2014 2:56	58.2	27/7/2014 4:01	58.9
22/7/2014 23:46	63.0	24/7/2014 0:51	61.4	25/7/2014 1:56	58.5	26/7/2014 3:01	58.7	27/7/2014 4:06	59.0
22/7/2014 23:51	62.6	24/7/2014 0:56	61.6	25/7/2014 2:01	57.7	26/7/2014 3:06	57.9	27/7/2014 4:11	58.7
22/7/2014 23:56	63.0	24/7/2014 1:01	61.1	25/7/2014 2:06	58.7	26/7/2014 3:11	59.7	27/7/2014 4:16	58.6
23/7/2014 0:01	62.4	24/7/2014 1:06	60.4	25/7/2014 2:11	57.0	26/7/2014 3:16	58.9	27/7/2014 4:21	59.5
23/7/2014 0:06	62.3	24/7/2014 1:11	60.6	25/7/2014 2:16	59.9	26/7/2014 3:21	57.6	27/7/2014 4:26	60.7
23/7/2014 0:11	62.5	24/7/2014 1:16	62.0	25/7/2014 2:21	58.3	26/7/2014 3:26	59.3	27/7/2014 4:31	60.4
23/7/2014 0:16	62.1	24/7/2014 1:21	61.1	25/7/2014 2:26	59.0	26/7/2014 3:31	58.6	27/7/2014 4:36	60.5
23/7/2014 0:21	62.1	24/7/2014 1:26	59.9	25/7/2014 2:31	57.3	26/7/2014 3:36	59.1	27/7/2014 4:41	65.2
23/7/2014 0:26	62.0	24/7/2014 1:31	59.8	25/7/2014 2:36	58.1	26/7/2014 3:41	57.5	27/7/2014 4:46	61.1
23/7/2014 0:31	62.0	24/7/2014 1:36	59.6	25/7/2014 2:41	56.5	26/7/2014 3:46	58.4	27/7/2014 4:51	61.4
23/7/2014 0:36	61.4	24/7/2014 1:41	60.3	25/7/2014 2:46	57.0	26/7/2014 3:51	58.9	27/7/2014 4:56	58.0
23/7/2014 0:41	62.0	24/7/2014 1:46	59.6	25/7/2014 2:51	56.2	26/7/2014 3:56	58.4	27/7/2014 5:01	58.3
23/7/2014 0:46	61.2	24/7/2014 1:51	59.9	25/7/2014 2:56	56.3	26/7/2014 4:01	56.9	27/7/2014 5:06	64.4
23/7/2014 0:51	61.2	24/7/2014 1:56	61.1	25/7/2014 3:01	54.9	26/7/2014 4:06	57.9	27/7/2014 5:11	62.2
23/7/2014 0:56	61.1	24/7/2014 2:01	60.9	25/7/2014 3:06	56.1	26/7/2014 4:11	57.1	27/7/2014 5:16	59.9
23/7/2014 1:01	60.5	24/7/2014 2:06	59.5	25/7/2014 3:11	56.2	26/7/2014 4:16	56.5	27/7/2014 5:21	58.7
23/7/2014 1:06	61.3	24/7/2014 2:11	64.9	25/7/2014 3:16	54.1	26/7/2014 4:21	56.9	27/7/2014 5:26	59.2
23/7/2014 1:11	60.1	24/7/2014 2:16	57.8	25/7/2014 3:21	51.9	26/7/2014 4:26	56.9	27/7/2014 5:31	60.1
23/7/2014 1:16	61.3	24/7/2014 2:21	57.1	25/7/2014 3:26	56.2	26/7/2014 4:31	55.6	27/7/2014 5:36	58.7
23/7/2014 1:21	59.5	24/7/2014 2:26	57.6	25/7/2014 3:31	50.7	26/7/2014 4:36	56.3	27/7/2014 5:41	59.0
23/7/2014 1:26	59.9	24/7/2014 2:31	56.9	25/7/2014 3:36	53.2	26/7/2014 4:41	56.0	27/7/2014 5:46	60.4
23/7/2014 1:31	59.2	24/7/2014 2:36	54.6	25/7/2014 3:41	54.7	26/7/2014 4:46	55.6	27/7/2014 5:51	60.3
23/7/2014 1:36	59.3	24/7/2014 2:41	56.7	25/7/2014 3:46	54.9	26/7/2014 4:51	54.4	27/7/2014 5:56	60.1
23/7/2014 1:41	59.3	24/7/2014 2:46	56.6	25/7/2014 3:51	54.9	26/7/2014 4:56	55.5	27/7/2014 6:01	60.2
23/7/2014 1:46	57.7	24/7/2014 2:51	58.1	25/7/2014 3:56	55.2	26/7/2014 5:01	57.2	27/7/2014 6:06	60.0
23/7/2014 1:51	59.9	24/7/2014 2:56	56.6	25/7/2014 4:01	55.1	26/7/2014 5:06	56.2	27/7/2014 6:11	60.8
23/7/2014 1:56	59.6	24/7/2014 3:01	57.1	25/7/2014 4:06	55.6	26/7/2014 5:11	56.3	27/7/2014 6:16	60.4
23/7/2014 2:01	58.8	24/7/2014 3:06	58.6	25/7/2014 4:11	52.6	26/7/2014 5:16	56.3	27/7/2014 6:21	60.9
23/7/2014 2:06	60.9	24/7/2014 3:11	56.4	25					



Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)



After checking with contractor HY/2009/19, no construction activity was conducted at the concerned location during the recorded period. As such, the exceedance was considered to be contributed by nearby IEC traffic and not related to Project.

After checking with contractor HY/2009/19, no despite socket H piling works was conducted, contractor mitigation measures including erection of temporary noise barrier was in place . The exceedances were considered to be contributed by the adverse weather condition during the hoisting period of rainstorm Warning Signal and thunder warning signal and not related to Projects





***Appendix 6.1***

***Event Action Plans***



Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level being exceeded	<ol style="list-style-type: none"><li>1. Notify ER, IEC and Contractor;</li><li>2. Carry out investigation;</li><li>3. Report the results of investigation to the IEC, ER and Contractor;</li><li>4. Discuss with the IEC and Contractor on remedial measures required;</li><li>5. Increase monitoring frequency to check mitigation effectiveness.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>	<ol style="list-style-type: none"><li>1. Review the investigation results submitted by the ET;</li><li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly;</li><li>3. Advise the ER on the effectiveness of the proposed remedial measures.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>	<ol style="list-style-type: none"><li>1. Confirm receipt of notification of failure in writing;</li><li>2. Notify Contractor;</li><li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li><li>4. Supervise the implementation of remedial measures.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>	<ol style="list-style-type: none"><li>1. Submit noise mitigation proposals to IEC and ER;</li><li>2. Implement noise mitigation proposals.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>



EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
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)



**Event / Action Plan for Construction Air Quality**

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
<b>ACTION LEVEL</b>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform IEC and ER;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Notify Contractor.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Rectify any unacceptable practice;</li> <li>Amend working methods if appropriate.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>Identify source;</li> <li>Inform IEC and ER;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> <li>If exceedance continues, arrange meeting with IEC and ER;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ET on the effectiveness of the proposed remedial measures;</li> <li>Supervise Implementation of remedial measures.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Submit proposals for remedial to ER within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)
<b>LIMIT LEVEL</b>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform ER, Contractor and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>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.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>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)</li> </ol>



**Event and Action Plan for Marine Water Quality**

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; (The above actions should be taken within 1 working day after the exceedance is identified) Repeat measurement on next day of exceedance.	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the ER and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and ER; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)
Action level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; (The above actions should be taken within 1 working day after the exceedance is identified) Repeat measurement on next working day of exceedance.	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)



EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Limit level being exceeded by one sampling day	<p>Repeat in-situ measurement to confirm findings;            Identify source(s) of impact; Inform IEC, contractor and EPD;            Check monitoring data, all plant, equipment and Contractor's working methods;            Discuss mitigation measures with IEC, ER and Contractor; Ensure mitigation measures are implemented;            Increase the monitoring frequency to daily until no exceedance of Limit level.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>	<p>Discuss with ET and Contractor on the mitigation measures;            Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly;            Assess the effectiveness of the implemented mitigation measures.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>	<p>Discuss with IEC, ET and Contractor on the proposed mitigation measures;            Request Contractor to critically review the working methods;            Make agreement on the mitigation measures to be implemented;            Assess the effectiveness of the implemented mitigation measures.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>	<p>Inform the Engineer and confirm notification of the non-compliance in writing;            Rectify unacceptable practice;            Check all plant and equipment;            Consider changes of working methods;            Discuss with ET , IEC and ER and propose mitigation measures to IEC and ER within 3 working days;            Implement the agreed mitigation measures.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>
Limit level being exceeded by more than one consecutive sampling days	<p>Identify source(s) of impact; Inform IEC, contractor and EPD;            Check monitoring data, all plant, equipment and Contractor's working methods;            Discuss mitigation measures with IEC, ER and Contractor;            Ensure mitigation measures are implemented;            Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>	<p>Discuss with ET and Contractor on the mitigation measures;            Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly;            Assess the effectiveness of the implemented mitigation measures.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>	<p>Discuss with IEC, ET and Contractor on the proposed mitigation measures;            Request Contractor to critically review the working methods;            Make agreement on the mitigation measures to be implemented;            Assess the effectiveness of the implemented mitigation measures;            Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit level.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>	<p>Inform the ER and confirm notification of the non-compliance in writing;            Rectify unacceptable practice;            Check all plant and equipment;            Consider changes of working methods;            Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 3working days;            Implement the agreed mitigation measures;            As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities.            (The above actions should be taken within 1 working day after the exceedance is identified)</p>



**Event and Action Plan for Odour Patrol**

Event	ACTION	
	Person-in-charge of Odour Monitoring	Implementation Agent Identified by CEDD
<b>Action Level</b>		
Exceedance of Action Level	1. Identify source/reason of exceedance; 2. Repeat odour patrol to confirm finding.	1. Carry out investigation to identify the source/reason of exceedance; 2. Rectify any unacceptable practice 3. Implement more mitigation measures if necessary; 4. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.
<b>Limit Level</b>		
Exceedance of Limit Level	1. Identify source / reason of exceedance; 2. Repeat odour patrol to confirm findings; 3. Increase odour patrol frequency; 4. If exceedance stops, cease additional odour patrol.	1. Carry out investigation to identify the source/reason of exceedance. Investigation shall be completed within 2 weeks; 2. Rectify any unacceptable practice; 3. Formulate remedial actions; 4. Ensure remedial actions properly implemented; 5. If exceedance continues, consider what more/enhanced mitigation measures shall be implemented; 6. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.





***Appendix 6.2***

***Summary for Notification of Exceedance***



Ref no.	Date	Tidal	Location	Depth	Parameters	Measured	Action	Limit Level	Follow-up action	
X_10D437	7-Jul-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	1.15	3.19	3.10	<p><b>Possible reason:</b></p> <p>Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station.</p> <p><b>Action taken/ to be taken:</b></p> <p>Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b></p> <p>No marine works was conducted during the time of monitoring on 07 July 2014 at Ex-WPCWA. In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works. DO level was restored to normal level during subsequent monitoring on 09 July 2014 during flood tide.</p>	
X_10D438	7-Jul-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	1.13	3.55	3.00	<p><b>Possible reason:</b></p> <p>Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station.</p> <p><b>Action taken/ to be taken:</b></p> <p>Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b></p> <p>No marine works was conducted during the time of monitoring on 07 July 2014 at Ex-WPCWA. In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works. DO level was restored to normal level during subsequent monitoring on 09 July 2014 during flood tide.</p>	
X_10D439	14-Jul-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	1.90	3.19	3.10	<p><b>Possible reason:</b></p> <p>Possible in relation to the upstream organic discharge.</p> <p><b>Action taken/ to be taken:</b></p> <p>Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b></p> <p>Despite temporary reclamation removal work was conducted during on monitoring date on 14 July 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective. In addition, upstream discharge at the concerned location were regularly observed. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project. DO level was restored to normal level during subsequent monitoring on 14 July 2014 during ebb tide.</p>	
X_10D440	14-Jul-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	2.50	3.55	3.00	<p><b>Possible reason:</b></p> <p>Possible in relation to the upstream organic discharge.</p> <p><b>Action taken/ to be taken:</b></p> <p>Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b></p> <p>Despite temporary reclamation removal work was conducted during on monitoring date on 14 July 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective. In addition, upstream discharge at the concerned location were regularly observed. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project. DO level was restored to normal level during subsequent monitoring on 14 July 2014 during ebb tide.</p>	



Ref no.	Date	Tidal	Location	Depth	Parameters	Measured	Action	Limit Level	Follow-up action
X_10D441	21-Jul-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.35	3.19	3.10	<p><b>Possible reason:</b> Possible in relation to the upstream organic discharge.</p> <p><b>Action taken/ to be taken:</b> Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b> Despite temporary reclamation removal work was conducted during on monitoring date on 21 July 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective. In addition, upstream discharge at the concerned location were regularly observed. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project. DO level was restored to normal level during subsequent monitoring on 23 July 2014 during ebb tide.</p>
X_10D442	21-Jul-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	2.66	3.55	3.00	<p><b>Possible reason:</b> Possible in relation to the upstream organic discharge.</p> <p><b>Action taken/ to be taken:</b> Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b> Despite temporary reclamation removal work was conducted during on monitoring date on 21 July 2013 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective. In addition, upstream discharge at the concerned location were regularly observed. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project. DO level was restored to normal level during subsequent monitoring on 23 July 2014 during ebb tide.</p>
X_10D443	25-Jul-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	1.05	3.19	3.10	<p><b>Possible reason:</b> Possible in relation to the upstream organic discharge.</p> <p><b>Action taken/ to be taken:</b> Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b> Despite temporary reclamation removal work was conducted during on monitoring date on 25 July 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective. In addition, upstream discharge at the concerned location were regularly observed. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project. DO level was restored to normal level during subsequent monitoring on 28 July 2014 during ebb tide.</p>
X_10D444	25-Jul-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	1.10	3.55	3.00	<p><b>Possible reason:</b> Possible in relation to the upstream organic discharge.</p> <p><b>Action taken/ to be taken:</b> Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contractor works.</p> <p><b>Remarks/ Other Obs:</b> Despite temporary reclamation removal work was conducted during on monitoring date on 25 July 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was in place and effective. In addition, upstream discharge at the concerned location were regularly observed. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project. DO level was restored to normal level during subsequent monitoring on 28 July 2014 during ebb tide.</p>



***Appendix 9.1***

***Complaint Log***



### Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100321a	21/3/2010	ICC Case no. 1-224618029, Ms. Tsang	Location near Tin Hau	Complaint regarding the loud noise and dark smoke in the course of dredging works on 21 March 2010 (Sunday).	<ol style="list-style-type: none"><li>1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18<sup>th</sup> Feb. 2010 for the dredging works which carry out at area for North Point Reclamation.</li><li>2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.</li><li>3) The Contractor (CHEC-CRBC JV) strictly comply all the conditions in CNP and take all mitigation measures in order to minimize the potential impacts to surrounding sensitive receivers. A formal letter was issued out by CHEC-CRBC JV and to explain the status of the recent construction activities.</li><li>4) No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring.</li><li>5) No further complaints were received from Mr. Tsang in the reporting month. The complaint is considered closed.</li></ol>	Closed
100321b	21/3/2010	Unknown	Near the eastern breakwater of the Causeway Bay Typhoon Shelter	A public complaint and enquiry regarding loud noises emanated from dredging activities on 21/3/2010 (Sunday) until 2220 hours and between 1920-1946 hours in the evening of 22 March 2010(Monday).	<ol style="list-style-type: none"><li>1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18<sup>th</sup> Feb. 2010 for the dredging works at area for North Point Reclamation during general holidays including Sunday between 0700-2300 hours and any day not being a general holiday between 1900-2300hours. It is complied with the condition of CNP.</li><li>2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.</li><li>3) No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring.</li><li>4) No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100504	4/5/2010	Public complainant received by ICC (ICC case: 1-233384048)	Watson Road	Complaint on the noise nuisance due to the large scale of dredging machine (face to Island East Corridor) in particular the hours 1900 to 0800 and request to reduce the noise level.	<ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0119-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.</li><li>2) According to RSS 's record, no more daytime and night time dredging since the departure of the split hopper barge from the workplace on 29 April 2010 at 1900 hrs to 5 May 2010.</li><li>3) No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>	Closed
100731	31/7/2010	Mr. Lee received by ICC (CC Case: 1-250702681)	Oil Street to Watson Road	Complaint on the noise nuisance due to the dredging works. Three construction plants were operated concurrently.	<ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works.</li><li>2) There was only 1 grab dredger operated by Contractor within NPR project site area for dredging works.</li><li>3) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 27 July and 3 August 2010 during daytime and evening time period.</li><li>4) It is considered as invalid from the EP and CNP point of view.</li></ol>	Closed
100812	12/8/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the dredging works at the marine works area adjacent to the Harbour Height during the period from 0700 to 2200.	<ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.</li><li>2) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 10 and 17 August 2010 during daytime and evening time period.</li><li>3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
101108	8/11/2010	Mr. Nip received by ICC (CC Case)	Sai Wan Ho	Visual concern around the seaside silt screen outside the WSD freshwater intake pump at Sai Wan Ho (Monitoring station ref no.. WSD15)	<ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 has been regular checked of condition and removal of trapped rubbish before the dismantling of the floating silt screen to be replaced by wall mount silt screen.</li><li>2) Follow-up action had been immediately carried out to check and clear the floating refuse around the seaside silt screen after receipt of the complaint.</li><li>3) Removal of seaside silt screen outside the WSD freshwater intake (WSD15) by contractor HY/2009/11 was checked and confirmed dated 9 November 2010. Silt screen has been deployed into the existing steel frame at WSD15 for the protection of WSD salt water intake.</li></ol>	Closed
101110	10/11/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the power mechanical equipment during the 0700 to 2200hrs	<ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0870-10 for their dredging works during evening time. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.</li><li>2) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 4 and 10 November 2010 during daytime and evening time period.</li><li>3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>	Closed
101203	3/12/2010, 01:45a.m.	The resident of Block 11, City Garden by ICC referral from Marine Department	North Point	Bad odour was generated from the dredging plant off North Point	<ol style="list-style-type: none"><li>1) The first investigation was carried out by Marine Department patrol in the morning on 3 Dec 2010 at around 10:00 and revealed that a few working barges were anchoring in the vicinity without carrying out dredging work.</li><li>2) A further specific investigation inspection on contractor's backhoe barge in the vicinity of City Garden was jointly conducted with Engineer Representatives (AECOM/RSS), and ET on 8 Dec 2010 at 11:30. No bad odour was noted during the investigation.</li><li>3) Routine dredging operation of the backhoe barge was performed during the jointed investigation inspection and it was revealed that no bad odour was attributed by the dredged materials inspected.</li></ol>	Closed
101206	6/12/2010	Ms Lui, the resident of 27/F, Block 10, City	City Garden, North Point	Two barges were generating noise at 22:00 on 6 December 2010 in which the noise from	<ol style="list-style-type: none"><li>1) ET confirmed the following information with resident site staff on the complaint:<ul style="list-style-type: none"><li>• It was referred to the filling operation at North Point</li></ul></li></ol>	Closed





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		Garden by ICC (ICC case: 1-266039336)		<p>filling operation was louder than the traffic noise &amp; visual impact was generated due to the spot-light pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II;</p> <p>Complainant also raised the same complaint to District Councillor, Mr. Hui on 7 Dec 2010 regarding the night-time noise and suspected earlier start of work at 06:30. Complaint also requested for limiting the plant operating hours from 09:00-21:00.</p>	<p>Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II;</p> <ul style="list-style-type: none"> <li>• Two derrick barges were in operation at the time of complaint for placing 400 rockfill onto the excavation trench and for levelling the formation level to receive the pre-cast caisson seawall;</li> <li>• Flood light on the control mast of derrick barge have no lighting shields for the prevention of glare of flood lights;</li> <li>• No starting work on 7 Dec 2010 at 0630hours.</li> </ul> <p>2) PME used in restricted hours were checked and confirmed compliant with valid CNP no. GW-RS0870-10. The noise level recorded on 6 Dec 2010 was complied with the noise criteria during restricted hour;</p> <p>3) It was found that the occasional noise nuisance might be caused by the hitting or scratching onto the rock surface during loading down the grab onto the Grade 400 rockfill;</p> <p>4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time.</p> <p>5) Contractor was advised to minimize the finishing time of placing Grade 400 rockfill at 2100hrs and switch off all unnecessary flood lights apart from the light for the safety and security purpose;</p> <p>6) No further complaint was received after implementation of proposed measures</p>	
110415	15/04/2011	The resident, Mr Law at Victoria Centre by ICC (ICC#1-281451236)	North Point	A dust generation and a concern of mosquitoes breeding complaint in which suspected the filling operation was part of North Point Reclamation.	<p>1) The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work.</p> <p>2) Water spraying on the haul road and potential dust generating material at least 4 times a day was conducted by contractor that complies with the requirement.</p> <p>3) It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant.</p> <p>4) It was recommended that increasing the frequency of water spraying shall be conducted to all potential dust generating materials and activities. Besides, Contractor should consider to cover the idle part of the stockpile</p> <p>5) The concern of mosquitoes breeding is out the scope of EM&amp;A, the follow-up action is not reported in this monthly EM&amp;A report.</p>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
110419	19/04/2011	Ms Chiu at Victoria Centre at Victoria Centre by ICC (ICC# 1-272874759)	North Point	The episode of night noise on 19/4/11 and 20/4/11 at 2:50 am and the noise lasted for 30 minutes per night.	<ol style="list-style-type: none"><li>1) According to the RSS's record, there was no construction works undertaken under the EP-356/2009 during the concern time period.</li><li>2) There was no abnormal real-time noise monitoring data recorded in RTN1 - FEHD Hong Kong Transport Section Whitefield Depot which is next to the Victoria Centre.</li><li>3) It is considered as invalid complaint under this Project.</li></ol>	Closed
110617	9/06/2011	Mr. Law from Victoria Centre Management Office	North Point	An odour nuisance suspected generating from the discharge point – Channel T at Watson Road in part of the site area was related to CWB under Contract no. HY/2009/11	<ol style="list-style-type: none"><li>1) The complaint was received by ET on 13 Jun 2011. During the weekly site inspection on 7 and 17 June 2011, there was no any odour impact detected in the site area.</li><li>2) According to the site record, there was muddy water discharged from the unknown source at upstream of Channel T during heavy rainstorm. No any site surface runoff to the Channel T and out of site boundary was observed in the inspection.</li><li>3) In order to prevent muddy water washing out to the water body under heavy rainstorm, a silt curtain was installed at the outfall of the channel by Contractor. ET confirmed with the Resident Site Staff that a silt curtain was installed at the outfall of the channel to prevent muddy water washing out to the water body under heavy rainstorm. Besides, regular cleaning of refuse in the channel has been conducted by Contractor.</li><li>4) A further site investigation on 28 June 2011 revealed that no odour nuisance was detected at the upstream of the Channel T and no source of odour nuisance was identified at site. As such, it was concluded that the source of odour nuisance was not related to the Project works.</li><li>5) Although no source of odour nuisance was identified at site, the muddy water and dirt from the unknown source at upstream of Channel T may cause a potential smell during low tide and low water flow. Contractor was reminded to remove the silt curtain at the channel on non-rainy day so as to avoid the accumulation of the sediment and dirt in the water channel.</li></ol>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
110709	09/07/2011	Mr. Au from City Garden Management Office	North Point	A complaint letter to Contractor HY/2009/11 was raised by Cayley Property Management Limit on 9 July 2011 regarding a series of pump breakdown events at seawater intake of City Garden on 4, 6, 7 and 8 July 2011. A lot of rubbish such as plastic bags, nylon bags, nylon-wire mesh was observed sucking from the seawater intake at the seawater front of Block 7 of City Garden affecting the operation of seawater pump plant.	<ol style="list-style-type: none"><li>1) Contractor conducted formation works for installation of caisson seawall at C27, C28, C29 and C30 on 4, 6, 7 and 8 July 2011 and no dredging work was conducted during this time period</li><li>2) Water mitigation measures of an 80m long silt curtain at the site boundary in front of City Garden Relocation of silt curtain and silt curtain at the outfall of the channel were provided and maintained to accommodate the site works. All vessels are equipped with rubbish collection facilities and disposed the rubbish regularly. Also, daily cleaning actions had been taken by contractor to minimize floating refuse within the site boundary.</li><li>3) Moreover, it has been reported several times that discharged from outfall pipeline outside the site boundary near the intake of the pump maybe considered as another source of rubbish generation.</li><li>4) Referring to the record provided by Cayley Property Management Limit, the trapped rubbish was unlikely generated from the construction works. It was considered that complaint is invalid and not related to project.</li></ol>	Closed
110710	09/07/2011	Complainant by ICC (ICC no. 1-301520309)	North Point	It was received at 00:56 on 10 July 2011. There was complained a derrick barge unloading rockfill material off the shore facing the Harbour Grant HK Hotel causing noise nuisance.	<ol style="list-style-type: none"><li>1) ET confirmed with the Resident Site Staff that the complaint was referred to Contract HY/2009/15 for the loading and unloading of fill material at two barges operation in the sea at around 300m adjacent to Island Eastern Corridor (Oil Street Chainage) where is outside the Site of HY/2009/15 in the period of around 19:45 on 9 July to 1:00 on 10 July 2011.</li><li>2) The material loading and unloading operation processed in restricted hours was checked without a valid CNP. It was found that the operation was due to an unexpected water leakage of the hopper barge and considered an incident.</li><li>3) According to the incident report provided from RSS on 20 July 2011, around 7:30 pm the barge S22 was inclined slightly and slightly water leakage might occur. Due to marine safety concern, the hopper barge would open the hopper to release the contained materials in order to reduce the weight and stabilize the barge. In consider of slight water leakage, the operator decided to use the nearby Derrick Barge ST32 to help for unload the general fill materials first and the unloading operation was started at around 7:45pm, and end at around 1:00 am. Contractor was reminder to provide frequent check of vessel condition</li></ol>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					so as to prevent recurrent by barge defect	
110723a	23/07/2011	Ms. Law at Victoria Centre by ICC no. 1-303887687	North Point	She concerned that Highways Department published a notice in their Management Office about construction works will be conducted from 0700 hours to 2300 hours during July to December 2011 including Saturday, Sunday and public holiday.	<ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 28 July 2011</li> <li>2) RSS confirmed that the notice was prepared by Victoria Centre's Management office to their resident and the advice was only given on the extension construction works (for Contract HY/2009/15) to 7am-9pm from Monday to Saturday except Public Holidays and Sundays.</li> <li>3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-August 2011.</li> <li>4) No noise exceedance was recorded at construction noise monitoring station at Victoria Centre on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring.</li> <li>5) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.</li> </ol>	Closed
110723b	23/07/2011	Ms. Yau at Block 2, Victoria Centre by ICC no. 1-304013959	North Point	Reclamation work was conducted at Causeway Bay Typhoon Shelter at 7am on 23 July 2011. She complained that the works shall be started later to minimize the noise nuisance to the vicinity of the residents in early morning	<ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 8 August 2011</li> <li>2) With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring</li> <li>3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-August 2011.</li> <li>4) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.</li> </ol>	Closed
110727a	27/07/2011	Mr. Law from Victoria Centre Management Office by ICC no. 1-304616162	North Point	It was complained by Mr. Law from Victoria Centre Management Office on 27 July 2011 regarding construction noise generated by the construction operations of	<ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 28 July 2011</li> <li>2) RSS confirmed to start the rock breaking activities for Contract HY/2009/15 at 8am as a mitigation measure to minimize the noise nuisance in the vicinity of the residents.</li> <li>3) No noise exceedance was recorded at construction noise</li> </ol>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
				Central-Wanchai Bypass at noon rather than in morning at 7am.	<p>monitoring station at Victoria Centre on 25 July and 4 August 2011 during daytime while breaking and excavation works were undertaken during monitoring.</p> <p>4) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. No further complaint from complainant was received after proposed the mitigation measure.</p>	
110727b	27/07/2011	Ms. Chiu by ICC no.1-304615409	North Point	Noise nuisance from the excavation works for the Highways Department adjacent to the Victoria Centre was conducted from 7am	<p>1) It was referred by AECOM to ET on 28 July 2011</p> <p>2) With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 25 July and 4 and 10 August 2011 during daytime while breaking and excavation works were undertaken during monitoring.</p> <p>3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am.</p>	Closed
	08/08/2011				<p>4) However, complainant did not satisfy with the response on the noise nuisance from the rock-breaking during morning in front of Victoria Centre and then further complaint via 1823 on 7 August 2011.</p> <p>5) Highways contacted the complainant on 15 August 2011 that the noisy rock breaking operation had been completed.</p> <p><i>Remarks: There will be counted as two complaints in this complaint log.</i></p>	
110810	10/08/2011	Mr. Yip by ICC no. 1 - 306740207	North Point	Muddy water was discharged from work site to the seafront near Oil Street during heavy rain. The environmental protection measures were not good enough and are needed to rectify.	<p>1) It was referred by AECOM to ET on 17 August 2011.</p> <p>2) Confirmed with RE, Muddy water was caused by a heap of earth being washed to the sea by heavy rain. The heap of earth was referred as a small stockpile placed close to the seafront in front of Oil Street within the site area under handover transition period from contract HY/2009/11 to contract HY/2009/19. The necessary mitigation measures to protect the small stockpile against rainfall were missing at the time of complaint.</p> <p>3) Due to the missing of mitigation measures to protect the small stockpile during handover transition period, loose material was washed into the harbour when heavy rain came. Muddy water was formed and dispersed in the sea that caused the water quality and visual concern to the public. The complaint was considered as valid.</p> <p>4) Contractors were advised to relocate the loose materials</p>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover.	
110826	26/08/2011	Grand Hyatt and a complainant by ICC	Wan Chai	Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area.	<ol style="list-style-type: none"> <li>1) Confirmed with the Resident Site Staff that the construction works were referred to the Contractor HK/2009/01.</li> <li>2) The Excavator mounted breaker at Convention Avenue and Drilling rig at HKCEC1 reclamation area were the dominant construction noise source during this period.</li> <li>3) The drilling rig at HKCEC1 reclamation area and excavator mounted breaker at Convention Avenue were then temporary suspended after received the complaint.</li> <li>4) Investigation revealed that the erected noise barrier (4m cantilevered movable noise barrier for the drilling rig and 1m movable noise barrier for the excavator mounted breaker) were not located close to the plants to provide adequate noise screening.</li> <li>5) Contractor was advised to avoid concurrent operation of construction plants at site. Further enhancement of movable noise barriers at HKCEC1 and providing noise enclosure for the excavator mounted breaker at Convention Avenue are needed.</li> <li>6) Further site investigation and checking on 31 August and 7 September 2011 revealed that the implemented noise mitigation measures were in proper and minimize the noise impact.</li> </ol>	Closed
110826A	26/08/2011	A complaint letter from Mr. Au of Cayley Property of City Garden	North Point	Harbor front adjacent to their cooling water intake suction which caused 3 times of system breakdown of the sea water pump on 9, 22 and 25 August 2011.	<ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the <ul style="list-style-type: none"> <li>• construction works were referred to the Contractors HY/2009/11 and HY/2009/19.</li> <li>• The pump is located on the site area of HY/2009/19</li> <li>• A temporary garbage defender was installed on 23 July 2011 by HY/2009/11 and the shape of the defender was adjusted on 8 August 2011 in order to exclude the outfall.</li> <li>• An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project</li> </ul> </li> </ol>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>team), contractor of HY/200911 and HY/2009/19 and ICon 29 August 2011. Inspection report of it was submitted to RSS on 19 September 2011.</p> <ul style="list-style-type: none"><li>• Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19.</li><li>• In response to City Garden request, the contractors have set up the temporary garbage defender in function and collect the floating refuses, but cannot eliminate all refuses, in particular the refuse coming from the seabed</li></ul> <p>2) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying with their expectation.</p> <p>3) During on-site inspection, floating refuses observed occasionally outside the garbage defender. No conclusion could be made for the source of these floating refuses. On the other hand, some of the refuses were observed floating behind the garbage defender during investigation.</p> <p>4) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site.</p> <p>5) It was noted that the cooling water intake was accessible to the public. As such, fish breeding and fishing activities were observed even though a notice has already hoisted. Also, tripping of rubbish by the passers-by could result in a lot of rubbish accumulated around the intake point.</p> <p>6) Referring to the record provided by CPML, there were a lot of nylon/ plastic bags and nylon wire mesh that matched those rubbishes generated from the public activities.</p> <p>7) Contractors have fulfilled the requirement of site cleanliness and no exceedance was recorded during Water Quality Monitoring. It is considered the cause of this complaint is not related to project and environmental issue in this project as well. No more complaint received after ad-hoc inspection</p>	
111014	14/10/2011	The complainant, Ms. Tam complained via hotline 1823	Wan Chai	The polluted fumes and exhaust from the excavation by sub-contractor of CEDD on pedestrian way outside no.25 Harbour Road (in front of the Harbour Centre)	<p>1) RSS notified ET to carry out investigation on 17 October 2011.</p> <p>2) ET confirmed with the Resident Site Staff that the location of the excavator was within site area of Contract no. HK/2009/02 undertaking the water cooling main re-provision works along the Harbour Road. The plants including the excavator have been checked before using</p>	Closed





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site.</p> <p>3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011.</p> <p>4) Contractor was reminded to enhance regular checking and maintenance to all plants at site.</p> <p>5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.</p>	
111104	04/11/2011	Mr. Liu from LCS D complained via Contractor Complaint Hotline	Wan Chai	Complain about a tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road, the status is not healthy and roof ball of two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue were half cut.	<p>1) ET confirmed with the Resident Site Staff that</p> <ul style="list-style-type: none"> <li>• A tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road is the Tree no. TA1122 under Contract no. HK/2009/02. Leaves of a branch of this tree were shrivelled.</li> <li>• Two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue are the tree nos. A160 and A161 under Contract no. HK/2009/01. Part of roof ball of these two trees was covered by the metal plate.</li> </ul> <p>2) Independent Tree Specialists for these two inspected the trees. Contractor HK/2009/01 has taken the measure as recommend downgrading the soil level around the trunk base. Reinstating of the ground works will be conducted in mid-December 2011. For the tree no. TA1122 under Contract no. HK/2009/02, the brown leaves were removed and fenced the tree with orange net is provided to prevent damage of tree trunk by construction works. The distance between the tree and the edge of the trench is kept approximate 2m. Two Contractors were reminded to carry out regular watering to the trees within their site area.</p>	Waiting RSS respond
111106	06/11/2011	Police officer	Wan Chai	Construction noise generated from the site at about 6:30 a.m on 6 November 2011 and require to stop the machine operation	<p>1) According to the information reported by Contractor, one BC cutter and hoist were operated for Diaphragm Wall construction of Shatin-Central Link to inspect bentonite pipes and ensure no damages and all the joints are tightened in good position. Then, the subcontractor for Diaphragm wall, SAMBO Korean foreman stopped the engine of the BC cutter immediately. The police officer recorded the details and HKID number of the foreman and then left. Due to the different language communication between the police officer and the Korean foreman, no</p>	Keep in view for three months from the date of complaint received



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>CNP was checked by the police officer.</p> <p>2) ET confirmed with the Resident Site Staff that same issue was also raised out by RSS at about 7:00a.m on the same day. Besides, it was confirmed that there is no valid Construction Noise Permit for the conducted construction works in the period between 2300 and 0700.</p> <p>3) Due to insufficient communication between Contractor HK/2009/01 and their Korean Sub-contractor, Korean Sub-contractor had not notified to Contractor before carrying out the inspection of the BC cutter, hoists and bentonite pipes at about 6:00a.m to ensure no damages and all the pipe joints should be tightened and in good position.</p> <p>4) Contractor was advised to enhance the communication between Contractor and sub-contractor and provide sufficient environmental training to all foreman and operators on restricted hour operation. Furthermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour</p> <p>5) This complaint was considered in relation to the conducted construction works during restricted hours without valid Construction Noise Permit. No more construction works were conducted during night time period. The construction works will be conducted in accordance with the time period stated in valid CNP. This complaint will be kept in view of any follow-up action from the relevant government activities.</p>	
120405	05/04/2012	N/A	North Point	A complaint regarding excessive noise from construction sites of CBTS was observed daily before 7:30am except on public holidays, and the noise source was mainly from piling works. The complainant requested that construction works should start after 8:30am to avoid nuisance to nearby residents and a speedy follow-up and reply.	<p>1) RSS notified ET on 5 April 2012.</p> <p>2) ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period.</p> <p>3) After reviewing the results of noise monitoring (M2b and M3a), no exceedance was recorded during daytime period and the noise level was below 75dB(A). Site inspection for HY/2009/15 was conducted on 10 April 2012. The condition of noise mitigation measures around CBTS was found satisfactory. RSS confirmed that no pilings were performed during the concerned period. The major works included drilling, diaphragm wall construction and excavations.</p> <p>4) HyD made a reply to the complainant on 16 April 2012 via 1823. HyD replied that the current works at CBTS were drilling, diaphragm wall construction and deep excavations. In order to minimize the noise generated</p>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					from the above works, the Contractor had erected temporary noise barriers and provided noise blankets on plants. RSS would continue to work with the Contractor on the effectiveness of the environmental mitigation measures implemented on site. No further complaint was received after the response.	
130308	06/03/2013	ICC Case#1-407181502	Tin Hau	A complaint regarding the dropping of fine rock material into surrounding waterbody was observed during rock breaking operation with two excavators in active operation at the Eastern Breakwater of Causeway Bay Typhoon Shelter near the North Point lighthouse.	<p>1) RSS notified ET on 8 March 2013</p> <p>2) ET confirmed with RSS that excavation works, installation of buoy, flashing light and silt curtain and dredging works were undertaken at Eastern Breakwater during the concerned period on 6 March 2013. One backhoe equipped with breaker and one derrick barge were confirmed in operation while another backhoe was at idle during the concerned period on 6 March 2013.</p> <p>3) Reviewing the photo record provided by RSS, the condition of the silt curtain deployed around the Eastern Breakwater on 6 March 2013 was found to be in good condition. It is considered that the silt curtain was properly in place during the concerned period and the concerned act of dropping of fine rock material was confined within the silt curtain boundary without adverse impact to the nearby water quality.</p> <p>Further follow up was conducted on 12 March 2013 during weekly environmental audit inspection, the silt curtain deployed around the concerned area was found to be maintained in good condition and the water quality at the concerned work area was generally satisfactory. No violation of the Environmental Permit condition was found.</p> <p>The contractor was advised and committed to implement preventive measures to minimize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequate back up stock of silt curtain for emergency use.</p>	Closed
140612	12/06/2014	EPD ref: EP/860/F2/24 Annex IV	Wan Chai	The complaint is regarding to the water quality of the waterfront outside the Hong Kong Academy for Performing Arts Theatre Block, where a large piece of muddy water was found.	<p>1) WSII RSS team notified ET on 12 June 2014; Notification letter from EPD (ref: EP/860/F2/24 Annex IV) was received by ET on 13 June 2014.</p> <p>2) ET confirmed with RSS that neither marine construction works nor barge operation was conducted at the concerned location during the time of complaint. With respect to the complaint case, muddy dispersion was observed at HKCEC2W works area on 12 June 2014, and</p>	Interim Report was submitted to EPD on 20 June 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>the dispersion was observed partly extended beyond the outermost layer silt curtain at 1000hrs. Immediate follow up action was requested.</p> <p>3) It is considered that Contractor's mitigation measures would require further review on the effectiveness to avoid seepage of muddy dispersion such as regular diver inspection check and daily visual checking of silt curtains.</p> <p>Additional silt curtain at marine access zone was installed by Contractor on 12 June 2014 and the double layer silt curtain were generally in order. Follow-up inspection was further conducted on 16 June 2014.</p> <p>The Contractor's investigation report on the complaint case was submitted to EPA via email on 18 June 2014.</p>	
140723	21/07/2014	ICC Case Ref: 2-341537112	Works area opposite to Ngan Tao Building	The complaint is regarding to construction noise impact to the complainant who could not sleep due to work and machine at the project site opposite to the Ngan Tao Building.	<p>1) Construction noise impact referred by RSS was received by ET on 25 July 2014</p> <p>2) ET confirmed with RSS that horizontal cutting and removal of D-wall at Eastern, Southern and Northern side of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter before 23:00hrs on 20 July 2014 that total 3 numbers of derrick lighter and 3 numbers of saw cut machine were in operation, and removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter around 00:25hrs to 00:56hrs on 21 July 2014 that total 1 number of derrick lighter was in operation.</p> <p>3) According to the relevant site records under Contract HY/2009/15, before 23:00hrs on 20 July 2014, horizontal cutting and removal of Diaphragm Wall at Eastern, Southern and Northern side of TS2 was conducted under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 3 nos. of derrick lighter and 3 nos. of saw cut machine were in operation at the above period. From around 00:25hrs to 00:56hrs on 21 July 2014, removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter. Total 1 no. of derrick lighter was found operating at the above period</p> <p>4) It was considered the condition of CNP GW-RS0592-14 was not fulfilled by the Contractor of HY/2009/15. "From 00:25hrs to 00:57hrs on 21 July 2014, the PME(s) (1 no. of Derrick Lighter) on-site could not follow with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0592-14."</p>	<p>Final report (Issue1) issued on 31 July 2014.</p> <p>Further to complainant follow-up, Final report (Issue2) Issued on 12 Aug 2014.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>Notwithstanding the above, according to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting procedure was incomplete. Under safety and navigation consideration, the completion of diaphragm wall removal was necessary and of imminent need.</p> <p>5) The Contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works.</p>	



***Appendix 10.1***

***Construction Programme of Individual Contracts***

Activity ID	Activity Name	OD	RD	Start	Finish	% Comp	Total Float	2014				
								Jun	Jul	Aug	Sep	
<b>HK/2009/01 - Works Programme Rev.6D (Data Date: 20-Jun-14)</b>												
<b>Key Dates (Contractual)</b>												
<b>Major Works</b>												
KD-0400B	Completion of Outstanding Works for Section 4 - Salt Watermains	0	0		20-Jun-14*	0%	-629					
<b>Key Dates (Forecast Completion)</b>												
<b>Major Works</b>												
KD-0405B	Completion of Outstanding Works for Section 4 - Salt Watermains & Works in Area 3	0	0		02-Sep-14	0%	-704					
KD-0805	Completion of Section 8 of Works - Works in Area 6	0	0		09-Aug-14	0%	87					
<b>Preliminaries</b>												
<b>Method Statement &amp; Design (Major) Approval by AECOM</b>												
PRE-2000G	D-Wall Construction for CWB Tunnel (Stage 3)	60	1	05-Nov-13 A	20-Jun-14*	0%	-181					
PRE-2030B	ELS for CWB Stage 2	30	1	20-Mar-14 A	18-Jul-14	0%	758					
PRE-2030C	ELS for CWB Stage 3	30	0	19-Apr-14 A	18-Aug-14	100%	-156					
<b>Statutory / Authority Approval</b>												
PRE-3050B	ELS for CWB Tunneling Works Stage 2 (GEO)	28	28	21-Jun-14*	18-Jul-14	0%	-376					
PRE-3050C	ELS for CWB Tunneling Works Stage 3 (GEO)	28	28	21-Jul-14	17-Aug-14	0%	-156					
PRE-3050D	ELS for CWB Tunneling Works Stage 1b (GEO) for Bottom Up	28	1	20-Apr-11 A	20-Jun-14	0%	-376					
<b>Watermains Connection Submission Approval by WSD/Stakeholders</b>												
PRE-3200C	Salt Water Mains (S3)	28	28	01-Sep-14*	28-Sep-14	0%	0					
PRE-3200D	Salt Water Mains (S8)	28	28	20-Jun-14*	17-Jul-14	0%	-384					
PRE-3200E	Salt Water Mains (S9)	28	28	20-Jun-14*	17-Jul-14	0%	-671					
PRE-3200O	Cooling Watermains (BF)	28	28	01-Sep-14*	28-Sep-14	0%	0					
PRE-3200P	Cooling Watermains (BG)	28	28	01-Sep-14*	28-Sep-14	0%	0					
PRE-3200Q	Cooling Watermains (BI)	28	28	01-Sep-14*	28-Sep-14	0%	0					
<b>Contractor's Design (CWB Diaphragm Wall)</b>												
PRE-4020	Contractor's Detailed Design	30	1	09-Jul-11 A	20-Jun-14	40%	726					
PRE-4030	AECOM's and GEO's approval on Detailed Design	60	60	21-Jun-14	19-Aug-14	0%	726					
<b>Contractor's Design (PS1.94)</b>												
PRE-5100C	Approval of ICCP of Cross-Harbour Mains - by AECOM & Relevant Authorities	28	0	04-Mar-11 A	20-Jun-14	100%	787					
<b>TTA Implementation and Completion Summary Milestone</b>												
<b>Zone A2 (At Convention Avenue)</b>												
TTAM-A2-1040D	TTA Completion - Zone A2-4B	0	0		02-Aug-14	0%	-673					
<b>Zone A3 (At Fenwick Pier Street)</b>												
AA1030	TTA Completion - Combination of Zone A3-5D & A3-4D (Sewer)	0	0		20-Jun-14	0%	85					
AA1040	TTA Implementation - Zone A3-2C (Sewer)	0	0	20-Jun-14*		0%	85					
AA1050	TTA Completion - Zone A3-2C (Sewer)	0	0		31-Jul-14	0%	745					
AA1060	TTA Implementation - Zone A3-2D (Sewer)	0	0	20-Jun-14		0%	85					
AA1070	TTA Completion - Zone A3-2D (Sewer)	0	0		31-Jul-14	0%	745					
TTAM-A3-1090B	TTA Completion - Zone A3-5C - Salt Water	0	0		29-Aug-14	0%	-700					
<b>Zone A4 (At Convention Avenue)</b>												
TTAM-A4-1020D	TTA Completion - Zone A4-2B (Night Works)	0	0		29-Jun-14	0%	-690					
TTAM-A4-1120A	TTA Implementation - Zone A4-2C	0	0	30-Jun-14		0%	-690					
TTAM-A4-1120B	TTA Completion - Zone A4-2C	0	0		13-Aug-14	0%	-684					
<b>Zone A5 (At Harbour Road)</b>												
TTAM-A5-1050B	TTA Completion - Zone A5-6	0	0		27-Aug-14	0%	-698					
<b>Area X3 (Fleming Road b/w Harbour Road &amp; Convention Avenue)</b>												
TTAM-X3-1000B	TTA Completion - Zone X1-1	0	0		03-Jul-14	0%	107					
TTAM-X3-1000D	TTA Completion - Zone X1-1A	0	0		26-Jun-14	0%	780					
TTAM-X3-1010B	TTA Completion - Zone X1-2	0	0		23-Jul-14	0%	753					
TTAM-X3-1020B	TTA Completion - Zone X1-3	0	0		23-Jul-14	0%	753					
<b>Zone C (Expo Drive East)</b>												
TTAM-C1-1000B	TTA Completion - Zone C1-1	0	0		03-Jul-14	0%	27					
TTAM-C1-1010C	TTA Implementation - Zone C1-2A	0	0	04-Jul-14		0%	27					
TTAM-C1-1010D	TTA Completion - Zone C1-2A	0	0		02-Aug-14	0%	743					

■ Remaining Work     ■ Summary Bar  
■ Actual Work  
■ Summary Bar  
■ Critical Remaining Work  
◆ Milestone

CEDD CONTRACT NO. HK/2009/01  
 Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)  
WORKS PROGRAMME Rev.6C - 3 Month Programme starting from 20-Jun-14



Activity ID	Activity Name	OD	RD	Start	Finish	% Comp	Total Float	2014					
								Jun	Jul	Aug	Sep		
TTAM-C2-1100B	TTA Completion - Zone C2-2	0	0		23-Jul-14	0%	-8						
TTAM-C3-1000A	TTA Implementation - Zone C3-1	0	0	24-Jul-14		0%	-8						
<b>Section 3 of the Works - CWB Tunnel, Slip Roads 2 &amp; 3, Works in Area 8</b>													
<b>CWB Tunnelling Works (Stage 1 : CH2947 - CH3045)</b>													
<b>Stage 1 - Tunnel Structure Works (Bay 1 to Bay 7 : Ch2947 - Ch 3045)</b>													
<b>Tunnel Structure at Stage 1A &amp; 1B (CH2947 - CH3045)</b>													
S3A-TS-2000	Tunnel Structures Works including Waterproofing and OHVD	300	191	28-Feb-14 A	27-Dec-14	0%	224						
<b>CWB Tunnelling Works (Stage 2 : Ch3045 - Ch3129)</b>													
<b>Stage 2 - Foundation Works (Bottom Up Method : CH3045 - CH3129 / CH120 - CH225)</b>													
S3B-FW-1060B	Pre-bored H Piles for CWB (38 Piles w/ 1 piling rig) - 4th row & ED	90	73	27-Jan-14 A	31-Aug-14	0%	679						Pre-bored H Pile
<b>Stage 2 - Excavation Works (For Bottom Slab Construction : CH3045 - CH3129)</b>													
S3B-EW-1020	Excavate to -3.0 mPD for installation of waling/strut at +1.5mPD & -2.0 mPD (30,000 cu.m)	185	156	22-May-14 A	22-Nov-14	0%	-130						
<b>CWB Tunnelling Works (Stage 3 : Ch3129 - Ch3245)</b>													
<b>Stage 3 - Reclamation Works</b>													
<b>Demolition Works</b>													
<b>Demolition Works - Stage 3</b>													
DW3-1000	Demolition of Existing 10nos. Pump Houses along Convention Avenue	90	73	21-May-14 A	31-Aug-14	18.89%	372						Demolition of Existing
DW3-1015	Partial Demolition of Existing Bridge from North to South	60	1	02-May-14 A	20-Jun-14	0%	-236						Partial Demolition of Existing Bridge from North to South
DW3-1020	Demolition of Remaining Existing Expo Drive East Bridge at Southern Bound	28	28	21-Jun-14	18-Jul-14	0%	-236						Demolition of Remaining Existing Expo Drive East Bridge at
<b>Expo Drive East (Diversion and Reprovision)</b>													
AA1150	Zone X1-1A - Temporary UU Connection/Change Over Point	60	7	22-May-14 A	26-Jun-14	0%	780						Zone X1-1A - Temporary UU Connection/Change Over Point
EDE-1040	Temporary Utilities Diversion at existing footpath/road JO (incl. changeover, pressure test and	60	7	22-Apr-14 A	26-Jun-14	0%	780						Temporary Utilities Diversion at existing footpath/road JO (incl. changeover, press
<b>Stage 3 - Foundation Works</b>													
S3C-FW-1040B	Remaining Stage 3 D- wall Construction for CWB (34 panels) - including adv. work & remov	96	96	03-Jun-14 A	23-Sep-14	0%	-202						
S3C-FW-1050E	Stage 3 Pre-bored H-pile for CWB - 179 piles w/2 ~ 4 piling rigs) incl piles for culvert & loadi	253	213	02-May-14 A	18-Jan-15	0%	-310						
<b>Section 4 of the Works - Salt Water Mains, Works in Area 3</b>													
<b>S8B (DN800) Salt Watermains</b>													
S4-1000	Zone A4-2C - S8B (20m)	45	45	30-Jun-14	13-Aug-14	0%	-690						Zone A4-2C - S8B (20m)
S4-1010C	Zone A4-2B - S8B (20m)	48	9	07-Oct-13 A	29-Jun-14	0%	-690						Zone A4-2B - S8B (20m)
S4-1010D	Zone A4-2Brev - S8B (10m)	21	10	14-Mar-14 A	29-Jun-14	0%	-690						Zone A4-2Brev - S8B (10m)
S4-1100	Zone A5-6 - S8B (15m)	25	58	09-Jan-14 A	27-Aug-14	100%	-563						Zone A5-6 - S8B (15m)
<b>Testing and Commissioning</b>													
S4-1500	Pressure Test of S8B	6	6	28-Aug-14	02-Sep-14	0%	-704						Pressure Test of
S4-1510	Cleaning of S8B	7	7	03-Sep-14	09-Sep-14	0%	-360						Cleaning
S4-1520	Connection to Existing Mains (S8B)	14	14	10-Sep-14	23-Sep-14	0%	-360						Connection to Existing Ma
<b>S9 (DN450) Salt Watermains &amp; Sewer</b>													
S4-2080	Zone A2-4B - S9 (8m) - Testing point	24	37	04-Dec-13 A	02-Aug-14	0%	-560						Zone A2-4B - S9 (8m) - Testing point
S4-2120	Zone A3-5C - S9 (8m) - Testing point	14	20	16-Jul-13 A	02-Aug-14	0%	-537						Zone A3-5C - S9 (8m) - Testing point
<b>Testing and Commissioning</b>													
S4-2500	Pressure Test of S9	6	6	03-Aug-14	08-Aug-14	0%	-700						Pressure Test of S9
S4-2510	Cleaning of S9	7	7	09-Aug-14	15-Aug-14	0%	-700						Cleaning of S9
S4-2520	Connection to Existing Mains (S9)	7	7	16-Aug-14	22-Aug-14	0%	-700						Connection to Existing Ma
<b>Section 6A of the Works - Cooling Water Discharge System (3 nos. Govt Towers)</b>													
S6A-1000	Zone C2-2 - CHBF (7m)	45	34	20-Jan-14 A	23-Jul-14	0%	-8						Zone C2-2 - CHBF (7m)
S6A-1020A	Zone C1-2A - CHBF (18m)	30	30	04-Jul-14	02-Aug-14	0%	743						Zone C1-2A - CHBF (18m)
S6A-1030	Zone C1-1 - CHBF (20m)	21	14	21-Feb-14 A	03-Jul-14	0%	27						Zone C1-1 - CHBF (20m)
S6A-1200	Zone X1-1 - CHBF (11m)	24	14	20-Jun-14*	03-Jul-14	0%	72						Zone X1-1 - CHBF (11m)
S6A-1210	Zone X1-2 - CHBF (5m)	24	34	10-Mar-14 A	23-Jul-14	0%	52						Zone X1-2 - CHBF (5m)
S6A-1220	Zone X1-3 - CHBF (7m)	24	34	10-Mar-14 A	23-Jul-14	0%	52						Zone X1-3 - CHBF (7m)
S6A-1240	Zone C3-1 - CHBF (16m) Test and Connection Point	60	60	24-Jul-14	21-Sep-14	0%	-8						
<b>Section 6B of the Works - Cooling Water Intake &amp; Discharge System (Great Eagle / Harbour Centre)</b>													
S6B-1000	Zone C2-2 - CHBG (7m)	45	34	20-Jan-14 A	23-Jul-14	0%	-8						Zone C2-2 - CHBG (7m)
S6B-1020A	Zone C1-2A - CHBG (18m)	30	45	04-Jul-14	17-Aug-14	0%	27						Zone C1-2A - CHBG (18m)
S6B-1220	Zone C3-1 - CHBG (16m) Test and Connection Point	60	60	24-Jul-14	21-Sep-14	0%	-8						
<b>Section 6C of the Works - Cooling Water Discharge System (China Resources Building)</b>													

█ Remaining Work     █ Summary Bar  
█ Actual Work  
█ Summary Bar  
█ Critical Remaining Work  
◆ Milestone

CEDD CONTRACT NO. HK/2009/01  
 Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)  
 WORKS PROGRAMME Rev.6C - 3 Month Programme starting from 20-Jun-14

Activity ID	Activity Name	OD	RD	Start	Finish	% Comp	Total Float	2014			
								Jun	Jul	Aug	Sep
S6C-1000	Zone C2-2 - CHBI (7m)	45	34	20-Jan-14 A	23-Jul-14	100%	-8	Zone C2-2 - CHBI (7m)			
S6C-1020A	Zone C1-2A - CHBI (18m)	30	30	04-Jul-14	02-Aug-14	0%	42	Zone C1-2A - CHBI (18m)			
S6C-1600	Zone C3-1 - CHBI (16m) Test and Connection Point	60	60	24-Jul-14	21-Sep-14	0%	-8				
<b>Section 8 of the Works - Works in Area 6 (Utilities other than Watermains in Fenwick Pier Street)</b>											
<b>Sewerage Works</b>											
AA1170	Relocation of existing light pole by Others	0	0		20-Jun-14*	0%	787	◆ Relocation of existing light pole by Others			
S8-1040	Zone A3-2C - 9 m pipe	23	35	20-Jun-14	31-Jul-14	0%	71	Zone A3-2C - 9 m pipe			
S8-1050	Zone A3-2D - 8m pipe & Connection with downstream existing manhole	23	35	20-Jun-14	31-Jul-14	0%	71	Zone A3-2D - 8m pipe & Connection with down			
S8-2500	CCTV Survey	1	1	01-Aug-14	01-Aug-14	0%	71	CCTV Survey			
S8-3000	Zone A2-1 - Connection with Upstream Existing Manhole & Abandon Used Pipe	7	7	02-Aug-14	09-Aug-14	0%	71	Zone A2-1 - Connection with Upstream			
<b>Section 9 of the Works - Remaindar of the Works</b>											
<b>Box Culvert Construction</b>											
S9-1030	Construction of Transition Chamber for Existing Box Culvert Diversion	30	30	19-Jul-14	22-Aug-14	0%	-186	Construction of Transition			
S9-1040	Pre-bored H Piles (8 nos) for Box Culvert	40	40	10-Jun-14 A	06-Aug-14	0%	-186	Pre-bored H Piles (8 nos) for Box Culvert			
S9-1040A	Installation of Sheet Pile for Bay7	45	45	23-Aug-14	06-Oct-14	0%	-234				
S9-1040B	Installation of Sheet Pile for Bay 2	45	45	23-Aug-14	06-Oct-14	0%	-234				
<b>Waterworks in Area 9</b>											
<b>Salt Water Mains (S3, S5A &amp; S5B)</b>											
S9-5500A	Zone X1-1 - S3 (5m)	0	0		03-Jul-14	0%	107	◆ Zone X1-1 - S3 (5m)			
S9-5500B	Zone X1-2 - S3 (5m)	0	0		23-Jul-14	0%	167	◆ Zone X1-2 - S3 (5m)			
S9-5500C	Zone X1-3 - S3 (5m)	0	0		23-Jul-14	0%	167	◆ Zone X1-3 - S3 (5m)			
<b>Fresh Water Mains (F3)</b>											
AA1180	Zone X1-1 - F3 (5m)	0	0		03-Jul-14	0%	187	◆ Zone X1-1 - F3 (5m)			
AA1190	Zone X1-2 - F3 (5m)	0	0		23-Jul-14	0%	167	◆ Zone X1-2 - F3 (5m)			
AA1200	Zone X1-3 - F3 (5m)	0	0		23-Jul-14	0%	167	◆ Zone X1-3 - F3 (5m)			
<b>Section 13 of the Works - Works in Area 11 (other than Section 11)</b>											
S13-3000	Completion of Backfilling to +5.0mPD	0	0		20-Jun-14	0%	253	◆ Completion of Backfilling to +5.0mPD			
<b>Section 9A of the Works - Landscape Softworks in Area 9</b>											
S9A-1000	Transplanting at Expo Drive East and Convention Avenue Junction	180	180	20-Jun-14	16-Dec-14	0%	242				

█ Remaining Work     █ Summary Bar  
█ Actual Work  
█ Summary Bar  
█ Critical Remaining Work  
◆ Milestone

Activity ID	Activity Name	Rem Dur	Start	Finish	Late Start	Late Finish	Total Float	2014															
								July				August				September				October			
								23	30	07	14	21	28	04	11	18	25	01	08	15	22	29	06
<b>3MRP - Jul 2014 to Oct 2014</b>																							
<b>01 - CONTRACT DATES</b>																							
<b>01.2 - Possession of Site</b>																							
0120-3300	Possession to Portion X11A	0	02-Sep-14*		02-Sep-14		0																
<b>02 - PRE-CONSTRUCTION WORKS</b>																							
<b>02.2 - Contractor's Submission</b>																							
0220-1580	Noise Enclosure/Barrier - Steel Material No Adverse Comment	0	02-Jun-14 A	30-Jun-14 A	11-Aug-19	11-Aug-19																	
<b>02.3 - Method Statement / Shop Drawings</b>																							
0230-1590	MS Bridge F1A/F2A Int. Noise Semi Enclosure - ER Review / Comment	0	26-May-14 A	11-Jul-14 A	30-Nov-15	30-Nov-15																	
0230-1600	MS Bridge F1A/F2A Int. Noise Semi Enclosure - Resubmission	0	01-Jun-14 A	11-Jul-14 A	30-Nov-15	30-Nov-15																	
0230-1610	MS Bridge F1A/F2A Int. Noise Semi Enclosure - No Adverse Comment	12	12-Jul-14 A	31-Jul-14	30-Nov-15	11-Dec-15	498																
0230-1420	MS Permanent Noise Barrier Cantilever - Submission	6	10-Feb-14 A	25-Jul-14	26-Aug-14	31-Aug-14	37																
0230-1430	MS Permanent Noise Barrier Cantilever - ER Review & Comment	12	26-May-14 A	06-Aug-14	01-Sep-14	12-Sep-14	37																
0230-1440	MS Permanent Noise Barrier Cantilever - Resubmission	12	10-Jun-14 A	18-Aug-14	13-Sep-14	24-Sep-14	37																
0230-1450	MS Permanent Noise Barrier Cantilever - No Adverse Comment	15	19-Aug-14	02-Sep-14	25-Sep-14	09-Oct-14	37																
0230-1820	MS Bridge Demolition Pier E3 to P20 - Submission	18	20-Jul-14 A	06-Aug-14	28-Jul-14	14-Aug-14	8																
0230-1830	MS Bridge Demolition Pier E3 to P20 - ER Review & Comment	12	07-Aug-14	18-Aug-14	15-Aug-14	26-Aug-14	8																
0230-1840	MS Bridge Demolition Pier E3 to P20 - Resubmission	12	13-Aug-14	24-Aug-14	21-Aug-14	01-Sep-14	8																
0230-1850	MS Bridge Demolition Pier E3 to P20 - No Adverse Comment	18	25-Aug-14	11-Sep-14	02-Sep-14	19-Sep-14	8																
0230-1740	MS Temporary Bridge TB - Submission	28	01-Aug-14*	28-Aug-14	28-Aug-14	24-Sep-14	27																
0230-1750	MS Temporary Bridge TB - ER Review & Comment	18	29-Aug-14	15-Sep-14	25-Sep-14	12-Oct-14	27																
0230-1760	MS Temporary Bridge TB - Resubmission	18	16-Sep-14	03-Oct-14	13-Oct-14	30-Oct-14	27																
0230-1770	MS Temporary Bridge TB - ER Approval	28	04-Oct-14	31-Oct-14	31-Oct-14	27-Nov-14	27																
<b>02.4 - Contractor's Design and Build Items</b>																							
0240-1046	Temp Bridge "TD" - Tower Fabrication Pier F5, F6 and F7	0	01-Jun-14 A	10-Jul-14 A	28-Jul-14	28-Jul-14																	
0240-1047	Temp Bridge "TD" - Beam Fabrication Pier F5 to F8	0	01-Jun-14 A	14-Jul-14 A	19-Jul-14	19-Jul-14																	
0240-1048	Temp Bridge "TD" - Tower Fabrication Pier F11, F12, F13 and F14	0	27-May-14 A	09-Jul-14 A	31-Jul-14	31-Jul-14																	
0240-1049	Temp Bridge "TD" - Beam Fabrication Pier F10 to F15	0	24-May-14 A	14-Jul-14 A	31-Jul-14	31-Jul-14																	
0240-1110	Int. Noise Enclosure Structural Design - ER Review/Resubmission	14	17-Jan-14 A	02-Aug-14	28-Nov-15	11-Dec-15	496																
0240-1111	Int. Noise Enclosure Structural Design - No Adverse Comment	28	03-Aug-14	30-Aug-14	12-Dec-15	08-Jan-16	496																
0240-1113	Int. Noise Enclosure Structural - Shop Drawings Bridge F1A/F2A	0	02-Jan-14 A	11-Jul-14 A	03-Sep-14	03-Sep-14																	
0240-1115	Int. Noise Enclosure - Fabricate Column (32 nos.) Bridge F1A/F2A	0	14-Apr-14 A	08-Jul-14 A	03-Sep-14	03-Sep-14																	
0240-1116	Int. Noise Enclosure - Fabricate Main Beam (32 nos.) Bridge F1A/F2A	0	14-Apr-14 A	10-Jul-14 A	03-Sep-14	03-Sep-14																	
0240-1117	Int. Noise Enclosure - Fabricate Temp. Column Bridge (32 nos.) F1A/F2A	0	14-Apr-14 A	11-Jul-14 A	03-Sep-14	03-Sep-14																	
0240-1118	Int. Noise Enclosure - Fabricate Sec. Beam (240 nos.) Bridge F1A/F2A	0	14-Apr-14 A	09-Jul-14 A	03-Sep-14	03-Sep-14																	
0240-1132	Noise Barrier Structural - Shop Drawings	12	21-Mar-14 A	31-Jul-14	23-Aug-14	03-Sep-14	34																
0240-1136	Noise Barrier Panel - Design ER Review/Resubmission	24	01-Mar-14 A	12-Aug-14	30-Jul-14	22-Aug-14	10																
0240-1137	Noise Barrier Panel - Design No Adverse Comment	28	13-Aug-14	09-Sep-14	23-Aug-14	19-Sep-14	10																
0240-1141	Noise Barrier Panel - Fabricate Type C Column (77 nos.)	36	25-Aug-14	29-Sep-14	04-Sep-14	09-Oct-14	10																
0240-1142	Noise Barrier Panel - Fabricate Type B Column (25 nos.)	24	06-Sep-14	29-Sep-14	10-Oct-14	02-Nov-14	34																
0240-1429	Noise Barrier Panel - Fabricate Beams (203 nos.)	48	06-Sep-14	23-Oct-14	22-Sep-14	08-Nov-14	16																
0240-1143	Noise Barrier Panel - Fabricate Type A Column (38 nos.)	30	18-Sep-14	17-Oct-14	22-Oct-14	20-Nov-14	34																
0240-1050	Temp Bridge "TB" Design - Prep & Submit	22	21-Feb-14 A	10-Aug-14	27-Jul-14	17-Aug-14	7																
0240-1060	Temp Bridge "TB" Design - ER review and comment	24	13-Aug-14 A	03-Sep-14	18-Aug-14	10-Sep-14	7																

- Remaining Level of Effort
- Actual Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

**Contract HY/2009/19**

**Three Month Rolling Programme (20 Jul to 19 Oct 2014)**

3MRP

3MRP - Jul 2014 to Oct 2014

Page 1 of 10





Activity ID	Activity Name	Rem Dur	Start	Finish	Late Start	Late Finish	Total Float	2014																		
								July					August				September				October					
								23	30	07	14	21	28	04	11	18	25	01	08	15	22	29	06	13		
0513-1310	APS Base Slab - Prepare CJ and form keys into D-wall	12	09-Aug-14	22-Aug-14	08-Aug-14	22-Aug-14	0																			
0513-1312	APS Base Slab - Waterproofing Membrane	12	09-Aug-14	22-Aug-14	08-Aug-14	22-Aug-14	0																			
0513-1314	APS Bay 17 Base Slab - Rebar Fixing	12	08-Sep-14	22-Sep-14	19-Sep-14	04-Oct-14	9																			
0513-1316	APS Bay 17 Base Slab - Formworks/Prepare CJ	12	19-Sep-14	04-Oct-14	30-Sep-14	15-Oct-14	9																			
0513-1318	APS Bay 17 Base Slab - Concreting	2	06-Oct-14	07-Oct-14	16-Oct-14	17-Oct-14	9																			
0513-1320	APS Bay 17 Wall/Col - Rebar Fixing	10	08-Oct-14	18-Oct-14	18-Oct-14	29-Oct-14	9																			
0513-1322	APS Bay 17 Wall/Col - Formworks	10	08-Oct-14	18-Oct-14	18-Oct-14	29-Oct-14	9																			
0513-1326	APS Bay 18 Base Slab - Rebar Fixing	12	08-Aug-14	21-Aug-14	08-Aug-14	21-Aug-14	0																			
0513-1328	APS Bay 18 Base Slab - Formworks/Prepare CJ	12	19-Aug-14	01-Sep-14	29-Aug-14	12-Sep-14	9																			
0513-1330	APS Bay 18 Base Slab - Concreting	2	02-Sep-14	03-Sep-14	13-Sep-14	15-Sep-14	9																			
0513-1332	APS Bay 18 Wall/Col - Rebar Fixing	10	04-Sep-14	16-Sep-14	18-Oct-14	29-Oct-14	35																			
0513-1334	APS Bay 18 Wall/Col - Formworks	10	04-Sep-14	16-Sep-14	18-Oct-14	29-Oct-14	35																			
0513-1336	APS Bay 18 Wall/Col - Concreting	2	17-Sep-14	18-Sep-14	30-Oct-14	31-Oct-14	35																			
0513-1338	APS Bay 19 Base Slab - Rebar Fixing	12	04-Sep-14	18-Sep-14	16-Sep-14	29-Sep-14	9																			
0513-1340	APS Bay 19 Base Slab - Formworks/Prepare CJ	12	16-Sep-14	29-Sep-14	30-Sep-14	15-Oct-14	12																			
0513-1342	APS Bay 19 Base Slab - Concreting	2	30-Sep-14	03-Oct-14	16-Oct-14	17-Oct-14	12																			
0513-1344	APS Bay 19 Wall/Col - Rebar Fixing	10	04-Oct-14	15-Oct-14	18-Oct-14	29-Oct-14	12																			
0513-1346	APS Bay 19 Wall/Col - Formworks	10	04-Oct-14	15-Oct-14	18-Oct-14	29-Oct-14	12																			
0513-1348	APS Bay 19 Wall/Col - Concreting	2	16-Oct-14	17-Oct-14	30-Oct-14	31-Oct-14	12																			
0513-1350	APS Bay 20 Base Slab - Rebar Fixing	12	01-Aug-14	14-Aug-14	01-Aug-14	14-Aug-14	0																			
0513-1352	APS Bay 20 Base Slab - Formworks/Prepare CJ	12	12-Aug-14	25-Aug-14	26-Aug-14	08-Sep-14	12																			
0513-1354	APS Bay 20 Base Slab - Concreting	2	26-Aug-14	27-Aug-14	10-Sep-14	11-Sep-14	12																			
0513-1356	APS Bay 20 Wall/Col - Rebar Fixing	10	28-Aug-14	08-Sep-14	18-Oct-14	29-Oct-14	41																			
0513-1358	APS Bay 20 Wall/Col - Formworks	10	28-Aug-14	08-Sep-14	18-Oct-14	29-Oct-14	41																			
0513-1360	APS Bay 20 Wall/Col - Concreting	2	10-Sep-14	11-Sep-14	30-Oct-14	31-Oct-14	41																			
0513-1362	APS Bay 21 Base Slab - Rebar Fixing	12	28-Aug-14	11-Sep-14	12-Sep-14	25-Sep-14	12																			
0513-1364	APS Bay 21 Base Slab - Formworks/Prepare CJ	12	08-Sep-14	22-Sep-14	30-Sep-14	15-Oct-14	18																			
0513-1366	APS Bay 21 Base Slab - Concreting	2	23-Sep-14	24-Sep-14	16-Oct-14	17-Oct-14	18																			
0513-1368	APS Bay 21 Wall/Col - Rebar Fixing	10	25-Sep-14	08-Oct-14	18-Oct-14	29-Oct-14	18																			
0513-1370	APS Bay 21 Wall/Col - Formworks	10	25-Sep-14	08-Oct-14	18-Oct-14	29-Oct-14	18																			
0513-1372	APS Bay 21 Wall/Col - Concreting	2	09-Oct-14	10-Oct-14	30-Oct-14	31-Oct-14	18																			
0513-1374	APS Bay 22 Base Slab - Rebar Fixing	12	05-Aug-14	18-Aug-14	05-Aug-14	18-Aug-14	0																			
0513-1376	APS Bay 22 Base Slab - Formworks/Prepare CJ	12	15-Aug-14	28-Aug-14	30-Sep-14	15-Oct-14	38																			
0513-1378	APS Bay 22 Base Slab - Concreting	2	29-Aug-14	30-Aug-14	16-Oct-14	17-Oct-14	38																			
0513-1380	APS Bay 22 Wall/Col - Rebar Fixing	10	01-Sep-14	12-Sep-14	18-Oct-14	29-Oct-14	38																			
0513-1382	APS Bay 22 Wall/Col - Formworks	10	01-Sep-14	12-Sep-14	18-Oct-14	29-Oct-14	38																			
0513-1384	APS Bay 22 Wall/Col - Concreting	2	13-Sep-14	15-Sep-14	30-Oct-14	31-Oct-14	38																			
0513-1386	APS Bay 23 Base Slab - Rebar Fixing	12	19-Sep-14	04-Oct-14	19-Sep-14	04-Oct-14	0																			
0513-1388	APS Bay 23 Base Slab - Formworks/Prepare CJ	12	30-Sep-14	15-Oct-14	30-Sep-14	15-Oct-14	0																			
0513-1390	APS Bay 23 Base Slab - Concreting	2	16-Oct-14	17-Oct-14	16-Oct-14	17-Oct-14	0																			
0513-1392	APS Bay 23 Wall/Col - Rebar Fixing	10	18-Oct-14	29-Oct-14	18-Oct-14	29-Oct-14	0																			
0513-1394	APS Bay 23 Wall/Col - Formworks	10	18-Oct-14	29-Oct-14	18-Oct-14	29-Oct-14	0																			
0513-1398	APS Bay 24 Base Slab - Rebar Fixing	12	12-Aug-14	25-Aug-14	12-Aug-14	25-Aug-14	0																			
0513-1400	APS Bay 24 Base Slab - Formworks/Prepare CJ	12	22-Aug-14	04-Sep-14	30-Sep-14	15-Oct-14	32																			

- █ Remaining Level of Effort
- █ Actual Level of Effort
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

**Contract HY/2009/19**

**Three Month Rolling Programme (20 Jul to 19 Oct 2014)**

3MRP

3MRP - Jul 2014 to Oct 2014









Activity ID	Activity Name	Rem Dur	Start	Finish	Late Start	Late Finish	Total Float	2014															
								July				August				September				October			
								23	30	07	14	21	28	04	11	18	25	01	08	15	22	29	06
1013-1865	Bridge D3 Parapet North D3-N10 to D3-N05 - Concreting (F1)	21	20-Jul-14	09-Aug-14	22-Jul-14	11-Aug-14	2	Bridge D3 Parapet North D3-N10 to D3-N05 - Concreting (F1)															
1013-1138.1	Bridge D3 Par. North D3-N11 to D3-N12 - Scaffolding	12	01-Aug-14	14-Aug-14	08-Aug-14	21-Aug-14	6	Bridge D3 Par. North D3-N11 to D3-N12 - Scaffolding															
1013-1138.2	Bridge D3 Par. North D3-N11 to D3-N12 - Rebar Fixing	9	08-Aug-14	18-Aug-14	15-Aug-14	25-Aug-14	6	Bridge D3 Par. North D3-N11 to D3-N12 - Rebar Fixing															
1013-1138.3	Bridge D3 Par. North D3-N11 to D3-N12 - Formworks + Concreting	6	15-Aug-14	21-Aug-14	22-Aug-14	28-Aug-14	6	Bridge D3 Par. North D3-N11 to D3-N12 - Formworks + Concreting															
1013-1132	Bridge D3 Parapet South D3-S13 to D3-S08 - Concreting (F2)	0	08-Jun-14 A	04-Jul-14 A	11-Aug-19	11-Aug-19		Bridge D3 Parapet South D3-S13 to D3-S08 - Concreting (F2)															
1013-1993	Bridge D3 Parapet South D3-S04 to D3-S01 - Rebar Fixing (F5)	0	13-Jun-14 A	26-Jun-14 A	11-Aug-19	11-Aug-19		Bridge D3 Parapet South D3-S04 to D3-S01 - Rebar Fixing (F5)															
1013-1963	Bridge D3 Parapet South D3-S04 to D3-S01 - Concreting (F4)	0	19-Jun-14 A	12-Jul-14 A	27-Jul-14	27-Jul-14		Bridge D3 Parapet South D3-S04 to D3-S01 - Concreting (F4)															
1013-1973	Bridge D3 Parapet South D3-S05 to D3-S07 - Concreting (F4)	0	08-Jul-14 A	16-Jul-14 A	11-Aug-19	11-Aug-19		Bridge D3 Parapet South D3-S05 to D3-S07 - Concreting (F4)															
1013-2153	Bridge D3 Parapet South D3-S05 to D3-S07 - Prefab Rebar Install	0	05-Jul-14 A	10-Jul-14 A	11-Aug-19	11-Aug-19		Bridge D3 Parapet South D3-S05 to D3-S07 - Prefab Rebar Install															
1013-1869	Bridge D3 Road Lighting	9	19-Aug-14	28-Aug-14	29-Aug-14	08-Sep-14	9	Bridge D3 Road Lighting															
1013-1870	Bridge D3 Parapet Railing	9	19-Aug-14	28-Aug-14	29-Aug-14	08-Sep-14	9	Bridge D3 Parapet Railing															
1013-1144.1	Bridge D3 - Seal Deck Opening + Waterproofing Preparation	9	13-Aug-14	21-Aug-14	20-Aug-14	28-Aug-14	7	Bridge D3 - Seal Deck Opening + Waterproofing Preparation															
1013-1886	Bridge D3 MJ at Abutment D12	6	19-Aug-14	24-Aug-14	26-Aug-14	31-Aug-14	7	Bridge D3 MJ at Abutment D12															
1013-1144	Bridge D3 Deck Waterproofing	3	22-Aug-14	24-Aug-14	29-Aug-14	31-Aug-14	7	Bridge D3 Deck Waterproofing															
1013-1145	Bridge D3 Deck Paving & Marking	9	25-Aug-14	02-Sep-14	01-Sep-14	09-Sep-14	7	Bridge D3 Deck Paving & Marking															
<b>Bridge D2</b>																							
1013-1565	Bridge D2 Parapet North Prefab Rebar Install D2-N01 to D2-N14	2	19-Jun-14 A	21-Jul-14	15-Aug-14	16-Aug-14	26	Bridge D2 Parapet North Prefab Rebar Install D2-N01 to D2-N14															
1013-1913	Bridge D2 Parapet North D2-N08 to D2-N11 - Concreting (F3)	0	08-Jul-14 A	19-Jul-14 A	11-Aug-19	11-Aug-19		Bridge D2 Parapet North D2-N08 to D2-N11 - Concreting (F3)															
1013-1706	Bridge D2 Parapet North D2-N12 to D2-N14 - Concreting (F5)	9	31-Jul-14	08-Aug-14	31-Jul-14	08-Aug-14	0	Bridge D2 Parapet North D2-N12 to D2-N14 - Concreting (F5)															
1013-1566	Bridge D2 Parapet North D2-N01 to D2-N04 - Concreting (F5)	12	17-Aug-14	28-Aug-14	17-Aug-14	28-Aug-14	0	Bridge D2 Parapet North D2-N01 to D2-N04 - Concreting (F5)															
1013-1705	Bridge D2 Parapet North D2-N05 to D2-N07 - Concreting (F5)	10	17-Aug-14	26-Aug-14	19-Aug-14	28-Aug-14	2	Bridge D2 Parapet North D2-N05 to D2-N07 - Concreting (F5)															
1013-1133	Bridge D2 Parapet South D2-S12 to D2-S13- Rebar Fixing (F5)	0	03-Jul-14 A	18-Jul-14 A	03-Aug-14	03-Aug-14		Bridge D2 Parapet South D2-S12 to D2-S13- Rebar Fixing (F5)															
1013-1134	Bridge D2 Parapet South Prefab Rebar Install D2-S11 to D2-S03	6	02-Jul-14 A	25-Jul-14	11-Aug-14	16-Aug-14	22	Bridge D2 Parapet South Prefab Rebar Install D2-S11 to D2-S03															
1013-1863	Bridge D2 Parapet South D2-S13 to D2-S10 - Concreting (F4)	8	13-Jul-14 A	27-Jul-14	27-Jul-14	03-Aug-14	7	Bridge D2 Parapet South D2-S13 to D2-S10 - Concreting (F4)															
1013-1943	Bridge D2 Parapet South D2-S03 to D2-S09 - Concreting (F2)	24	17-Jul-14 A	12-Aug-14	05-Aug-14	28-Aug-14	16	Bridge D2 Parapet South D2-S03 to D2-S09 - Concreting (F2)															
1013-2143	Bridge D2 Parapet South Prefab Rebar Install D2-S01 to D2-S02	6	13-Aug-14	18-Aug-14	16-Aug-14	21-Aug-14	3	Bridge D2 Parapet South Prefab Rebar Install D2-S01 to D2-S02															
1013-1953	Bridge D2 Parapet South D2-S01 - D2-S02 - Concreting (F2)	7	21-Aug-14	27-Aug-14	22-Aug-14	28-Aug-14	1	Bridge D2 Parapet South D2-S01 - D2-S02 - Concreting (F2)															
1013-1880	Bridge D2 Road Lighting	10	21-Aug-14	01-Sep-14	28-Aug-14	08-Sep-14	6	Bridge D2 Road Lighting															
1013-1881	Bridge D2 Parapet Railing	10	21-Aug-14	01-Sep-14	28-Aug-14	08-Sep-14	6	Bridge D2 Parapet Railing															
1013-1860.1	Bridge D2 - Seal Deck Opening / Waterproofing Preparation	9	20-Aug-14	28-Aug-14	20-Aug-14	28-Aug-14	0	Bridge D2 - Seal Deck Opening / Waterproofing Preparation															
1013-1891	Bridge D2 MJ at Pier D8	6	26-Aug-14	31-Aug-14	26-Aug-14	31-Aug-14	0	Bridge D2 MJ at Pier D8															
1013-1860	Bridge D2 Deck Waterproofing	3	29-Aug-14	31-Aug-14	29-Aug-14	31-Aug-14	0	Bridge D2 Deck Waterproofing															
1013-1561	Bridge D2 Deck Paving & Marking	9	01-Sep-14	09-Sep-14	01-Sep-14	09-Sep-14	0	Bridge D2 Deck Paving & Marking															
<b>Bridge D1</b>																							
1013-1650	Bridge D1 Stitching at midspan between D01-D02 + Tendon Stressing	0	16-Jun-14 A	23-Jun-14 A	25-Jul-14	25-Jul-14		Bridge D1 Stitching at midspan between D01-D02 + Tendon Stressing															
1013-1660	Bridge D1 Permanent Stressing	10	13-Jul-14 A	29-Jul-14	25-Jul-14	03-Aug-14	5	Bridge D1 Permanent Stressing															
1013-1651	BackLaunch LG to Pier D03 to D05	0	13-Jul-14 A	15-Jul-14 A	11-Aug-19	11-Aug-19		BackLaunch LG to Pier D03 to D05															
1013-1652	Dismantle LG - E&M and Trusses	12	16-Jul-14 A	31-Jul-14	20-Jul-14	31-Jul-14	0	Dismantle LG - E&M and Trusses															
1013-1653	Dismantle LG - Complete	6	01-Aug-14	06-Aug-14	04-Aug-14	09-Aug-14	3	Dismantle LG - Complete															
1013-1704	Bridge D1 Parapet North D1-N01 to D1-N10 Prefab Rebar Install	12	01-Aug-14	12-Aug-14	01-Aug-14	12-Aug-14	0	Bridge D1 Parapet North D1-N01 to D1-N10 Prefab Rebar Install															
1013-1933	Bridge D1 Parapet North D1-N01 to D1-N08 - Concreting (F3)	25	04-Aug-14	28-Aug-14	04-Aug-14	28-Aug-14	0	Bridge D1 Parapet North D1-N01 to D1-N08 - Concreting (F3)															
1013-1708	Bridge D1 Parapet North D1-N09 to D1-N10 - Concreting (F5)	8	09-Aug-14	16-Aug-14	09-Aug-14	16-Aug-14	0	Bridge D1 Parapet North D1-N09 to D1-N10 - Concreting (F5)															
1013-1701	Bridge D1 Parapet South D1-S01 to D1-S10 - Prefab Rebar Install	12	01-Aug-14	12-Aug-14	04-Aug-14	15-Aug-14	3	Bridge D1 Parapet South D1-S01 to D1-S10 - Prefab Rebar Install															
1013-1983	Bridge D1 Parapet South D1-S01 to D1-S06 - Concreting (F4)	18	04-Aug-14	21-Aug-14	11-Aug-14	28-Aug-14	7	Bridge D1 Parapet South D1-S01 to D1-S06 - Concreting (F4)															

- Remaining Level of Effort
- Actual Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

**Contract HY/2009/19**

**Three Month Rolling Programme (20 Jul to 19 Oct 2014)**

3MRP

3MRP - Jul 2014 to Oct 2014

Page 7 of 10

Activity ID	Activity Name	Rem Dur	Start	Finish	Late Start	Late Finish	Total Float	2014																		
								July					August				September				October					
								23	30	07	14	21	28	04	11	18	25	01	08	15	22	29	06	13		
1013-1703	Bridge D1 Parapet South D1-S07 to D1-S10 - Concreting (F2)	14	07-Aug-14	20-Aug-14	08-Aug-14	21-Aug-14	1																			
1013-1882	Bridge D1 Road Lighting	10	22-Aug-14	02-Sep-14	01-Sep-14	12-Sep-14	8																			
1013-1883	Bridge D1 Parapet Railing	10	22-Aug-14	02-Sep-14	01-Sep-14	12-Sep-14	8																			
1013-1715.1	Bridge D1 - Seal Deck Opening / Waterproofing Preparation	9	20-Aug-14	28-Aug-14	20-Aug-14	28-Aug-14	0																			
1013-1892	Bridge D1 MJ at Pier D1 and D4	7	23-Aug-14	30-Aug-14	23-Aug-14	30-Aug-14	0																			
1013-1715	Bridge D1 Deck Waterproofing	3	29-Aug-14	31-Aug-14	29-Aug-14	31-Aug-14	0																			
1013-1716	Bridge D1 Deck Paving & Marking	9	01-Sep-14	09-Sep-14	01-Sep-14	09-Sep-14	0																			
<b>Bridge F1A</b>																										
1013-1256	Bridge F1A Parapet North F1-N09 to F1-N03 - Concreting (F1)	0	11-Jun-14 A	30-Jun-14 A	22-Jul-14	22-Jul-14																				
1013-1903	Bridge F1A Parapet North F1-N01 to F1-N02 - Concreting (F3)	0	04-Jul-14 A	08-Jul-14 A	27-Jul-14	27-Jul-14																				
1013-1258	Bridge F1A South Wing Extension Formwork + Casting	12	15-May-14 A	02-Aug-14	02-Aug-14	15-Aug-14	11																			
1013-1866	Bridge F1A Int. Double Noise Encl. Install Columns (North)	12	21-Jul-14	02-Aug-14	06-Aug-14	19-Aug-14	14																			
1013-1867	Bridge F1A Int. Double Noise Encl. Install Columns (South)	12	31-Jul-14	13-Aug-14	13-Aug-14	26-Aug-14	11																			
1013-1868	Bridge F1A Int. Double Noise Encl. Install Beams	12	07-Aug-14	20-Aug-14	20-Aug-14	02-Sep-14	11																			
1013-1872	Bridge F1A Road Lighting	9	11-Aug-14	20-Aug-14	29-Aug-14	08-Sep-14	16																			
1013-1873	Bridge F1A Parapet Railing	9	11-Aug-14	20-Aug-14	29-Aug-14	08-Sep-14	16																			
1013-1265.1	Bridge F1A - Seal Deck Opening + Waterproofing Preparation	9	10-Aug-14	18-Aug-14	23-Aug-14	31-Aug-14	13																			
1013-1887	Bridge F1A MJ at Pier F3A	6	12-Aug-14	18-Aug-14	25-Aug-14	30-Aug-14	11																			
1013-1265	Bridge F1A Deck Waterproofing	3	19-Aug-14	21-Aug-14	01-Sep-14	03-Sep-14	13																			
1013-1266	Bridge F1A Deck Paving & Marking	6	22-Aug-14	27-Aug-14	04-Sep-14	09-Sep-14	13																			
<b>Bridge F2A</b>																										
1013-1367	Bridge F2A South Wing Extension Formwork + Casting	6	20-May-14 A	26-Jul-14	04-Aug-14	09-Aug-14	12																			
1013-1376	Bridge F2A Int. Double Noise Encl. Install Columns (North)	7	12-Jul-14 A	28-Jul-14	04-Aug-14	11-Aug-14	12																			
1013-1377	Bridge F2A Int. Double Noise Encl. Install Columns (South)	12	14-Jul-14 A	02-Aug-14	04-Aug-14	16-Aug-14	12																			
1013-1378	Bridge F2A Int. Double Noise Encl. Install Beams	11	29-Jul-14	09-Aug-14	12-Aug-14	23-Aug-14	12																			
1013-1874	Bridge F2A Road Lighting	9	31-Jul-14	09-Aug-14	29-Aug-14	08-Sep-14	25																			
1013-1875	Bridge F2A Parapet Railing	9	31-Jul-14	09-Aug-14	29-Aug-14	08-Sep-14	25																			
1013-1888	Bridge F2A MJ at Pier F5	6	09-Aug-14	15-Aug-14	23-Aug-14	29-Aug-14	12																			
1013-1374.1	Bridge F2A - Seal Deck Opening + Waterproofing Preparation	6	10-Aug-14	15-Aug-14	24-Aug-14	29-Aug-14	14																			
1013-1374	Bridge F2A Deck Waterproofing	3	16-Aug-14	18-Aug-14	30-Aug-14	01-Sep-14	14																			
1013-1375	Bridge F2A Deck Paving & Marking	6	19-Aug-14	25-Aug-14	02-Sep-14	08-Sep-14	12																			
<b>Bridge F3A</b>																										
1013-1889	Bridge F3A MJ at Pier F8	6	15-Aug-14	21-Aug-14	23-Aug-14	29-Aug-14	7																			
1013-1428.1	Bridge F3A - Seal Deck Opening + Waterproofing Preparation	6	16-Aug-14	21-Aug-14	24-Aug-14	29-Aug-14	8																			
1013-1428	Bridge F3A Deck Waterproofing	3	22-Aug-14	24-Aug-14	30-Aug-14	01-Sep-14	8																			
1013-1430	Bridge F3A Deck Paving & Marking	6	25-Aug-14	30-Aug-14	02-Sep-14	08-Sep-14	7																			
<b>Bridge F5/F4</b>																										
1013-1436	Bridge F4/F5 - Pier F8 to F10 - Top Slab Formworks	6	11-Jun-14 A	25-Jul-14	26-Jul-14	31-Jul-14	6																			
1013-1439	Bridge F4/F5 - Pier F8 to F10 - Top Slab Rebar Fixing	12	19-Jul-14 A	31-Jul-14	15-Aug-14	26-Aug-14	26																			
1013-1441	Bridge F4/F5 - Pier F8 to F10 - Top Slab Concreting	6	29-Jul-14	03-Aug-14	24-Aug-14	29-Aug-14	26																			
1013-2103	Bridge F4/F5 - Pier F8 to F10 - Longitudinal Stitch/ Tie-in	6	04-Aug-14	09-Aug-14	30-Aug-14	04-Sep-14	26																			
1013-1446	Bridge F4 - Pier F10 to F15 Diaphragm	0	20-Jun-14 A	15-Jul-14 A	15-Aug-14	15-Aug-14																				
1013-2160	Bridge F4 - Pier F10 to F11 - Top Slab Formworks	9	26-Jul-14	05-Aug-14	01-Aug-14	11-Aug-14	5																			
1013-2162	Bridge F4 - Pier F11 to F12 - Top Slab Formworks	9	30-Jul-14	08-Aug-14	05-Aug-14	14-Aug-14	5																			

- █ Remaining Level of Effort
- █ Actual Level of Effort
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

**Contract HY/2009/19**

**Three Month Rolling Programme (20 Jul to 19 Oct 2014)**

3MRP

3MRP - Jul 2014 to Oct 2014





Activity ID	Activity Name	Rem Dur	Start	Finish	Late Start	Late Finish	Total Float	2014																	
								July					August					September				October			
								23	30	07	14	21	28	04	11	18	25	01	08	15	22	29	06	13	
1053-1013.2	"TD" - Pier F9 to F10 Rebar Fixing + Concreting	0	30-Jun-14 A	17-Jul-14 A	11-Aug-19	11-Aug-19																			
1053-1014	"TD" - Pier F8 to F10 Parapet	12	21-Jul-14	02-Aug-14	21-Aug-14	03-Sep-14	27																		
1053-1021	"TD" - Pier F11, F12, F13 and F14 Tower Erection	0	27-May-14 A	09-Jul-14 A	31-Jul-14	31-Jul-14																			
1053-1061	"TD" - Pier F10 to F14 Beam Erection	0	23-Jun-14 A	14-Jul-14 A	31-Jul-14	31-Jul-14																			
1053-1062	"TD" - Pier F10 to F14 Bond Deck Erection	1	05-Jul-14 A	21-Jul-14	31-Jul-14	31-Jul-14	9																		
1053-1063	"TD" - Pier F10 to F14 Rebar Fixing	12	15-Jul-14 A	04-Aug-14	01-Aug-14	14-Aug-14	9																		
1053-1064	"TD" - Pier F10 to F14 Concrete Deck	12	28-Jul-14	11-Aug-14	08-Aug-14	21-Aug-14	9																		
1053-1065	"TD" - Pier F10 to F14 Parapet	12	04-Aug-14	18-Aug-14	29-Aug-14	12-Sep-14	21																		
1053-1150	"TD" - F6-F5 Tower + Beam Erection	7	01-Aug-14	07-Aug-14	09-Aug-14	15-Aug-14	8																		
1053-1152	"TD" - F6-F5 Bond Deck Erection	5	08-Aug-14	12-Aug-14	16-Aug-14	20-Aug-14	8																		
1053-1154	"TD" - F6-F5 Rebar Fixing + Concreting	9	13-Aug-14	21-Aug-14	21-Aug-14	29-Aug-14	8																		
1053-1140	"TD" - F6-F7 Tower + Beam Erection	7	25-Jul-14	31-Jul-14	02-Aug-14	08-Aug-14	8																		
1053-1142	"TD" - F6-F7 Bond Deck Erection	5	03-Aug-14	07-Aug-14	11-Aug-14	15-Aug-14	8																		
1053-1144	"TD" - F6-F7 Rebar Fixing + Concreting	9	08-Aug-14	16-Aug-14	16-Aug-14	24-Aug-14	8																		
1053-1130	"TD" - F7-F8 Tower + Beam Erection	5	17-Jul-14 A	24-Jul-14	28-Jul-14	01-Aug-14	8																		
1053-1132	"TD" - F7-F8 Bond Deck Erection	5	25-Jul-14	29-Jul-14	02-Aug-14	06-Aug-14	8																		
1053-1134	"TD" - F7-F8 Rebar Fixing + Concreting	9	30-Jul-14	07-Aug-14	07-Aug-14	15-Aug-14	8																		
1053-1160	"TD" - F5 to F8 Parapet	9	16-Aug-14	24-Aug-14	24-Aug-14	01-Sep-14	8																		
1053-1010.93	"TD" - Deck Paving & Marking	6	25-Aug-14	30-Aug-14	04-Sep-14	09-Sep-14	10																		
<b>10.6 - Tunnel Approach Ramp</b>																									
<b>10.6.1 - Approach Ramp (Excluding Portion IIB)</b>																									
<b>Bored Piles</b>																									
1061-1670	Pre-drilling Approach Ramp Bored Piles Except Oil St and Portion IIB	18	19-Jul-13 A	09-Aug-14*	10-Oct-14	30-Oct-14	67																		
1061-1920	Bored Pile Ramp - BM30	0	10-Jun-14 A	27-Jun-14 A	19-Aug-14	19-Aug-14																			
1061-1930	Bored Pile Ramp - BM10	0	16-Jun-14 A	28-Jun-14 A	11-Aug-19	11-Aug-19																			
1061-1950	Bored Pile Ramp - BM22	0	20-Jun-14 A	03-Jul-14 A	11-Aug-19	11-Aug-19																			
1061-1960	Bored Pile Ramp - BM33	0	04-Jul-14 A	15-Jul-14 A	11-Aug-19	11-Aug-19																			
1061-1990	Bored Pile Ramp - BS17	0	28-Jun-14 A	14-Jul-14 A	11-Aug-19	11-Aug-19																			
1061-2050	Bored Pile Ramp - BM09	10	15-Jul-14 A	31-Jul-14	19-Aug-14	30-Aug-14	26																		
1061-1970	Bored Pile Ramp - BM31	15	21-Jul-14	06-Aug-14	01-Sep-14	18-Sep-14	36																		
1061-2060	Bored Pile Ramp - BN32	15	01-Aug-14	19-Aug-14	30-Aug-14	18-Sep-14	26																		
1061-1980	Bored Pile Ramp - BN25	15	07-Aug-14	23-Aug-14	19-Sep-14	08-Oct-14	36																		
1061-2070	Bored Pile Ramp - BN34	15	19-Aug-14	05-Sep-14	19-Sep-14	08-Oct-14	26																		
1061-2000	Bored Pile Ramp - BM12	15	25-Aug-14	11-Sep-14	09-Oct-14	25-Oct-14	36																		
1061-2080	Bored Pile Ramp - BN33	15	05-Sep-14	24-Sep-14	09-Oct-14	25-Oct-14	26																		
1061-2010	Bored Pile Ramp - BM11	15	12-Sep-14	29-Sep-14	27-Oct-14	12-Nov-14	36																		
1061-2090	Bored Pile Ramp - BN35	15	24-Sep-14	14-Oct-14	27-Oct-14	12-Nov-14	26																		
1061-2020	Bored Pile Ramp - BM16	15	30-Sep-14	18-Oct-14	13-Nov-14	29-Nov-14	36																		
1061-2100	Bored Pile Ramp - BM08	15	14-Oct-14	31-Oct-14*	13-Nov-14	29-Nov-14	26																		
<b>10.7 - Section X - Miscellaneous Works</b>																									
<b>10.7.1 - TTM Stages</b>																									
1071-1005	TTM Stage 2A - TMLG / TD / Police Consultation and Endorsement	9	17-Jul-14 A	30-Jul-14	22-Jul-14	31-Jul-14	1																		
1071-1010	TTM Stage 2A - TTM Enabling Works + Trial Run	3	10-Sep-14	12-Sep-14	10-Sep-14	12-Sep-14	0																		
1071-1020	TTM Stage 2A - Hing Fat Slip Road Divert to New E/B Bridge through 'TA'	0		12-Sep-14*		12-Sep-14	0																		

- █ Remaining Level of Effort
- █ Actual Level of Effort
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

**Contract HY/2009/19**

**Three Month Rolling Programme (20 Jul to 19 Oct 2014)**

3MRP

3MRP - Jul 2014 to Oct 2014



Activity Name	Duration (cal days)	Start	Finish	Total Float	2011		2012		2013		2014		2015		2016	
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>HY/2009/15 - Works Programme Rev. K (DD:20-Feb-14) 1st Submission</b>																
<b>Works in East Ventilation Adit - Based on Alternative Method</b>																
EAST VENTILATION ADIT - SUMMARY	744	08-Apr-13 A	20-Jun-14	184												
<b>Works in T81 Area (Portion 13A, 13B) &amp; CCT at Portion 1,2,4,6,22</b>																
<b>T81 - Temporary Reclamation</b>																
T81 - TEMPORARY RECLAMATION SUMMARY	1254	07-Jan-11 A	13-Aug-11 A													
<b>T81 - Diaphragm Wall</b>																
T81 DIAPHRAGM WALL & PUMP TEST SUMMARY	2154	19-Mar-11 A	30-Dec-11 A													
<b>T81 - ELS Works</b>																
T81 ELS SUMMARY	1974	09-Jan-12 A	16-Apr-12 A													
<b>T81 - CCT RC Structure</b>																
T81 CCT - SUMMARY	1004	12-Jan-12 A	19-Jun-12 A													
<b>EV Adit at Portion 1,2,6,22</b>																
EV ADIT PORTION 1 & 2	276	12-Jun-12 A	17-Jul-12 A													
<b>T81 - Removal of Temp. Reclamation</b>																
T81 - REMOVAL OF TEMP. RECLAMATION SUMMARY	1339	04-Jun-12 A	15-Oct-12 A													
REMOVAL OF TEMP. RECLAMATION T81 (MAX=3110)	614	25-Jan-11 A	20-Sep-12 A													
DURATION OF TEMP. RECLAMATION T81E (EXCLUDING T81W MAX=900)	5578	13-Mar-11 A	20-Sep-12 A													
<b>Works in T82 Area (Portion 13A, 13B)</b>																
<b>T82 - Temporary Reclamation</b>																
T82 - TEMPORARY RECLAMATION SUMMARY	4304	16-Apr-12 A	25-Jun-13 A													
<b>T82 - Diaphragm Wall</b>																
T82 - DIAPHRAGM WALL SUMMARY	2818	21-Feb-12 A	23-Aug-13 A													
<b>T82 - ELS Works</b>																
T82 ELS SUMMARY	876	17-Sep-13 A	13-Dec-13 A													
<b>T82 - CCT RC Structure</b>																
T82 - CCT SUMMARY	1234	23-Nov-13 A	25-Mar-14	-594												
<b>T82 - Removal of Temp. Reclamation</b>																
T82 REMOVAL OF TEMP. RECLAMATION SUMMARY	828	11-Mar-14	31-Aug-14	-1204												
REMOVAL OF TEMP. RECLAMATION T82 (MAX=3110)	12324	15-Jan-11 A	31-Aug-14	-1220												
DURATION OF TEMP. RECLAMATION T21 (MAX=900)	12234	25-Jan-11 A	31-Aug-14	-1220												
<b>Works in T81/T82 - Cable Trough/Maintenance Walkway</b>																
T82 CABLE TROUGH SUMMARY	2184	06-Jun-14 A	11-Aug-14	-584												
<b>Works in T84/ME4 Area (Portion 14A, 14B, 15, 23)</b>																
<b>T84 + ME4 (T84+ &amp; T26) Temporary Reclamation</b>																
T84 - TEMPORARY RECLAMATION SUMMARY	3648	20-Jan-11 A	16-Apr-12 A													
<b>T84ME4 - Diaphragm Wall</b>																
DIAPHRAGM WALL SUMMARY	3104	23-Dec-11 A	27-Oct-12 A													
<b>T84ME4 - ELS Works &amp; Rock Excavation</b>																
T84 - ELS + ROCK EXCAVATION SUMMARY	3786	19-Oct-12 A	22-Oct-13 A													
<b>T84ME4 - Mined Tunnel East Portal Works</b>																
MT EAST PORTAL WORKS SUMMARY	2016	16-Aug-13 A	13-Mar-14	-2050												
<b>T84ME4 - CCT RC Structure</b>																
T84ME4 - CWB CCT SUMMARY	3104	20-May-13 A	06-Apr-14	-2054												
T84ME4 - SCL CCT SUMMARY	1254	20-Dec-13 A	04-May-14	-2054												
<b>T84ME4 - Removal of Temporary Reclamation</b>																
DURATION OF TEMP. RECLAMATION T84 (MAX=1020)	11094	24-Apr-11 A	29-Jun-14	-2184												
REMOVAL OF TEMP. RECLAMATION SUMMARY	648	28-Apr-14	30-Jun-14	-2184												
<b>Re-Provision of Permanent Jetty/Floating Pontoon</b>																
RE-PROVISION OF PERMANENT JETTY	1904	20-Feb-14	23-Aug-14	414												
<b>CHT Protection Works at Location A,B,C</b>																
<b>ADMS Installation</b>																
ADMS INSTALLATION - SUMMARY	74	01-Feb-11 A	15-Apr-11 A													
<b>Standby Dewatering System(CSD: Grout Curtain Cut-off Wall Scheme)</b>																
STANDBY DEWATERING SYSTEM - SUMMARY	4324	19-Apr-11 A	13-Jul-12 A													
<b>VO.NO. 8 - Steel Weights &amp; Aluminum Cladding Inside CHT</b>																
VO NO. 8 & 14 - STEEL WEIGHTS & CLADDING SUMMARY	3786	20-Aug-11 A	31-Aug-12 A													
<b>Works in TPCWAE Area (Portion 20A, 20B)</b>																
<b>TPCWAE - Temporary Reclamation</b>																
TPCWAE - TEMPORARY RECLAMATION SUMMARY	1436	08-Dec-10 A	07-Jun-11 A													
<b>TPCWAE - Diaphragm Wall</b>																
DIAPHRAGM WALL & PUMP TEST SUMMARY	2528	13-Jun-11 A	30-Jan-12 A													
<b>TPCWAE - ELS Works &amp; Soft Excavation</b>																
TPCWAE - ELS SUMMARY (EXCEPT ROCK EXCAVATION)	2400	17-Jan-12 A	12-Sep-12 A													
<b>TPCWAE - Rock Excavation</b>																
TPCWAE - ROCK EXCAVATION SUMMARY	2764	19-Jun-12 A	05-Apr-13 A													
<b>MT West Portal Works</b>																
MT WEST PORTAL WORKS SUMMARY	3754	08-Nov-12 A	04-Dec-13 A													
<b>CCT RC Structure</b>																
CCT - AREA A	3094	24-Jan-13 A	18-May-14	-1278												
CCT - AREA B, STITCHING AREA	1114	27-Nov-13 A	23-Mar-14	-1278												
<b>Removal of Temporary Reclamation</b>																
REMOVAL OF RECLAMATION SUMMARY	434	15-Mar-14	30-Apr-14	-1434												
<b>Works in TPCWAW Area</b>																
<b>TPCWAW - Temporary Reclamation</b>																
TPCWAW - TEMPORARY RECLAMATION SUMMARY	864	02-May-14	26-Jun-14	0												
<b>TPCWAW - Diaphragm Wall</b>																
Diaphragm Wall & Pump Test Summary	1934	27-Jul-14	04-Feb-15	0												
<b>TPCWAW - ELS Works</b>																
TPCWAW - ELS SUMMARY (EXCEPT ROCK EXCAVATION)	884	06-Feb-15	04-May-15	0												
<b>TPCWAW - ROCK EXCAVATION</b>																
TPCWAW - ROCK EXCAVATION SUMMARY	1044	29-Apr-15	19-Aug-15	0												
<b>TPCWAW - CCT RC Structure</b>																
TPCWAW - CCT SUMMARY	944	24-Jul-15	25-Oct-15	0												
<b>TPCWAW - Removal of Temporary Reclamation</b>																
DURATION OF TEMP. RECLAMATION T23 (MAX=1660)	18124	11-Feb-11 A	27-Jun-16	0												
DURATION OF TEMP. RECLAMATION TPCWAW (MAX=1660)	6284	09-May-14	27-Jun-16	0												
REMOVAL OF TEMP. RECLAMATION SUMMARY	964	19-Oct-15	27-Jan-16	0												
<b>Works for Mined Tunnel (Portion 16, 17, 18)</b>																
<b>(SR) Slip Road 8 Tunnel, Total L = 147m, less 13m at WP and less 5m at EP= 149m Tunnel Excav</b>																
SR - MINED TUNNEL WORKS SUMMARY	514	19-Oct-13 A	17-Mar-15	2304												
<b>(EB) East Bound Tunnel, L = 167m, less 7m at WP and less 1.5m at EP= 158.5m Tunnel Excav</b>																
EB - MINED TUNNEL WORKS SUMMARY	744	19-Oct-13 A	02-Nov-15	0												
<b>(WB) West Bound Tunnel, L = 163m, less 7m at WP and less 1.5m at EP= 144.5m Tunnel Excav</b>																
WB - MINED TUNNEL WORKS SUMMARY	744	19-Oct-13 A	02-Nov-15	0												

Actual Level of Effort  
 Remaining Level of Effort  
 Milestone  
 Milestone

**China State Construction Engineering (HK) Ltd :**  
**HY/2009/15 - CWB Tunnel(CBTS)**  
**EXECUTIVE SUMMARY PROGRAMME**

Prepared by William Caluza			
Date	Revision	Checked	Approved
20-Feb-14	Executive Summary Progra...	GC	KC







Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	2014			
						Jun	Jul	Aug	Sep
<b>HK/2012/08 3-Mth Rolling Programme for Jun 2014 - Aug 2014 Rev. 1 on 24Jun14</b>									
<b>Dredging and Reclamation</b>									
<b>Marine Work Construction</b>									
<b>Dredging</b>									
<b>Dredging - Zone D</b>									
MAR11880	Zone D - Remove existing rock armour [S8-S10]	90	16-Apr-14 A	31-Aug-14	42	[Green bar from Jun to Aug]			
MAR11900	Zone D - dredging [R8-R10]	22	02-Dec-13 A	31-Aug-14	9	[Green bar from Jun to Aug]			
<b>Seawall Construction</b>									
<b>Seawall Construction - Zone B</b>									
MAR21430	Zone B - WDII Box 1 temp SW - place concrete block	6	31-May-14	05-Jun-14	1700	[Green bar from May to Jun]			
<b>Seawall Construction - Zone A2</b>									
MAR10765	Zone A2 - seawall - Type 4, 13 - fill rock mound to temp diversion channel I.L. at -1.5 mPD	18	22-Mar-14 A	08-Jun-14	1	[Green bar from Mar to Jun]			
MAR10769	Zone A2 - seawall - form temporary rock fill to temp diversion channel I.L. at -1.5 mPD	30	31-May-14	29-Jun-14	92	[Green bar from May to Jun]			
<b>Seawall Construction - Zone D</b>									
MAR11820	Zone D - fill rock mound for seawall 2F	4	14-Jul-14	17-Jul-14	7	[Green bar from Jul to Jul]			
MAR11882	Zone D - pile head treatment for caisson seawall 2F	24	18-Jul-14	14-Aug-14	7	[Green bar from Jul to Aug]			
MAR11884	Zone D - complete fabrication of Caisson Seawall 2F and ready for delivery	0		30-Jul-14*	0	[Blue diamond at end of Jul]			
MAR11885	Zone D - deliver and Install Caisson Seawall 2F	2	15-Aug-14	16-Aug-14	8	[Green bar from Aug to Aug]			
MAR11925	Zone D - complete fabrication of Caisson Seawall 1C and ready for delivery	0		08-Aug-14*	0	[Blue diamond at end of Aug]			
<b>Filling</b>									
<b>Filling - Zone B</b>									
MAR11135	Zone B - Public Fill (Remaining Area) -10.0 to +4.0mPD	39	05-May-14 A	26-Jun-14	0	[Red bar from May to Jun]			
MAR11140	Zone B - Sorted & Compacted Fill above MTR TWL	30	07-Apr-14 A	15-Jul-14	86	[Green bar from Apr to Jul]			
<b>Filling - Zone A2</b>									
MAR20360	Zone A2 - Public Fill -4.0 to +4.0mPD (portion beside Culvert L diversion only)	25	25-May-14 A	23-Jul-14	78	[Green bar from May to Jul]			
<b>Filling - Zone A1</b>									
MAR20400	Zone A1 - Public Fill -4.0 to +4.0mPD	22	29-May-14 A	22-Jun-14	1	[Green bar from May to Jun]			
MAR20420	Zone A1 & A2 - Form rock underlayer for temp channel	28	26-Jun-14	23-Jul-14	110	[Green bar from Jun to Jul]			
<b>Filling - Above C4 Unit</b>									
MAR21450	Zone above C4 Unit - Public fill above MTR TWL	30	15-Apr-14 A	15-Jul-14	150	[Green bar from Apr to Jul]			
<b>Works for Section Completion</b>									
<b>Construction</b>									
<b>Box Culvert La, L1 &amp; FRP-L Construction</b>									
<b>Sec VI A - Box Culvert La bay 1-3 and Roadwork</b>									
<b>Box Culvert La Bay 1-3</b>									
CUL10480	Sec VI A - Area 1 - Culvert L bay 1-3 - excavation and ELS installation	90	14-Mar-14 A	20-Jun-14	-59	[Red bar from Mar to Jun]			

Data Date: 31-May-14

- ◆ Current Milestone
- Actual Work
- Critical Remaining Work
- Remaining Work
- Remaining Level of Effort

**3 - Months Rolling Programme (June 2014 to August 2014)**

**For Zone Non-CRIII Works**

Date	Revision	Checked	Approved
31-May-14			



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	2014			
						Jun	Jul	Aug	Sep
CUL10520	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 3 - base slab	11	21-Jun-14	04-Jul-14	-59	[Red bar from 21-Jun to 04-Jul]			
CUL10540	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 3 - wall	9	05-Jul-14	15-Jul-14	-59	[Red bar from 05-Jul to 15-Jul]			
CUL10560	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 3 - top slab	8	31-May-14	10-Jun-14	-25	[Red bar from 31-May to 10-Jun]			
CUL10600	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 2 - base slab	11	09-Jul-14	21-Jul-14	-59	[Red bar from 09-Jul to 21-Jul]			
CUL10620	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 2 - wall	9	22-Jul-14	31-Jul-14	-59	[Red bar from 22-Jul to 31-Jul]			
CUL10640	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 2 - top slab	8	01-Aug-14	09-Aug-14	-39	[Red bar from 01-Aug to 09-Aug]			
CUL10660	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 1 - base slab	16	25-Jul-14	12-Aug-14	-59	[Red bar from 25-Jul to 12-Aug]			
CUL10680	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 1 - wall	18	13-Aug-14	02-Sep-14	-59	[Red bar from 13-Aug to 02-Sep]			
CUL12040	Sec VI A - Area 1 - 9M completion of Kiosk reinstatement	0		01-Aug-14*	0	[Blue dot at 01-Aug]			
<b>Sec VI C - Box Culvert La bay 4 and Roadwork</b>									
CUL11570	Sec VI C - Culvert L - bay 4 - sheetpile, ELS & Excavation	45	06-Jan-14 A	15-Aug-14	69	[Green bar from 06-Jan to 15-Aug]			
<b>Box Culvert L1 &amp; FRP-L - Bay 5 to 7</b>									
CUL10010	Drainage Impact Assessment for ex. box culvert L diversion - Eng, DSD comment and approve	60	22-Jul-13 A	25-Jun-14	0	[Red bar from 22-Jul to 25-Jun]			
CUL10015	Culvert L - form temp opening at existing box culvert bay 4 for temp flow diversion	35	31-May-14	12-Jul-14	99	[Green bar from 31-May to 12-Jul]			
CUL10215	Sec VI C - Culvert L - bay 5,6,7 - Design of Temp Platform for Predrill & Piling Works	12	14-Jun-14	27-Jun-14	0	[Red bar from 14-Jun to 27-Jun]			
CUL10218	Sec VI C - Culvert L - bay 5,6,7 - Engineer's comment and approve of Temp Platform for Predrill & Piling Works	28	28-Jun-14	31-Jul-14	0	[Red bar from 28-Jun to 31-Jul]			
CUL10225	Sec VI C - Culvert L - bay 5,6,7 - Erect Temp Platform for Predrill & Piling Works	75	01-Aug-14	30-Oct-14	0	[Red bar from 01-Aug to 30-Oct]			
CUL10860	Sec VI C - Culvert L - bay 5-7 - pile loading test	0	14-Jul-14	14-Jul-14	99	[Green bar at 14-Jul]			
CUL10880	Sec VI C - Culvert L - bay 5-7 - install sheetpile	10	14-Jul-14	24-Jul-14	99	[Green bar from 14-Jul to 24-Jul]			
CUL10900	Sec VI C - Culvert L - bay 5-7 - excavation & ELS	26	25-Jul-14	23-Aug-14	99	[Green bar from 25-Jul to 23-Aug]			
CUL10940	Sec VI C - Culvert L - bay 5 - pile head treatment and construct pile cap	10	18-Aug-14	28-Aug-14	99	[Green bar from 18-Aug to 28-Aug]			
CUL11020	Sec VI C - Culvert L - bay 6 - pile head treatment and construct pile cap	10	29-Aug-14	10-Sep-14	99	[Green bar from 29-Aug to 10-Sep]			
<b>Section II - MVB Structure</b>									
<b>Section II - MVB Substructure - Design, Submission and Approval</b>									
SII10180	Sec II - MVB - MS for pumping test - prepare and submit to ICE	2	02-Aug-14	03-Aug-14	97	[Green bar at 02-Aug]			
SII10200	Sec II - MVB - MS for pumping test - ICE check & issue cert	14	04-Aug-14	17-Aug-14	97	[Green bar from 04-Aug to 17-Aug]			
SII10220	Sec II - MVB - MS for pumping test - Eng comment and approve	28	18-Aug-14	14-Sep-14	97	[Green bar from 18-Aug to 14-Sep]			
SII10240	Sec II - MVB - MS & temp work design for bulk exc & ELS - prepare and submit to ICE	60	22-Apr-14 A	18-Jun-14	69	[Green bar from 22-Apr to 18-Jun]			
SII10260	Sec II - MVB - MS & temp work design for bulk exc & ELS - ICE check & issue cert	14	19-Jun-14	02-Jul-14	69	[Green bar from 19-Jun to 02-Jul]			
SII10280	Sec II - MVB - MS & temp work design for bulk exc & ELS - Eng comment and approve	28	03-Jul-14	30-Jul-14	69	[Green bar from 03-Jul to 30-Jul]			
SII12321	Sec II - MVB - Temp work design for bulk exc & ELS - Prepare tender and sub-contract	120	31-Jul-14	27-Nov-14	69	[Green bar from 31-Jul to 27-Nov]			
<b>MVB Substructure - Diaphragm Wall and Sheetpile Wall</b>									
SII10440	Sec II - MVB - predrilling and ground pretreatment for Dwall	158	17-Mar-14 A	24-Sep-14	21	[Green bar from 17-Mar to 24-Sep]			
SII10460	Sec II - MVB A - construct guide wall [P1-P13, P33-P41]	177	12-Apr-14 A	20-Nov-14	4	[Green bar from 12-Apr to 20-Nov]			
SII10480	Sec II - MVB A - construct Dwall [P1-P13, P33-P41] (1.5m thk on rock)	177	28-May-14 A	16-Dec-14	1	[Green bar from 28-May to 16-Dec]			
SII10520	Sec II - MVB B - construct guide wall [P14-P32]	177	07-Apr-14 A	21-Nov-14	0	[Red bar from 07-Apr to 21-Nov]			
SII10540	Sec II - MVB B - construct Dwall [P14-P32] (1.5m thk on rock)	187	16-Apr-14 A	05-Dec-14	0	[Red bar from 16-Apr to 05-Dec]			
SII10560	Sec II - MVB B - contact grout / fissure grout / install pumping well	90	15-Aug-14	01-Dec-14	17	[Green bar from 15-Aug to 01-Dec]			
SII10590	Sec II - MVB A&B - grout curtain and fissure grout	135	12-Jul-14	19-Dec-14	4	[Green bar from 12-Jul to 19-Dec]			
<b>MVB Substructure - Diaphragm Wall - Construction Sequences</b>									
Group 1									



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	2014			
						Jun	Jul	Aug	Sep
SII-10110	Sec II - MVB - Dwall P19	13	26-May-14 A	20-Jun-14	8				
SII-10120	Sec II - MVB - Dwall P17	25	21-Jun-14	21-Jul-14	8				
SII-10140	Sec II - MVB - Dwall P28	26	08-Jul-14	06-Aug-14	8				
SII-10150	Sec II - MVB - Dwall P18	23	25-Jul-14	20-Aug-14	8				
SII-10160	Sec II - MVB - Dwall P27	20	12-Aug-14	03-Sep-14	8				
SII-10170	Sec II - MVB - Dwall P22	22	26-Aug-14	20-Sep-14	8				
<b>Group 2</b>									
SII-10230	Sec II - MVB - Dwall P30	12	19-May-14 A	31-May-14	11				
SII-10240	Sec II - MVB - Dwall P29	20	09-Jun-14	02-Jul-14	11				
SII-10250	Sec II - MVB - Dwall P20	22	23-Jun-14	18-Jul-14	11				
SII-10260	Sec II - MVB - Dwall P13	22	07-Jul-14	31-Jul-14	11				
SII-10270	Sec II - MVB - Dwall P21	29	23-Jul-14	25-Aug-14	11				
SII-10280	Sec II - MVB - Dwall P16	25	12-Aug-14	10-Sep-14	11				
SII-10290	Sec II - MVB - Dwall P26	30	26-Aug-14	30-Sep-14	11				
<b>Group 3</b>									
SII-10330	Sec II - MVB - Dwall P37	23	28-May-14 A	24-Jun-14	19				
SII-10340	Sec II - MVB - Dwall P01	19	10-Jun-14	02-Jul-14	19				
SII-10350	Sec II - MVB - Dwall P11	21	26-Jun-14	21-Jul-14	19				
SII-10360	Sec II - MVB - Dwall P36	21	05-Jul-14	29-Jul-14	19				
SII-10370	Sec II - MVB - Dwall P02	19	14-Jul-14	04-Aug-14	19				
SII-10380	Sec II - MVB - Dwall P10	20	21-Jul-14	12-Aug-14	19				
SII-10390	Sec II - MVB - Dwall P39	20	28-Jul-14	19-Aug-14	19				
SII-10400	Sec II - MVB - Dwall P03	24	05-Aug-14	01-Sep-14	19				
SII-10410	Sec II - MVB - Dwall P09	21	14-Aug-14	06-Sep-14	19				
SII-10510	Sec II - MVB - Dwall P40	20	23-Aug-14	16-Sep-14	19				
<b>MVB Substructure - Bored Pile and Prebored H-Pile</b>									
SII10300	Sec II - MVB A&B - Bored Pile plant mobilisation	12	23-Jun-14	07-Jul-14	1				
SII10320	Sec II - MVB A&B - Predrilling for bored pile	90	23-Jun-14	09-Oct-14	38				
SII10340	Sec II - MVB A&B - Construct bored piles	148	26-Jun-14	19-Dec-14	1				
<b>MVB Substructure - Bored Pile - Construction Sequences</b>									
<b>Group 1</b>									
SII-11000	Ssec II - MVB - Bored Pile BC1-A	18	26-Jun-14	17-Jul-14	41				
SII-11020	Ssec II - MVB - Bored Pile BC2-A	18	18-Jul-14	07-Aug-14	41				
SII-11030	Ssec II - MVB - Bored Pile BC1-B	18	08-Aug-14	28-Aug-14	41				
SII-11040	Ssec II - MVB - Bored Pile BC8	18	29-Aug-14	19-Sep-14	41				
<b>Group 2</b>									
SII-11090	Ssec II - MVB - Bored Pile BC2-B	18	07-Jul-14	26-Jul-14	44				
SII-11100	Ssec II - MVB - Bored Pile BC3-A	18	28-Jul-14	16-Aug-14	45				
SII-11110	Ssec II - MVB - Bored Pile BC14	18	18-Aug-14	06-Sep-14	45				
<b>Group 3</b>									
SII-11160	Ssec II - MVB - Bored Pile BC4-A	18	11-Jul-14	31-Jul-14	44				

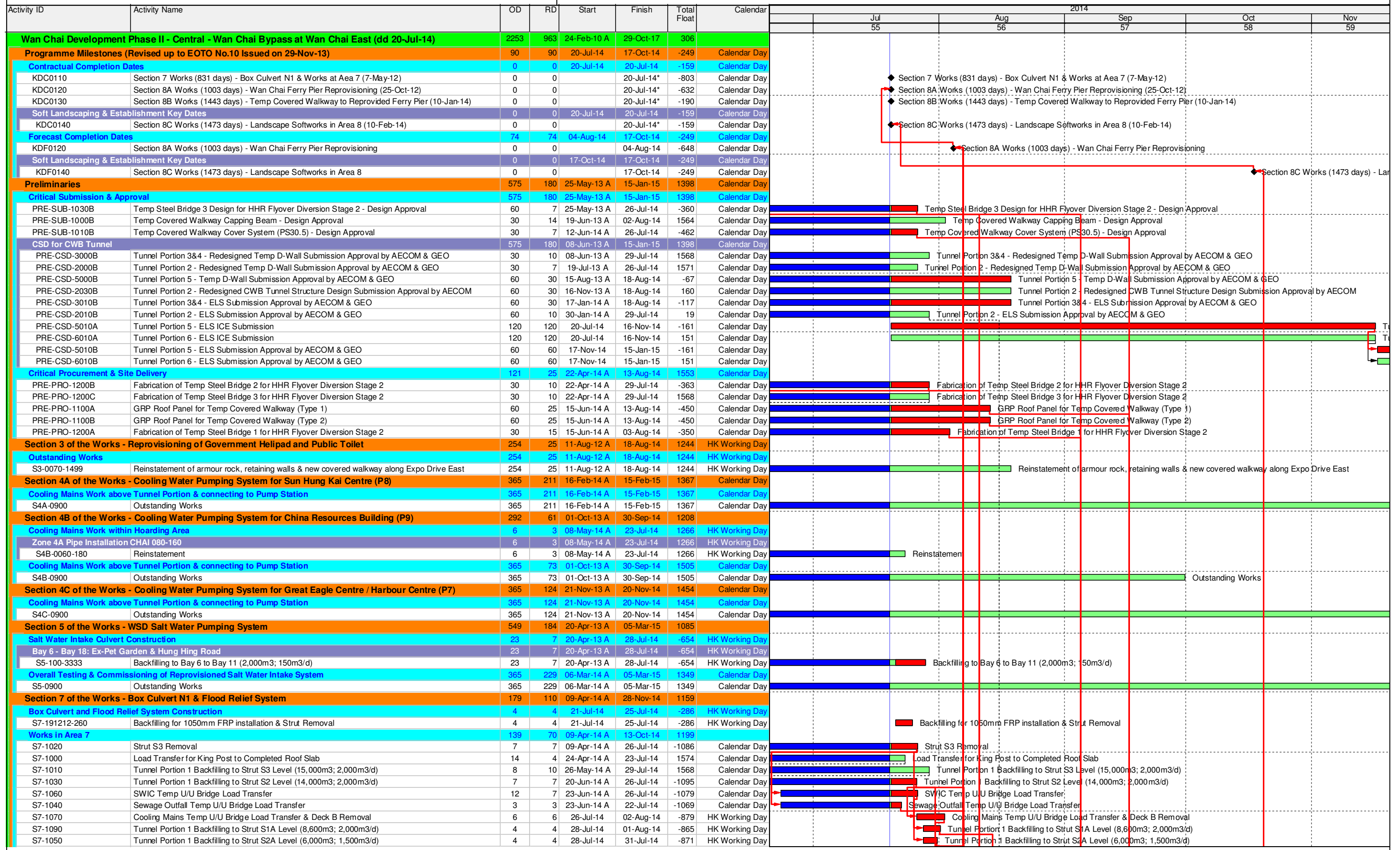


Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	2014			
						Jun	Jul	Aug	Sep
SII-11170	Ssec II - MVB - Bored Pile BC11	18	01-Aug-14	21-Aug-14	44				
SII-11180	Ssec II - MVB - Bored Pile BC4-B	18	22-Aug-14	12-Sep-14	44				
<b>Section II A - CWB Tunnel &amp; Slip Road Structures and Facilities</b>									
<b>Section II A - CWB Tunnel - Design, Submission and Approval</b>									
SIIA10420	CWB Tunnel - MS for DWall Construction - prepare & submit to ICE	30	01-Aug-13 A	31-May-14	91				
SIIA10480	CWB Tunnel - MS & temp work design for bulk exc & ELS - prepare & submit to ICE	80	01-Aug-14	19-Oct-14	29				
<b>CWB CRIII &amp; A1</b>									
<b>CWB CRIII &amp; A1 - Dwall and Pile Construction</b>									
SIIA11060	Sec II A - CWB A1 - predrilling for Dwall and piles	30	26-Jun-14	31-Jul-14	2				
SIIA11080	Sec II A - CWB A1 - carry out ground pretreatment for Dwall	80	04-Jul-14	08-Oct-14	2				
SIIA11100	Sec II A - CWB A1 - construct Guide Wall	46	08-Jul-14	29-Aug-14	2				
SIIA11120	Sec II A - CWB A1 - construct temporary DWall and temp bulk head wall	70	11-Jul-14	03-Oct-14	2				
SIIA11140	Sec II A - CWB A1 - Construct pre-bored H-pile	65	25-Jul-14	11-Oct-14	2				
SIIA11180	Sec II A - CWB A1 - D-wall grout curtain / contact grout	90	19-Jun-14	06-Oct-14	7				
SIIA11220	Sec II A - CWB A1 - D-wall Sonic test / interface core	90	19-Jun-14	06-Oct-14	7				
SIIA11240	Sec II A - CWB A1 - install dewater/ recharge / observation well	90	19-Jun-14	06-Oct-14	7				
<b>Section VI A - Area 1 &amp; 2 - Lung King Street</b>									
<b>Roadwork &amp; Utilities</b>									
SVIA10040	Sec VI A - Area 1 - Summary of Box Culvert La Construction	136	11-Nov-13 A	22-Nov-14	-56				
<b>Section VI B - Area 8</b>									
<b>Area 8 - Demolish Ex. Cooling Water Pumping Station</b>									
SVIB10020	MS of cooling water pump station demolition - ICE check and issue check cert	14	22-Feb-14 A	04-Jun-14	1				
SVIB10040	MS of cooling water pump station demolition Works - Eng comment and approve	28	22-Feb-14 A	06-Jun-14	2				
SVIB10060	Completion of reclamation at Zone C	0		31-May-14	24				
SVIB10070	Sec VI B - site clearance, u/g utilities detection	12	07-Apr-14 A	07-Jun-14	0				
SVIB10080	Sec VI B - demolish existing air duct	20	09-Jun-14	02-Jul-14	0				
SVIB10100	Sec VI B - remove existing crane	4	03-Jul-14	07-Jul-14	0				
SVIB10120	Sec VI B - open cut excavation to expose ex. seawall and pump house	5	02-Jul-14	07-Jul-14	0				
SVIB10140	Sec VI B - demolish existing pump house (cell 1)	5	08-Jul-14	12-Jul-14	0				
SVIB10180	Sec VI B - demolish existing pump house (cell 2)	5	10-Jul-14	15-Jul-14	9				
SVIB10200	Sec VI B - demolish existing pump house (cell 3)	5	12-Jul-14	17-Jul-14	9				
SVIB10220	Sec VI B - demolish existing pump house (cell 4)	5	15-Jul-14	19-Jul-14	9				
SVIB10240	Sec VI B - demolish existing pump house (cell 5)	5	17-Jul-14	22-Jul-14	9				
SVIB10260	Sec VI B - demolish existing pump house (cell 6)	5	19-Jul-14	24-Jul-14	9				
SVIB10280	Sec VI B - demolish existing pump house (cell 7)	5	22-Jul-14	26-Jul-14	9				
SVIB10300	Sec VI B - demolish existing pump house (cell 8)	5	24-Jul-14	29-Jul-14	9				
SVIB10320	Sec VI B - demolish existing pump house (cell 9)	5	26-Jul-14	31-Jul-14	9				
SVIB10340	Sec VI B - demolish existing pump house (cell 10)	5	01-Aug-14	06-Aug-14	9				
SVIB10360	Sec VI B - fill up void inside existing pump house (cell 1)	2	14-Jul-14	15-Jul-14	0				
SVIB10380	Sec VI B - fill up void inside existing pump house (cell 2)	2	16-Jul-14	17-Jul-14	12				
SVIB10400	Sec VI B - fill up void inside existing pump house (cell 3)	2	18-Jul-14	19-Jul-14	12				



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	2014			
						Jun	Jul	Aug	Sep
SVIB10420	Sec VI B - fill up void inside existing pump house (cell 4)	2	21-Jul-14	22-Jul-14	12				
SVIB10440	Sec VI B - fill up void inside existing pump house (cell 5)	2	23-Jul-14	24-Jul-14	12				
SVIB10460	Sec VI B - fill up void inside existing pump house (cell 6)	2	25-Jul-14	26-Jul-14	12				
SVIB10480	Sec VI B - fill up void inside existing pump house (cell 7)	2	28-Jul-14	29-Jul-14	12				
SVIB10500	Sec VI B - fill up void inside existing pump house (cell 8)	2	30-Jul-14	31-Jul-14	12				
SVIB10520	Sec VI B - fill up void inside existing pump house (cell 9)	2	01-Aug-14	02-Aug-14	12				
SVIB10540	Sec VI B - fill up void inside existing pump house (cell 10)	2	07-Aug-14	08-Aug-14	9				
SVIB10560	Sec VI B - demolish existing seawall coping	11	16-Jul-14	28-Jul-14	0				
SVIB10580	Sec VI B - trim down existing seawall	33	23-Jul-14	29-Aug-14	0				
SVIB10600	Sec VI B - backfill and compaction to formation level	14	20-Aug-14	04-Sep-14	0				
<b>Section VI C - Area 3, 6, 8A &amp; 8C</b>									
<b>Area 8A &amp; 8C - Seawall Modification (Reviewed)</b>									
<b>Design Submission &amp; Approval</b>									
PRS-1004	Sec VI C - Temp Work Design for Seawall Modification & MTR Pump Room Stabilization - Engineer / MTR comment and approve	28	02-Apr-14 A	19-Jun-14	95				
<b>Tenders for Sub-contractor and Procurement</b>									
PCU60310	Sec VI C - Prepare Sub-contract for Seawall Modification and Procurement of Materials	90	14-Nov-13 A	08-Aug-14	12				
PCU60320	Sec VI C - Assessment and Award of Sub-contract for Seawall Modification	28	09-Aug-14	05-Sep-14	12				
<b>Area 3 - Box Culvert bay 4 and Roadwork</b>									
SVIC10220	Sec VI C - [Summary] Construct Box Culvert Bay 4	116	06-Jan-14 A	06-Dec-14	107				
<b>Section VI D - Area 8B &amp; 10</b>									
<b>WDII Box 1 Construction (Reviewed)</b>									
<b>WDII Box 1 Submission and Approval / Material Procurement</b>									
PCU60410	Sec VI D - WD II Box 1 - Prepare Subcontract for Box 1 structure	90	26-May-14 A	28-Aug-14	69				
S0721040	Sec VI D - WD II Box 1 - temp work design - ICE check and issue check cert	28	31-May-14	27-Jun-14	1678				
S0721060	Sec VI D - WD II Box 1 - temp work design - Engineer comment and approve	28	19-May-14 A	18-Jun-14	55				
S0721070	Sec VI D - WD II Box 1 - method statement and temp work design - MTR comment and approve	52	19-Jun-14	09-Aug-14	88				
S0721080	Sec VI D - WD II Box 1 - Prepare and submit method statement	28	19-Jun-14	16-Jul-14	55				
S0721090	Sec VI D - WD II Box 1 - method statement - Engineer comment and approve	28	17-Jul-14	13-Aug-14	55				
<b>Pile Head Treatment and Dry Dock</b>									
WD-C3030	Sec VI D - form dry dock	65	15-Aug-14	01-Nov-14	44				
<b>Section VIII - Landscape Softworks</b>									
<b>Soft Landscaping Works</b>									
SVIII10020	Sec VIII - Tree Felling/Transplanting at Portion 2 & 2A	90	20-Nov-13 A	24-Jun-14	305				
<b>Section X - Protection &amp; Preservation of Trees</b>									
<b>Soft Landscaping Works</b>									
SX10020	Sec X - Protection & Preservation of Trees	1632	31-Jan-13 A	20-Jul-17	0				





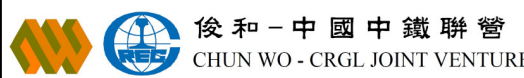
**俊和 - 中國中鐵聯營**  
 CHUN WO - CRGL JOINT VENTURE

■ Remaining Work    ■ Summ...  
■ Actual Work  
■ Summary Bar  
◆ Critical Remaining Work  
◆ Milestone

**CEDD CONTRACT NO. HK/2009/02**  
**Wan Chai Development Phase II - Central-Wan Chai Bypass at**  
**Wan Chai East (Contract 2)**  
**3-MONTH ROLLING PROGRAMME (Data Date on:20-Jul-14)**

Date	Revision	Checked	Approved
20-Jul-14	3MRP		
20-Feb-14	Baseline Prog		

Activity ID	Activity Name	OD	RD	Start	Finish	Total Float	Calendar	2014						
								Jul 55	Aug 56	Sep 57	Oct 58	Nov 59		
S7-1080	Strut S2 Removal	7	7	02-Aug-14	09-Aug-14	-1095	Calendar Day							
S7-1100	Tunnel Portion 1 Backfilling to Strut S1 Level (11,000m3; 2,000m3/d)	6	6	09-Aug-14	15-Aug-14	-1086	Calendar Day							
S7-1110	Box Culvert N1 Temp U/U Bridge Load Transfer	7	7	09-Aug-14	16-Aug-14	-1095	Calendar Day							
S7-1120	Strut S1 Removal	7	7	16-Aug-14	23-Aug-14	-1095	Calendar Day							
S7-1130	Deck C Removal	4	4	16-Aug-14	21-Aug-14	-877	HK Working Day							
S7-1140	D-Wall Trimming, Drain Installation & Backfilling to Ground Level (13,500m3; 1,000m3/d)	21	21	23-Aug-14	13-Sep-14	-1095	Calendar Day							
S7-1150	Completion of Tunnel Portion 1 Backfilling	0	0		13-Sep-14	-859	Calendar Day							
S7-1160	Paving Blockworks at Tunnel Portion 1 (for Works in Area 7)	30	30	13-Sep-14	13-Oct-14	-524	Calendar Day							
<b>Transformer Building for Dining Services at Ferry Pier (VO116)</b>								74	74	30-Aug-14	28-Nov-14	-827		
<b>Civil Works</b>								74	74	30-Aug-14	28-Nov-14	-879	HK Working Day	
S7-TB-2000	Lay 500mm thk. Rubble Mound	2	2	30-Aug-14	02-Sep-14	-879	HK Working Day							
S7-TB-2010	Blinding Layer	1	1	02-Sep-14	03-Sep-14	-879	HK Working Day							
S7-TB-2020	Base Slab Construction (9.3m x 4.9m x 1m thick)	7	7	03-Sep-14	12-Sep-14	-879	HK Working Day							
S7-TB-2030	Concrete Plinth, Side Wall, Beam & Corbel	14	14	15-Sep-14	03-Oct-14	-879	HK Working Day							
S7-TB-2040	Concrete In-Fill at Basement	3	3	07-Oct-14	10-Oct-14	-879	HK Working Day							
S7-TB-2050	Outer Wall & Partition Wall	21	21	10-Oct-14	04-Nov-14	-879	HK Working Day							
S7-TB-2060	Scaffolding Erection & Roof Construction	21	21	04-Nov-14	28-Nov-14	-879	HK Working Day							
<b>E&amp;M Works</b>								45	45	13-Sep-14	28-Oct-14	-993	Calendar Day	
S7-TB-4100	22kV Cable across HHR to Transformer Building by HEC	45	45	13-Sep-14	28-Oct-14	-993	Calendar Day							
<b>Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8</b>								558	69	17-Dec-12 A	12-Oct-14	-218		
<b>ABWF &amp; E&amp;M Installation</b>								477	25	17-Dec-12 A	18-Aug-14	-174		
<b>Level 1</b>								336	19	07-Aug-13 A	07-Aug-14	-377	Calendar Day	
<b>Public Area</b>								15	15	05-Sep-13 A	03-Aug-14	-467	Calendar Day	
S8A-BS-1070	E&M Final Fix	15	15	05-Sep-13 A	03-Aug-14	-467	Calendar Day							
<b>Ticket Room, Changing Room &amp; Storing Room</b>								284	19	08-Oct-13 A	07-Aug-14	-377	Calendar Day	
S8A-BS-1860	ELV System Installation	30	5	08-Oct-13 A	24-Jul-14	-377	Calendar Day							
S8A-BS-1870	T&C	14	14	25-Jul-14	07-Aug-14	-377	Calendar Day							
<b>Toilet</b>								120	18	05-Sep-13 A	06-Aug-14	-376	Calendar Day	
S8A-BS-1170	E&M Final Fix	14	14	05-Sep-13 A	02-Aug-14	-646	Calendar Day							
S8A-BS-1160	Sanitary Equipment	28	18	10-Jan-14 A	06-Aug-14	-376	Calendar Day							
<b>Lift</b>								7	6	09-Jan-14 A	25-Jul-14	-364	Calendar Day	
S8A-BS-1440	T&C	7	6	09-Jan-14 A	25-Jul-14	-364	Calendar Day							
<b>Metalworks</b>								80	7	07-Aug-13 A	26-Jul-14	-365	Calendar Day	
S8A-BS-1640	G3 Glass Panel Installation	15	7	07-Aug-13 A	26-Jul-14	-365	Calendar Day							
S8A-BS-1630	SS Balustrade Post & Frame Installation	24	3	17-Oct-13 A	22-Jul-14	-361	Calendar Day							
<b>Level 2</b>								474	14	17-Dec-12 A	05-Aug-14	-294	Calendar Day	
<b>General Area</b>								123	14	17-Dec-12 A	05-Aug-14	-294	HK Working Day	
S8A-BS-2000	ABWF and E&M First Fix at Level 2 @ +7.70mPD	123	14	17-Dec-12 A	05-Aug-14	-294	HK Working Day							
<b>Toilet</b>								345	16	30-Aug-13 A	04-Aug-14	-648	Calendar Day	
S8A-BS-2150	Sanitary Equipment	10	2	30-Aug-13 A	21-Jul-14	-648	Calendar Day							
S8A-BS-2160	E&M Final Fix	14	14	22-Jul-14	04-Aug-14	-648	Calendar Day							
<b>Metalworks &amp; Glass Panel Installation</b>								14	10	06-Mar-14 A	29-Jul-14	-642	Calendar Day	
S8A-BS-2230	G3 Glass Panel Installation	14	10	06-Mar-14 A	29-Jul-14	-642	Calendar Day							
<b>Level M</b>								7	7	20-Jul-14	26-Jul-14	-639	Calendar Day	
<b>Cleaning/ Flushing Water Pump Room</b>								7	7	20-Jul-14	26-Jul-14	-639	Calendar Day	
S8A-BS-3620	T&C	7	7	20-Jul-14	26-Jul-14	-639	Calendar Day							
<b>Roof</b>								359	30	26-Mar-13 A	18-Aug-14	-220	Calendar Day	
S8A-BS-4010	E&M Installation	28	10	10-Sep-13 A	29-Jul-14	-642	Calendar Day							
<b>Works in Area 8 - ABWF Works at Observation Deck of Ferry Pier</b>								359	30	26-Mar-13 A	18-Aug-14	-220	Calendar Day	
S8B-FP-01200	Aluminium Cladding	95	10	26-Mar-13 A	29-Jul-14	-200	Calendar Day							
S8B-FP-01100	Roof Finishes & Misc. ABWF Installation	120	30	28-Oct-13 A	18-Aug-14	-220	Calendar Day							
S8B-FP-01300	Handrail & Glass Balustrade Installation	45	14	21-Dec-13 A	02-Aug-14	-204	Calendar Day							
<b>T&amp;C and Handover</b>								149	69	16-Apr-14 A	12-Oct-14	-356	Calendar Day	
S8A-TC-9000	Fitting Out Works by Star Ferry (PS36.03(4)) & VO173 Works	180	85	16-Apr-14 A	12-Oct-14	-443	Calendar Day							
S8A-TC-8000	ELV System Installation (Misc.)	30	30	20-Jul-14	18-Aug-14	-388	Calendar Day							
S8A-TC-1500	EMSD Inspection for Lift	0	0		25-Jul-14	-292	HK Working Day							
<b>Section 8B of the Works - Temporary Covered Walkway &amp; Works in Area 8</b>								243	106	18-Nov-13 A	24-Nov-14	-393		
<b>Temporary Covered Walkway</b>								243	106	18-Nov-13 A	24-Nov-14	-393		
S8B-TCW-01200B	Temp Covered Walkway Footing & Drawpits - GL1-7 (Type 3) near New Ferry Pier (Remaining)	30	21	18-Nov-13 A	13-Aug-14	-387	HK Working Day							
S8B-TCW-01600	Temp Covered Walkway - Tie Beam Construction along Temp. D-wall	21	5	02-Jul-14 A	25-Jul-14	-371	HK Working Day							
S8B-TCW-01200C	Temp Covered Walkway Footing & Drawpits - GL1-2 (Type 4) to ST-01	14	10	16-Jul-14 A	31-Jul-14	-376	HK Working Day							
S8B-TCW-01100	Temp Covered Walkway Footing & Drawpits - GL23-34 (Type 2A) at WCR2	28	25	17-Jul-14 A	18-Aug-14	-391	HK Working Day							
S8B-TCW-01000	Temp Covered Walkway Footing & Drawpits - GL34-GL53 (Type 1) at Convention Avenue Footpath	28	26	18-Jul-14 A	19-Aug-14	-392	HK Working Day							
S8B-TCW-01800	Temp Covered Walkway - Steelworks Fixing	30	30	20-Aug-14	18-Sep-14	-486	Calendar Day							
S8B-TCW-01850	Temp Covered Walkway - Roof Panel Installation	30	30	19-Sep-14	18-Oct-14	-486	Calendar Day							
S8B-TCW-02000	Temp Covered Walkway - Paving Block Laying & Planter	30	30	19-Sep-14	18-Oct-14	-471	Calendar Day							
S8B-TCW-01900	Temp Covered Walkway - Drainage Installation	45	45	19-Sep-14	02-Nov-14	-471	Calendar Day							
S8B-TCW-01950	Temp Covered Walkway - Cable & Lighting Installation	30	30	19-Oct-14	17-Nov-14	-486	Calendar Day							
S8B-TCW-02100	Inspection & Handing Over	7	7	18-Nov-14	24-Nov-14	-486	Calendar Day							



俊和 - 中國中鐵聯營  
CHUN WO - CRGL JOINT VENTURE

- Remaining Work
- Actual Work
- Summary Bar
- Critical Remaining Work
- Milestone

**CEDD CONTRACT NO. HK/2009/02**  
**Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai East (Contract 2)**  
**3-MONTH ROLLING PROGRAMME (Data Date on:20-Jul-14)**

Date	Revision	Checked	Approved
20-Jul-14	3MRP		
20-Feb-14	Baseline Prog		



Activity ID	Activity Name	OD	RD	Start	Finish	Total Float	Calendar	2014					
								Jul 55	Aug 56	Sep 57	Oct 58	Nov 59	
<b>Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)</b>													
<b>Tunnel Portion 2 (CH3425-CH3500)</b>													
Foundation													
S9B-T2-1130	Tunnel portion 2 Pump Test	28	28	20-Jul-14	16-Aug-14	1	Calendar Day						
CWB Structural Works													
S9B-T2-2000	Tunnel portion 2 ELSW excavation (62,500m3; 500m3/d)	125	125	18-Aug-14	16-Jan-15	0	HK Working Day						
<b>Tunnel Portion 3 &amp; Tunnel Portion 4 (CH3630-CH3790)</b>													
Foundation													
<b>Stage 2 - Southern Wall after HHR Flyover Diversion (Stage 1) (C130A-P131; P144-C154)</b>													
S9B-T34-1230C	Pre-grouting & Guidewall for P147-P154	28	14	11-Feb-14 A	02-Aug-14	1564	Calendar Day						
S9B-T34-1270	Existing 450mm Stormwater Drain Diversion	21	21	17-Feb-14 A	13-Aug-14	1248	HK Working Day						
S9B-T34-1260B	Bored Pile Construction (PS30-PS32; 14d/pile; 1 Rig)	42	42	20-Jul-14	30-Aug-14	-403	Calendar Day						
S9B-T34-1250D	D-wall Construction along HHR slow lane (P147-P153; 6d/Panel)	42	42	01-Sep-14	22-Oct-14	-326	HK Working Day						
<b>Stage 3 - Northern Wall after TWCR4 Reclamation (P96-P101)</b>													
S9B-T34-1420C	Pre-grouting & Guide Wall Construction for P100-C105	21	14	19-Feb-14 A	02-Aug-14	1564	Calendar Day						
S9B-T34-1440E	Preboring works for Bored Pile Construction (PC28-PC30)	14	10	16-Jul-14 A	29-Jul-14	-161	Calendar Day						
S9B-T34-1440G	Bored Pile Construction (PN27; 14d/pile)	14	14	20-Jul-14	02-Aug-14	-326	Calendar Day						
S9B-T34-1440H	Bored Pile Construction (PC31; 14d/pile)	14	14	20-Jul-14	02-Aug-14	-115	Calendar Day						
S9B-T34-1440F	Bored Pile Construction (PC28-PC30; 14d/pile)	42	42	04-Aug-14	22-Sep-14	-134	HK Working Day						
S9B-T34-1430D	D-wall Construction at TWCR4 (C88-P95; 6d/Panel)	48	48	23-Oct-14	17-Dec-14	-326	HK Working Day						
<b>Stage 4 - Southern Wall after HHR Flyover Diversion (Stage 2) (P132-P143)</b>													
S9B-T34-1600	Complete Removal of Approach Ramp of Existing HHR Flyover	0	0	08-Nov-14		-383	Calendar Day						
S9B-T34-1610	Pre-drilling at HHR Flyover	26	26	08-Nov-14	03-Dec-14	-383	Calendar Day						
<b>Temp Works for HHR Flyover Diversion (Stage 2)</b>													
<b>Bridge 1</b>													
S9B-TTA-1000	Excavation & D-Wall Modification for Supporting Bridge 1	21	18	17-Jul-14 A	09-Aug-14	-310	HK Working Day						
S9B-TTA-1100	Overall Excavation to +1mPD	14	14	10-Aug-14	23-Aug-14	-384	Calendar Day						
S9B-TTA-1300	Installation of S1 Strut & Bracing	14	14	24-Aug-14	06-Sep-14	-384	Calendar Day						
S9B-TTA-1400	Installation of Bridge 1 spanning across CWB	14	14	07-Sep-14	20-Sep-14	-384	Calendar Day						
<b>Bridge 2</b>													
S9B-TTA-2000	D-Wall Modification for Supporting Bridge 2	14	14	19-May-14 A	05-Aug-14	1255	HK Working Day						
S9B-TTA-2100	Excavation & Installation of S1 Strut	7	24	02-Jul-14 A	12-Aug-14	-377	Calendar Day						
S9B-TTA-2200	Installation of Bridge 2 spanning across CWB	14	14	13-Aug-14	26-Aug-14	-377	Calendar Day						
<b>Bridge 3</b>													
S9B-TTA-3500	Installation of Bridge 3 connecting with Existing HHR Flyover	14	7	30-May-14 A	26-Jul-14	-346	Calendar Day						
<b>At-Grade Roadworks</b>													
S9B-TTA-4100	At-Grade Temp Roadworks, Drainage & Furniture Installation in TWCR4 Area	45	28	30-Jun-14 A	21-Aug-14	-269	HK Working Day						
S9B-TTA-4150	Concrete Deck & Steel Deck on Existing Box Culvert O Bay 17 - Bay 19	35	19	02-Jul-14 A	11-Aug-14	1250	HK Working Day						
S9B-TTA-4200	Road Furniture Installation & Pavement Works on Bridge 3	30	30	28-Jul-14	30-Aug-14	-277	HK Working Day						
S9B-TTA-4000	Road Furniture Installation & Pavement Works on Bridge 2	30	30	27-Aug-14	03-Oct-14	-303	HK Working Day						
S9B-TTA-4300	Road Furniture Installation & Pavement Works on Bridge 1	15	15	22-Sep-14	10-Oct-14	-309	HK Working Day						
S9B-TTA-4400	Diversion of Traffic to Steel Bridges & TWCR4 (Stage 2 TTA)	0	0		10-Oct-14	-387	Calendar Day						
S9B-TTA-4500	Demolish of Approach Ramp of Existing HHR Flyover for D-Wall Construction	24	24	11-Oct-14	07-Nov-14	-309	HK Working Day						
S9B-TTA-4600	Utility Diversion for D-Wall near Existing HHR Flyover Approach Ramp	35	35	11-Oct-14	14-Nov-14	-364	Calendar Day						
<b>Section 11 of the Works - Remainder of Works</b>													
<b>Marine Works at WCR2</b>													
S11-R2-1600	Removal of Existing SHK Pump House M&E equipment	7	5	09-Apr-14 A	24-Jul-14	1573	Calendar Day						
S11-R2-1800B	Complete remaining reclamation at WCR2 (Stage 2) - Remaining at WCR2	30	7	02-May-14 A	26-Jul-14	1571	Calendar Day						
<b>Marine Works at WCR3</b>													
S11-R3-0500A	Fabrication of Caisson Seawalls for WCR3 Reclamation (1st Stage - 2 Nos.)	60	60	27-Aug-14	25-Oct-14	-382	Calendar Day						
S11-R3-0500B	Fabrication of Caisson Seawalls for WCR3 Reclamation (2nd Stage - 3 Nos.)	90	90	26-Oct-14	23-Jan-15	-382	Calendar Day						
<b>Soft Landscaping &amp; Establishment Works</b>													
<b>Section 8C of the Works - Landscape Softworks in Area 8</b>													
S8C-0010	Carry out landscape soft work on new ferry pier	90	90	20-Jul-14	17-Oct-14	-249	Calendar Day						
<b>Section 8D of the Works - Establishment Works in Area 8</b>													
S8D-0010	Carry out establishment work on new ferry pier	365	365	18-Oct-14	17-Oct-15	-249	Calendar Day						
<b>Section 12 of the Works - Protection and Preservation of Existing Trees</b>													
S12-0010	Protection and preservation of existing trees	2375	770	24-Feb-10 A	27-Aug-16	0	Calendar Day						
<b>SUMMARY PROGRAMME</b>													
<b>CWB Tunnel Construction &amp; Remaining Works (Section 9A, 9B, 10 &amp; 11)</b>													
<b>CWB Tunnel Works in WCR1</b>													
SUM-CWB-14000	Backfilling for Tunnel Portion 1	97	56	26-May-14 A	13-Sep-14	-859	Calendar Day						
<b>CWB Tunnel Works in WCR2</b>													
SUM-CWB-20000	Reclamation at WCR2	224	7	25-Jul-12 A	26-Jul-14	1571	Calendar Day						
SUM-CWB-22000	Pump Test & Excavation for Tunnel Portion 2	181	181	20-Jul-14	16-Jan-15	0	Calendar Day						
<b>CWB Tunnel Works in WCR4/TWCR4</b>													
SUM-CWB-41000B	Foundation for Tunnel Portion 3&4 (except Eastern Bulkhead Wall)	457	307	11-Nov-13 A	22-May-15	-327	Calendar Day						
<b>Misc. Remaining Works</b>													
SUM-CWB-52000	Interface Work with HY/2009/15 after Portion 7 Re-Possession	717	717	20-Jul-14	05-Jul-16	-277	Calendar Day						

**俊和 - 中國中鐵聯營**  
 CHUN WO - CRGL JOINT VENTURE

█ Remaining Work    █ Summ...  
█ Actual Work  
 Summary Bar  
█ Critical Remaining Work  
◆ Milestone

**CEDD CONTRACT NO. HK/2009/02**  
**Wan Chai Development Phase II - Central-Wan Chai Bypass at**  
**Wan Chai East (Contract 2)**  
**3-MONTH ROLLING PROGRAMME (Data Date on:20-Jul-14)**

Date	Revision	Checked	Approved
20-Jul-14	3MRP		
20-Feb-14	Baseline Prog		

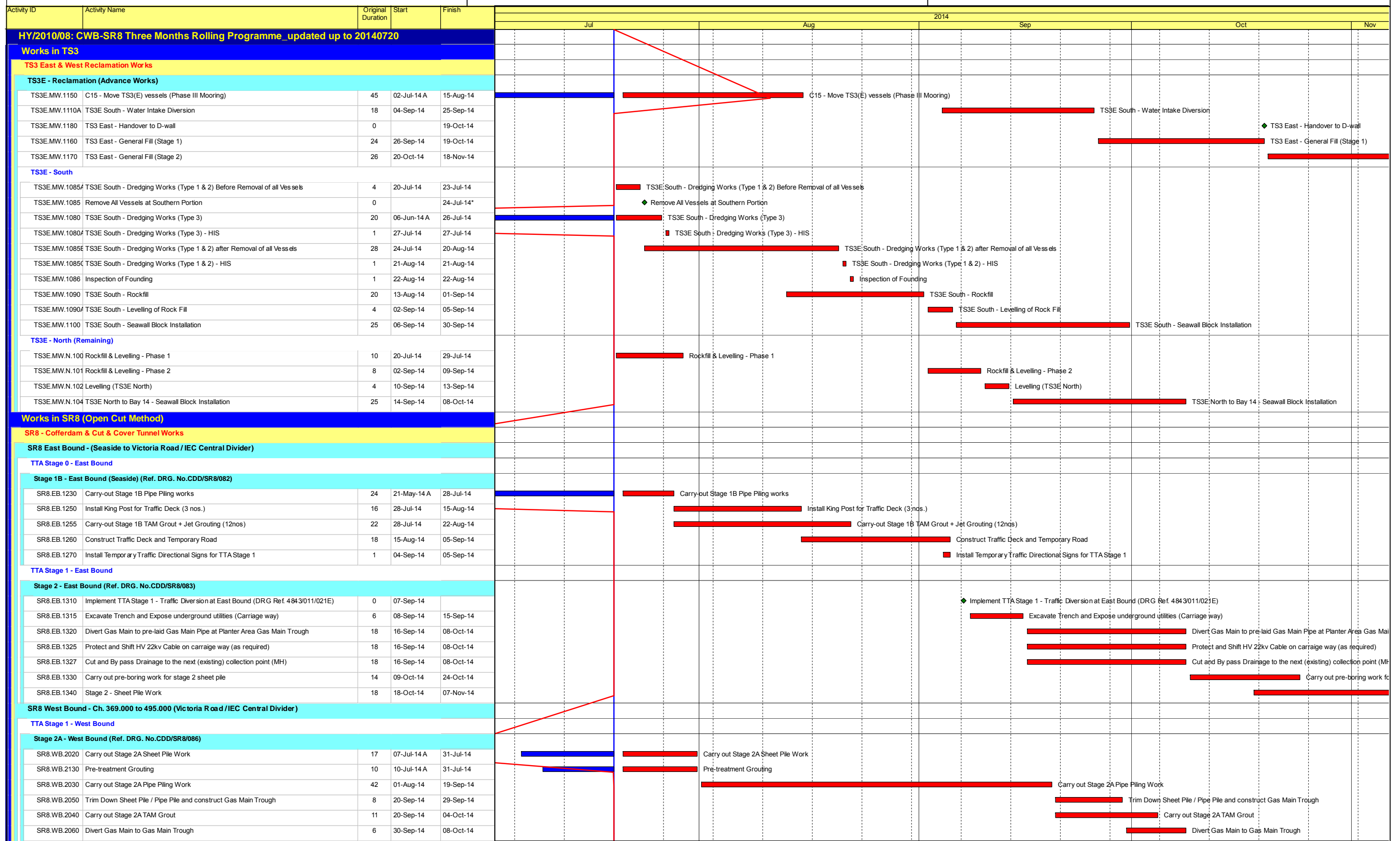
Activity ID	Activity Name	OD	RD	Start	Finish	Total Float	Calendar	2014					
								Jul	Aug	Sep	Oct	Nov	
								55	56	57	58	59	
SUM-CWB-50000	Paving Block Installation (Whole Newly Reclaimed Area)	1142	1142	13-Sep-14	29-Oct-17	-428	Calendar Day						
	<b>Reprovisioning of Existing Facilities (Section 3, 4A, 4B, 4C, 5, 6, 7, 8A &amp; 8B)</b>	<b>872</b>	<b>292</b>	<b>17-Dec-12 A</b>	<b>07-May-15</b>	<b>-356</b>	Calendar Day						
	Reprovisioning of Box Culvert N (Section 7)	250	250	30-Aug-14	07-May-15	-1095	Calendar Day						
SUM-FAC-52000	VO116 - New Transformer Building to Ferry Pier	250	250	30-Aug-14	07-May-15	-1095	Calendar Day						
	<b>Reprovisioning of Wan Chai Ferry Pier &amp; Covered Walkway (Section 8A &amp; 8B)</b>	<b>463</b>	<b>128</b>	<b>17-Dec-12 A</b>	<b>24-Nov-14</b>	<b>-192</b>	Calendar Day						
SUM-FAC-62000	Ferry Pier ABWF Works	155	10	17-Dec-12 A	29-Jul-14	-74	Calendar Day						
SUM-FAC-65000	ABWF Works on Observation Deck under Section 8B	150	30	07-May-13 A	18-Aug-14	-220	Calendar Day						
SUM-FAC-66000	Temp Covered Walkway	217	128	10-Aug-13 A	24-Nov-14	-486	Calendar Day						



	Remaining Work		Summ...
	Actual Work		
	Summary Bar		
	Critical Remaining Work		
	Milestone		

**CEDD CONTRACT NO. HK/2009/02**  
**Wan Chai Development Phase II - Central-Wan Chai Bypass at**  
**Wan Chai East (Contract 2)**  
**3-MONTH ROLLING PROGRAMME (Data Date on:20-Jul-14)**

Date	Revision	Checked	Approved
20-Jul-14	3MRP		
20-Feb-14	Baseline Prog		



- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

Date	Revision	Checked	Approved
20-Jul-14	Updated to 20th July 2014	DML/WC	

