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**DRAINAGE SERVICES DEPARTMENT  
CONTRACT NO. DC/2006/02**



**YUEN LONG, KAM TIN, NGAU TAM MEI AND TIN SHUI  
WAI DRAINAGE IMPROVEMENTS, STAGE 1, PHASE  
2B – CHEUNG CHUN SAN TSUEN AND KAM TSIN WAI**

**KT15 Quarterly EM&A Summary Report –  
26 March to 25 June 2009**

**PREPARED FOR**

**CHIT CHEUNG CONSTRUCTION COMPANY LIMITED**

**Quality Index**

<b>Date</b>	<b>Reference No.</b>	<b>Prepared By</b>	<b>Certified By</b>
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## EXECUTIVE SUMMARY

- ES01. Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department (DSD) Contract No. DC/2006/02 *Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai* (hereinafter “the Project”) on 3 April 2007. According to the contract specification requirements, an Environmental Monitoring & Audit (EM&A) program is to be implemented by an Independent Environmental Team (ET) throughout the major construction period.
- ES02. Under the Project Profile for *Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai, Drainage Improvement Stage 1 Phase 2B – Kam Tin Secondary Drainage Channels KT14 & KT15* (Ref.: 382047/E/PP/Issue 5), KT14 & KT15 were defined as Designated Projects and governed by the *Environmental Permit (EP-231/2005/A)*.
- ES03. Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC as an Independent Environmental Team (ET) to implement the EM&A program in compliance with the requirements as stated in the Environmental Permit and the *Environmental Monitoring & Audit Manual (EM&A Manual) for Secondary Channels KT14 & KT15 (August 2005)*. This contract (DC/2006/02) only covers KT15; and KT14 will be carried out under another contract.
- ES04. This is the 8<sup>th</sup> Quarterly Environmental Monitoring & Audit (EM&A) Summary Report for April to June 2009 containing the monitoring results and audit findings for the period from 26 March 2009 to 25 June 2009 (this quarter).

### BREACH OF ACTION AND LIMIT (A/L) LEVELS

- ES05. Monitored data exceedances in this quarter are summarised in following table.

Monitoring	Parameters	Action Level	Limit Level
Air Quality	1-hour TSP	nil	nil
	24-hour TSP	nil	nil
Noise	Leq (30min) Daytime	nil	nil
Stream Water	Dissolve Oxygen (DO)	nil	nil
	Turbidity (NTU)	nil	nil
	pH	nil	nil
	Suspended Solids (SS)	nil	nil
	Ammonia Nitrogen	nil	27 April 09
Ecology	Zinc	nil	nil
	Number of species of wetland birds	nil	24 Apr 09, 25 May 09
	Total number of wetland birds	nil	25 May 09
	Number of species of wetland fauna	nil	24 Apr 09, 25 May 09
	Total number of wetland fauna	nil	24 Apr 09, 25 May 09

Note: According to the EM&A Manual S7.5.1(b), fauna monitoring was only undertaken during wet season (April to July)

### COMPLAINTS LOG

- ES06. No environmental complaint was received in this quarter.

### NOTIFICATIONS OF ANY SUMMONS AND SUCCESSFUL PROSECUTIONS

- ES07. There was no environmental summons or successful prosecution was recorded in this quarter.

**REPORTING CHANGES**

ES08. There are no changes in reporting made in this quarter.

**CONSTRUCTION ACTIVITIES IN THE REPORTING QUARTER**

ES09. Construction activities in the quarter are listed in the following table:

Reporting Period	Construction Activities
26 March 2009 – 25 April 2009	<ul style="list-style-type: none"> <li>• Construction and excavation works;</li> <li>• Dumping activities;</li> <li>• Sheet pile driving;</li> <li>• Tree protection and tree transplanting works;</li> <li>• Utilities companies liaison;</li> <li>• Carrying out joined survey; and</li> <li>• Gabion Installation.</li> </ul>
26 April 2009 – 25 May 2009	<ul style="list-style-type: none"> <li>• Backfilling behind completed structure;</li> <li>• Extract sheet pile;</li> <li>• Stream diversion;</li> <li>• Road construction;</li> <li>• Dumping activities;</li> <li>• Tree protection and tree transplanting works;</li> <li>• Utilities companies liaison; and</li> <li>• Carrying out joined survey</li> </ul>
26 May 2009– 25 June 2009	<ul style="list-style-type: none"> <li>• Backfilling behind completed structure;</li> <li>• Stream diversion;</li> <li>• Road construction;</li> <li>• Dumping activities;</li> <li>• Sheet pile driving;</li> <li>• Tree protection and tree transplanting works;</li> <li>• Utilities companies liaison; and</li> <li>• Carrying out joined survey</li> </ul>

ES10. Potential environmental impacts for this project generally include air quality, noise, ecology, surface runoff and construction waste. The contractor shall properly implement the required environmental mitigation measures as per the Implementation Schedule in the EM&A manual.

**EM&A ACTIVITIES IN THE REPORTING QUARTER**

ES11. A summary of the monitoring activities in this quarter is listed below:

- 1-hour TSP Monitoring 42 Events
- 24-hour TSP Monitoring 14 Events
- Noise Monitoring 14 Events
- Stream Water Quality 54 Events
- Ecology (Fauna) 3 Events
- Site Inspection Audit 12 Times

**AIR QUALITY**

ES12. No Action or Limit Level exceedance of 1-hour or 24-hour TSP was recorded in this quarter.

**CONSTRUCTION NOISE**

ES13. No exceedance in construction noise measurements was recorded and no construction noise complaint was received in this quarter.

### STREAM WATER QUALITY

ES14. For stream water quality monitoring, 1 limit exceedance in ammonia nitrogen was recorded at Location W9B on 27 April 2009. Investigation report concluded that the exceedance was due to natural variation of the water quality, no corrective actions were therefore required.

### ECOLOGY

ES15. Faunal monitoring was conducted during the reporting quarter. Non-compliances with the ecological criteria were found during the quarter (24 April 2009 and 25 May 2009). No intrusions of construction activities into the wetland areas or adverse impact were observed (24 April 2009, 25 May 2009 and 22 June 2009). Based on the findings in the previous monthly monitoring, the non-compliance in wetland dependent bird was not caused by the project.

### SUMMARY OF MONITORING EXCEEDANCES

ES16. A summary of monitoring exceedances in this quarter for air quality, noise, stream water quality and ecology monitoring are presented below:

Env. Quality	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air Quality	1-hour TSP	0	Not Required for 0% Exceedance
	24-hour TSP	0	Not Required for 0% Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Exceedance
Stream Water	Dissolve Oxygen (DO)	0	Not Required for 0% Exceedance
	Suspended Solids (SS)	0	Not Required for 0% Exceedance
	Turbidity (NTU)	0	Not Required for 0% Exceedance
	pH	0	Not Required for 0% Exceedance
	Ammonia Nitrogen	0	Not Required for 0% Exceedance
	Zinc	0	Not Required for 0% Exceedance
Ecology	Decrease in the total number of species or individuals of wetland dependent bird from baseline	0	Not Required for 0% Exceedance
	Decrease in the total number of species or individuals of wetland fauna from baseline	0	Not Required for 0% Exceedance

### SITE INSPECTION BY EXTERNAL PARTIES

ES17. No site visit or inspection was carried out by the Environmental Protection Department in this Reporting Period.

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## 1.0 INTRODUCTION

- 1.01 Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department Contract No. DC/2006/02 *Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai* (hereinafter “the Project”) on 3 April 2007. According to the contract specification requirements the Project should implement an Environmental Monitoring & Audit (EM&A) program by an Independent Environmental Team (ET) throughout the construction period in accordance with the requirements as stated in the project particular specification, Environmental Permit (EP-231/2005/A) and EM&A Manual for Channel KT15. The location of the project site is presented in [Appendix A](#) and the construction program is presented in the pervious monthly EM&A reports.
- 1.02 The works to be executed at the proposed Channel KT15 mainly comprise the following:
- Construction of about 0.8 km secondary drainage channels;
  - Construction of DSD maintenances access;
  - Provisioning and re-provisioning of pedestrian crossings;
  - Associated ancillary works; and
  - Construction of temporary vehicular access in Portion 5A1 of the site for vehicular access from Kam Sheung Road to Lot Nos. 398RP, 395 in DD106 which are adjacent to the site.
- 1.03 Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC as an Independent Environmental Team (ET) for implementation of the EM&A program in accordance with the requirements as set out in the contract particular specification, Environmental Permit (EP-231/2005/A), EM&A Manual for Channel KT15 and the Environment Impact Assessment Ordinance (EIAO).
- 1.04 This report summaries the monitoring results and inspection findings for the quarter [April to June 2009](#) during the period from [26 March 2008 to 25 June 2009](#) under the EM&A program.

### REPORT STRUCTURE

- 1.05 This Quarterly EM&A Summary Report is structured into the following sections:

<b>SECTION 1</b>	<b>INTRODUCTION</b>
<b>SECTION 2</b>	<b>PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS</b>
<b>SECTION 3</b>	<b>SUMMARY OF MONITORING REQUIREMENTS</b>
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<b>SECTION 9</b>	<b>IMPLEMENTATION STATUS OF MITIGATION MEASURES</b>
<b>SECTION 10</b>	<b>CONCLUSIONS</b>

## 2.0 PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS

### PROJECT ORGANIZATION AND MANAGEMENT STRUCTURE

2.01 The organization chart and lines of communication with respect to the on-site environmental management and monitoring program are shown in [Appendix B](#).

### CONSTRUCTION PROGRESS

2.02 The major construction activities undertaken in this quarter were summaries in [Table 2-1](#).

**Table 2-1 Major Construction Activities**

Reporting Period	Construction Activities
26 March 2009 – 25 April 2009	<ul style="list-style-type: none"> <li>• Construction and excavation works;</li> <li>• Dumping activities;</li> <li>• Sheet pile driving;</li> <li>• Tree protection and tree transplanting works;</li> <li>• Utilities companies liaison;</li> <li>• Carrying out joined survey; and</li> <li>• Gabion Installation.</li> </ul>
26 April 2009 – 25 May 2009	<ul style="list-style-type: none"> <li>• Backfilling behind completed structure;</li> <li>• Extract sheet pile;</li> <li>• Stream diversion;</li> <li>• Road construction;</li> <li>• Dumping activities;</li> <li>• Tree protection and tree transplanting works;</li> <li>• Utilities companies liaison; and</li> <li>• Carrying out joined survey</li> </ul>
26 May 2009– 25 June 2009	<ul style="list-style-type: none"> <li>• Backfilling behind completed structure;</li> <li>• Stream diversion;</li> <li>• Road construction;</li> <li>• Dumping activities;</li> <li>• Sheet pile driving;</li> <li>• Tree protection and tree transplanting works;</li> <li>• Utilities companies liaison; and</li> <li>• Carrying out joined survey</li> </ul>

### SUMMARY OF ENVIRONMENTAL SUBMISSIONS

2.03 A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project in this quarter are presented in [Table 2-2](#).

**Table 2-2 Status of Environmental Licenses and Permits**

Items	Item Description	License/Permits Status
1	Environmental Permit (EP-231/2005/A)	-
2	Air Pollution Control (Construction Dust)	Notified EPD on 9 July 2007
3	Chemical Waste Producer Registration WPN:5296-519-C3430-01 (Portion 8, Ma Fung Ling Road, Tong Yan San Tsuen, Yuen Long)	Registration on 20 April 2007
4	Chemical Waste Producer Registration WPN:5113-533-C3434-09 (Kam Tsin Wai, Kam Tin, Yuen Long)	Registration on 20 April 2007
5	Chemical Waste Producer Registration WPN:5213-424-C3431-01 (Portion 7, Birthing Area, Hoi Wan Road, Tuen Mun)	Registration on 20 April 2007
6	Water Pollution Control Ordinance (Discharge License) License No.: 1U450/1	Obtained on 20 July 2007
7	Billing Account for Disposal of Construction Waste (Account Number : 7005311)	Valid on 7 May 2007

### 3.0 SUMMARY OF IMPACT MONITORING REQUIREMENTS

- 3.01 Environmental monitoring and audit requirements are set out in the EM&A Manual. Air quality, construction noise, stream water quality and ecology have been identified to be the key environmental issues during the construction phase of the project.
- 3.02 A summary of the EM&A requirements for air quality, construction noise, stream water quality and ecology monitoring are shown in **Table 3-1**. The designated station of the air quality, construction noise, stream water quality locations and ecology monitoring area are shown in **Appendix C**.

**Table 3-1 Summary of EM&A Requirements**

Environmental Aspect	Monitoring Parameters		Monitoring Stations
Air Quality	1-hour and 24-hour TSP		A10
Construction Noise	Leq <sub>(30min)</sub> during normal working hours		N10a*
	Supplementary data of L <sub>10</sub> and L <sub>90</sub> for reference.		
Stream Water Quality	In Situ Measurement	• Dissolved Oxygen Concentration (mg/L);	W9A & W9B
		• Dissolved Oxygen Saturation (% Sat);	
		• Turbidity (NTU);	
Laboratory Analysis	• pH;		
	• Salinity (%); Water Depth (m) and		
	• Temperature (°C).		
Ecology	Laboratory Analysis	• Suspended Solids (mg/L);	
		• Ammonia Nitrogen (mg/L); and	
		• Zinc (µg/L).	
Ecology	<ul style="list-style-type: none"> <li>• Monthly monitoring of construction activities adjacent to the wetland areas to identify any intrusions of construction activities into the wetland areas;</li> <li>• Monthly monitoring of wetland areas themselves to check that there is no adverse impact on the wetlands as a consequence of changes to the water table that are attributable to the project, if any;</li> <li>• Photographic records at six-month intervals; and</li> <li>• Monthly surveys of fauna in the wetland areas during the wet season (April to July inclusive) for reptiles, amphibians, dragonflies, and butterflies, and throughout the year for birds.</li> </ul>		

Note: \* The noise ambient condition within the victim area without significant change. Due to the accessibility, noise monitoring will undertake at N10a. Once the access is available, the impact noise monitoring will undertake at N10.

- 3.03 Air monitoring is carried out once every six days for 24-hour TSP and 3 times every six days for 1-hour TSP at one designated monitoring station A10.
- 3.04 Noise monitoring is conducted once per week at one designated monitoring location (N10a). Measurements of Leq<sub>(30min)</sub> shall be taken between 0700 and 1900 hours with supplementary L<sub>10</sub> and L<sub>90</sub> data collected for reference.
- 3.05 Stream water quality monitoring is conducted were undertaken at two location W9A & W9B twice per week. Dissolved Oxygen (DO), pH, Turbidity (NTU) was measured in-situ; water depth, temperature and salinity were collected for relevant data. Suspended solids (SS), ammonia nitrogen and zinc were determined in a HOKLAS accredited laboratory.
- 3.06 Ecological monitoring is conducted in the seasonal wetland area as shown in the Project Profile of Channel KT15 (Figure ATT 4-7.2). Bird survey should be conducted in monthly and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted in wet season (April to July inclusive).



3.07 A summary of the Action/Limit (A/L) Levels for air quality, construction noise, stream water quality and ecology are shown in **Tables 3-2, 3-3, 3-4** and **3-5**.

**Table 3-2 Action and Limit Levels for Air Quality Monitoring**

Monitoring Station	Action Level ( $\mu\text{g}/\text{m}^3$ )		Limit Level ( $\mu\text{g}/\text{m}^3$ )	
	1-hour TSP	24-hour TSP	1-hour TSP	24-hour TSP
A10	> 307	> 165	> 500	> 260

**Table 3-3 Action and Limit Levels for Construction Noise Monitoring**

Time Period	Action Level in dB(A)	Limit Level in dB(A)
0700-1900 hrs on normal weekdays	When one or more documented complaints are received	> 75* dB(A)

Note: \* Reduces to 70dB(A) for schools and 65dB(A) during the school examination periods.

**Table 3-4 Action and Limit Levels for Stream Water Quality Monitoring**

Dissolved Oxygen (mg/l)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
<b>Action Level</b>	NA	< 0.3
<b>Limit Level</b>	NA	< 0.2
Turbidity (NTU)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
<b>Action Level</b>	NA	> 73.5*
<b>Limit Level</b>	NA	> 78.2**
pH	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
<b>Action Level</b>	NA	> 7.0*
<b>Limit Level</b>	NA	> 7.1**
Suspended Solids (mg/L)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
<b>Action Level</b>	NA	> 148*
<b>Limit Level</b>	NA	> 159**
Ammonia Nitrogen (mg/L)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
<b>Action Level</b>	NA	> 30.91*
<b>Limit Level</b>	NA	> 32.20**
Zinc ( $\mu\text{g}/\text{L}$ )	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
<b>Action Level</b>	NA	> 242*
<b>Limit Level</b>	NA	> 252**

Notes: <sup>#</sup> Act as Control Station for the Impact Water Quality Monitoring.

\* Alternative Action Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 120% of upstream control station of same day.

\*\* Alternative Limit Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 130% of upstream control station of same day.

**Table 3-5 Action and Limit Levels for Ecology Monitoring**

Parameters	Action Level	Limit Level
Decrease in number of species of wetland birds of conservation importance from baseline.	20 – 40% of 2 species	> 40% of 2 species
Decrease in the total number of wetland birds of conservation importance from baseline.	20 – 40% of 1.2 individuals	> 40% of 1.2 individuals
Decrease in number of species of wetland fauna of conservation importance from baseline.	20 – 40% of 21 species	> 40% of 21 species
Decrease in the total number of wetland fauna of conservation importance from baseline.	20 – 40% of 44.99 individuals	> 40% of 44.99 individuals

#### 4.0 IMPACT MONITORING METHDOLOGY

##### MONITORING LOCATIONS

- 4.01 The 1-hour and 24-hour TSP monitoring was carried out at one designated station A10. Impact construction noise monitoring was undertaken at the designated location N10a. Stream water quality monitoring was undertaken at two designated locations (W9A & W9B). The ecology monitoring was conducted within the wetland area in according to the EM&A Manual of KT15. The descriptions of monitoring stations are presented in [Tables 4-1](#) and [Appendix C](#).

**Table 4-1 Location of Air Quality, Noise & Stream Water Quality Monitoring Station/Locations**

<b>Air Quality Station</b>	
A10	Village House in Tin Sam San Tsuen
<b>Construction Noise Location</b>	
N10*	Village House in Tin Sam San Tsuen
N10a	Village House in Tin Sam San Tsuen
<b>Water Quality Locations</b>	
W9A <sup>#</sup>	Tin Sam San Tsuen
W9B	Tin Sam San Tsuen

Note: \* The noise ambient condition within the victim area without significant change. Due to the accessibility, noise monitoring will undertake at N10a. Once the access is available, the impact noise monitoring will undertake at N10

# Act as control station in impact monitoring

- 4.02 The meteorological data during the quarter were obtained from the Lau Fau Shan Station of the Hong Kong Observatory (HKO).

##### MONITORING FREQUENCY AND PERIOD

###### 1-HOUR TSP MONITORING

- 4.03 The 1-hour TSP monitoring was conducted in designated station A10 in according to the EM&A Manual three times every 6 days. A total of **42** monitoring events were carried out in this quarter.

###### 24-HOUR TSP MONITORING

- 4.04 The 24-hour TSP monitoring was conducted at station A10 once every six days. A total of **14** monitoring events were carried out in this quarter.

###### NOISE MONITORING

- 4.05 Impact noise monitoring was undertaken at one location N10a once per week. A total of **14** monitoring events were carried out in this quarter.

###### STREAM WATER QUALITY MONITORING

- 4.06 The stream water quality monitoring was undertaken at two locations W9A & W9B two times per week and a total of **54** monitoring events were carried out.

###### ECOLOGY MONITORING

- 4.07 Bird survey should be conducted in monthly and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted in wet season (April to July inclusive) in the seasonal wetland area. Based on the EM&A Manual requirements, three monitoring and checking of construction activities adjacent to the wetland areas was undertaken on **24 April, 25 May and 22 June 2009**.

## 5.0 IMPACT MONITORING RESULTS

- 5.01 The impact EM&A program was carried out by the ET in compliance with the project specific EM&A Manual in this quarter. The impact monitoring schedules were presented in pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)). All the impact monitoring was undertaken in according to the monitoring schedule. Details of the monitoring results are present in the pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)).

### AIR QUALITY

- 5.02 No 1-hour/24-hour TSP Action or Limit Level exceedance was recorded in this quarter. Details of the impact air quality monitoring data were present in the pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)). Graphical plots of the 1-hour and 24-hour TSP monitoring results are shown in [Appendix D](#).
- 5.03 The meteorological data of this quarter are summarized in [Appendix E](#).

### CONSTRUCTION NOISE

- 5.04 No construction noise exceedance (Action/Limit Level) was recorded in this quarter. Details of the impact noise monitoring data were present in the pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)). Graphical plots of the monitoring data are presented in [Appendix D](#).

### STREAM WATER QUALITY

- 5.05 For stream water quality monitoring, 1 limit exceedance in ammonia nitrogen was recorded at Location W9B on 27 April 2009. Investigation report concluded that the exceedance was due to natural variation of the water quality, no corrective actions were therefore required. Details of the monitoring results were present in the pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)) and graphical plots for each parameter are presented in [Appendix D](#).

### ECOLOGY

- 5.06 Exceedances in ecology were recorded in this quarter. Details of the monitoring results were presented in the pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)) and a summary of the exceedance is presented in [Table 5-1](#). From the EM&A Manual Section 7.5.1(b), fauna survey is required during wet season (i.e. April to July) and thus fauna monitoring was undertaken in this period.

**Table 5-1 Summary of Exceedances in Ecology Impact Monitoring**

Month	Taxa	Parameters	Action Level	Limit Level
April 2009	Bird	Species no.	-	Breach
		Individual no.	-	-
	Fauna	Species no.		Breach
		Individual no.		Breach
May 2009	Bird	Species no.	-	Breach
		Individual no.	-	Breach
	Fauna	Species no.		Breach
		Individual no.		Breach
June 2009	Bird	Species no.	-	-
		Individual no.	-	-
	Fauna	Species no.		-
		Individual no.		-

5.07 Photographic records are scheduled in six-month intervals; the last photographic records were taken in recent month (June 2009) and the next photographic records will be scheduled in December 2009.

## 6.0 WASTE MANAGEMENT

6.01 The waste management was implemented by an Environmental Officer or Environmental Supervisor employed by the Contractor.

### RECORDS OF WASTE QUANTITIES

6.02 All types of waste arising from the construction work are classified into the following:

- Construction & Demolition (C&D) Material;
- Chemical Waste;
- General Refuse; and
- Excavated Soil.

6.03 Total quantities of waste for disposal in this quarter were summarized in **Tables 6-1 and 6-2**. Whenever possible, materials were reused on-site as far as practicable. The quantities of excavation soil for marine disposal in this quarter are summarized in **Table 6-3**.

**Table 6-1 Summary of Quantities of Inert C&D Materials**

Type of Waste	April 2009	May 2009	June 2009
Broken Concrete (Inert) (m <sup>3</sup> )	0	0	0
Reused in this Contract (Inert) (m <sup>3</sup> )	0	0	0
Reused in other Projects (Inert) (m <sup>3</sup> )	0	0	0
Disposal as Public Fill (Inert) (m <sup>3</sup> )	0	0	0

**Table 6-2 Summary of Quantities of C&D Wastes**

Type of Waste	April 2009	May 2009	June 2009
Recycled Metal (kg)	0	0	0
Recycled Paper/Cardboard Packing (kg)	0	0	0
Recycled Plastic (kg)	0	0	0
Chemical Wastes (kg)	0	0	0
General Refuses (kg)	0.007	0.0021	0

**Table 6-3 Summary of Excavated Soil for Marine Disposal**

Type of Waste	April 2009	May 2009	June 2009
Type 1 Materials (m <sup>3</sup> )	0	0	0
Type 2 Materials (m <sup>3</sup> )	0	0	0

## 7.0 SITE INSPECTION

- 7.01 According to the EM&A Manual Section 9.1.2, the environmental site inspection should be formulated by the Environmental Team Leader. The inspection dates of ET's weekly environmental site inspection and IEC monthly site audit were summaries in the [Table 7-1](#).

**Table 7-1 Date of Environmental Weekly Site Inspection and Monthly Audit**

Date of Inspection/Audit	Involved Parties
31 March 2009	ER, CCC and ET
8 April 2009	ER, CCC and ET
16 April 2009	ER, CCC and ET
24 April 2009*	ER, IEC, CCC and ET
30 April 09	ER, CCC and ET
6 May 09	ER, CCC and ET
13 May 09	ER, CCC and ET
20 May 09*	ER, IEC, CCC and ET
27 May 09	ER, CCC and ET
3 June 09	ER, CCC and ET
10 June 09	ER, CCC and ET
17 June 09*	ER, IEC, CCC and ET

Note: \*Monthly IEC site audit.

- 7.02 During the weekly site inspection or monthly auditing, there have no non-compliance but **17** observations were recorded in this quarter. The weekly ET site inspection and monthly IEC site audit checklists were present in the pervious Monthly EM&A Reports ([April 2009](#), [May 2009](#) and [June 2009](#)).

## 8.0 ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

### ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

- 8.01 No environmental complaint, summons and prosecution was received in this quarter. The statistical summary table of environmental complaint is presented in [Tables 8-1, 8-2 and 8-3](#).

**Table 8-1 Statistical Summary of Environmental Complaints**

Reporting Period	Environmental Complaints Statistics		
	Frequency	Cumulative	Complaint Nature
26 March – 25 April 2009	0	0	NA
26 April– 25 May 2009	0	0	NA
26 May– 25 June 2009	0	0	NA

**Table 8-2 Statistical Summary of Environmental Summons**

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Nature
26 March – 25 April 2009	0	0	NA
26 April– 25 May 2009	0	0	NA
26 May– 25 June 2009	0	0	NA

**Table 8-3 Statistical Summary of Environmental Prosecution**

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Nature
26 March – 25 April 2009	0	0	NA
26 April– 25 May 2009	0	0	NA
26 May– 25 June 2009	0	0	NA

## 9.0 IMPLEMENTATION STATUS OF MITIGATION MEASURES

9.01 CCC has been implementing the required environmental mitigation measures according to the EM&A Manual of KT15 - Mitigation Measures Implementation Schedule.

9.02 A summary of environmental mitigation measures generally implemented by CCC in this quarter is presented as follows:

### Water Quality

- Wastewater were appropriately treated by treatment facilities;
- Drainage channels were provided to convey run-off into the treatment facilities;
- Drainage systems were regularly and adequately maintained.

### Air Quality

- Vehicles were cleaned of mud and debris before leaving the site;
- Site vehicles were limited to within 8 km/hr;
- Public roads around the site entrance/exit had been kept clean and free from dust;
- Dust suppression measures were properly provided to reduce dust emission from stockpile.

### Noise

- Works and equipment were located to minimise noise nuisance from the nearest sensitive receiver;
- Idle equipments were either turned off or throttled down;
- Some of the Powered Mechanical Equipments were covered or shielded by appropriate acoustic materials if practicable.

### Waste and Chemical Management

- Wastes were properly segregated into inert and non-inert in appropriate containers/areas;
- Excavated materials were reused where practicable.
- A chemical waste storage area had been provided on site;

### General

- The site was generally kept tidy and clean.



## 10.0 CONCLUSION

10.01 The EM&A program in this quarter (26 March – 25 June 2009) were undertaken in compliance with the EM&A Manual for Channel KT15. A summary of environmental compliance of air, noise, stream water quality and ecology in this quarter are presented in **Table 10-1**.

**Table 10-1 Summary of the Exceedances for Impact Monitoring**

Env. Quality	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air Quality	1-hour TSP	0	Not Required for 0% Exceedance
	24-hour TSP	0	Not Required for 0% Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Exceedance
Stream Water	Dissolve Oxygen (DO)	0	Not Required for 0% Exceedance
	Suspended Solids (SS)	0	Not Required for 0% Exceedance
	Turbidity (NTU)	0	Not Required for 0% Exceedance
	pH	0	Not Required for 0% Exceedance
	Ammonia Nitrogen	0	Not Required for 0% Exceedance
	Zinc	0	Not Required for 0% Exceedance
Ecology	Decrease in the total number of species or individuals of wetland dependent bird from baseline	0	Not Required for 0% Exceedance
	Decrease in the total number of species or individuals of wetland fauna from baseline	0	Not Required for 0% Exceedance

10.02 No 1-hour or 24-hour TSP exceedance of the Action/Limit Level was recorded in this quarter.

10.03 All measured daytime construction noise levels were below the Limit Level and no complaint was received in this quarter.

10.04 For water quality monitoring, 1 limit exceedance in ammonia nitrogen was recorded at Location W9B on 27 April 2009. Investigation report concluded that the exceedance was due to natural variation of the water quality, no corrective actions were therefore required.

10.05 Faunal monitoring was conducted during the reporting quarter. Non-compliances with the ecological criteria were found during the quarter (24 April 2009 and 25 May 2009). No intrusions of construction activities into the wetland areas or adverse impact were observed (24 April 2009, 25 May 2009 and 22 June 2009). Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird was not caused by the project.

10.06 No environmental complaint, summons or prosecution was received in this quarter.

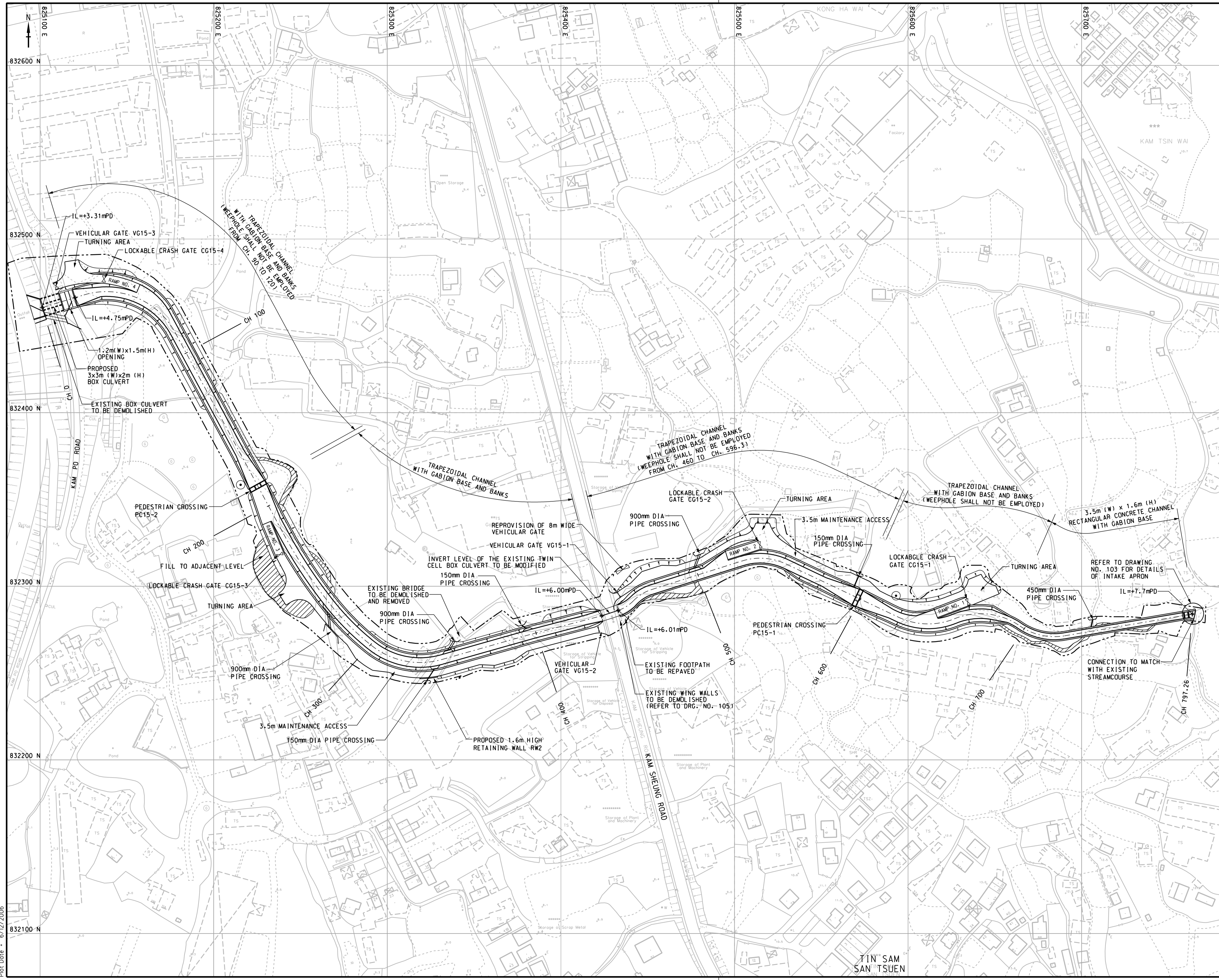
## RECOMMENDATIONS

10.07 Based on the weekly ET site inspection and monthly IEC site audit, no non-compliance but 17 observations were recorded in this quarter. Details of the observations were present in the pervious Monthly EM&A Reports (April 2009, May 2009 and June 2009). In general, the environmental performance of proposed channel KT15 was acceptable.

10.08 The ET will continue to implement the EM&A program and audit the effective mitigation measures implement by the Contractor.

## **Appendix A**

### **Project Site Layout**



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NOTES :  
 1. REFER TO DRAWING NO. 020 FOR NOTES AND LEGENDS.

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial		SFL	KIL	MK	KIL
Date	12/05	12/05	12/05	12/05	12/05
Approved					

CONTRACT NO. DG200602

Contract title  
 YUEN LONG, KAM TIN, NGAU TAM MEI AND TIN SHUI WAI DRAINAGE IMPROVEMENTS, STAGE 1, PHASE 2B - CHEUNG CHUN SAN TSUEN AND KAM TSIN WAI

Drawing title  
 CHANNEL KT15 GENERAL LAYOUT PLAN

Drawing no.	Scale
021	1:1000 A1 1:2000 A3

香港特別行政區政府渠務署  
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT

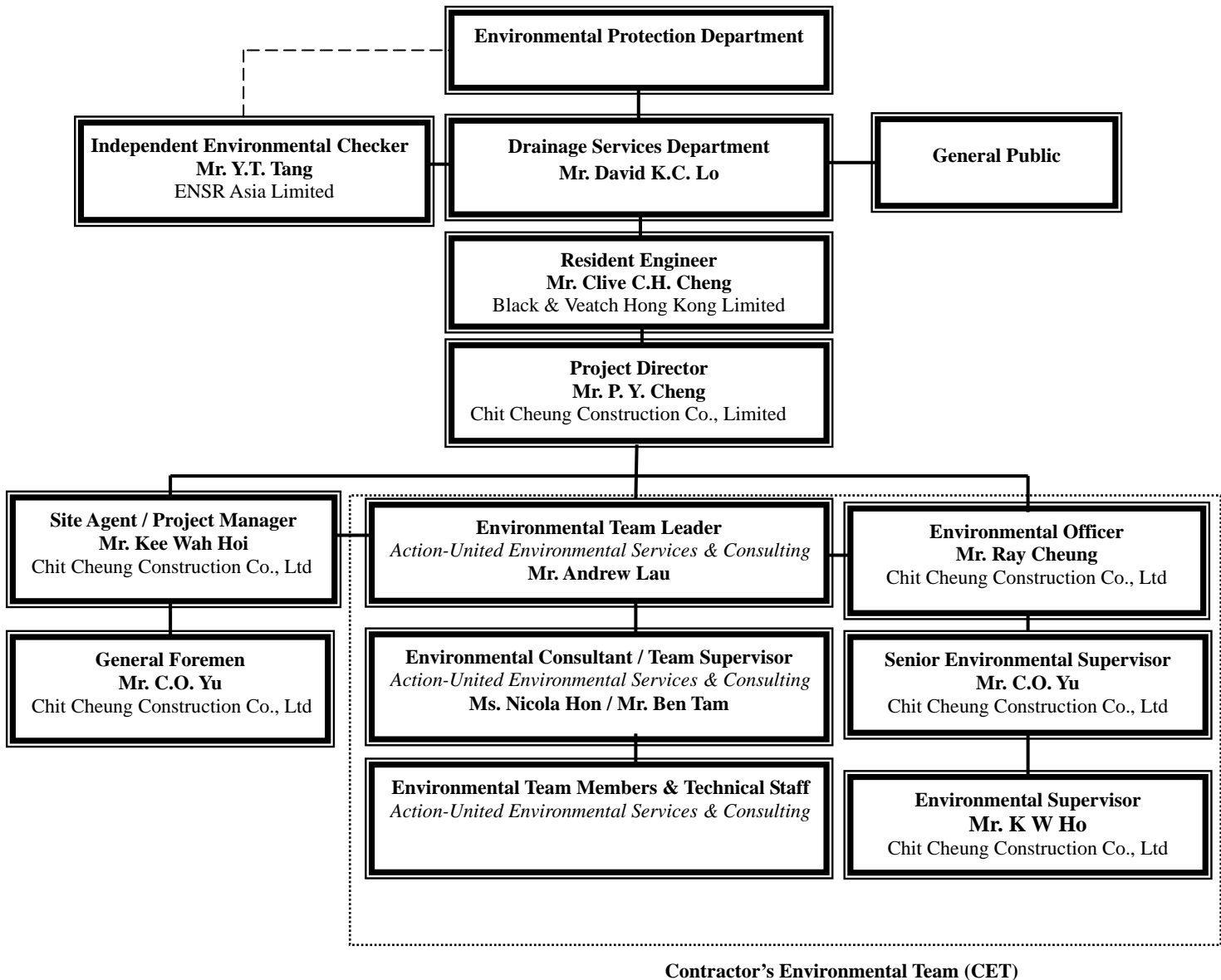
BLACK & VEATCH HONG KONG LIMITED  
 博威工程顧問有限公司

Plot Date : 6/12/2006

## **Appendix B**

### **Environmental Organization Structure**

### Environmental Organization Structure



**Contact Details of Key Personnel**

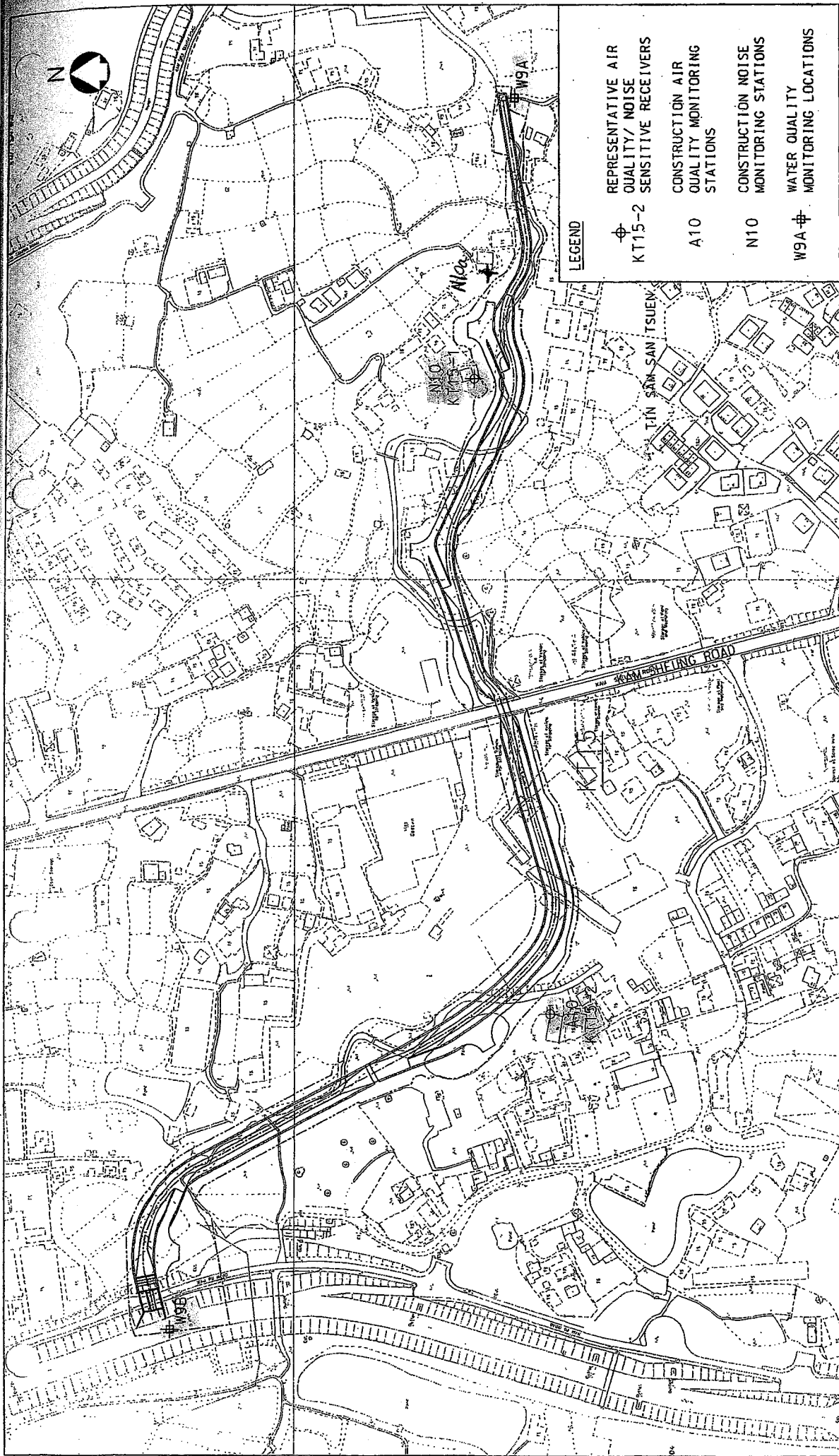
Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
DSD	Employer	Mr. David K.C. LO	2594-7254	2827-8526
B&V	Engineer	Mr. Kelvin N.F. LAU	2601-1000	2601-3988
B&V	Engineer's Representative	Mr. Clive C.H. CHENG	2478-9161	2478-9396
ENSR	Independent Environmental Checker	Mr. Y.T. Tang	3105-8537	2891-0305
CCC	Project Director	Mr. P.Y. CHENG	9023-4821	2403-1162
CCC	Project Manager	Mr. K. W. Hoi	9127-2861	2479-1365
CCC	Site Agent	Mr. K. W. Hoi	9127-2861	2479-1365
CCC	Site Engineer	Mr. Jimmy CHAN	9234-8632	2479-1365
CCC	Environmental Officer	Mr. Ray Cheung	9257-9111	2479-1365
CCC	Senior Environmental Supervisor	Mr. C. O. Yu	9026-9501	2479-1365
CCC	Environmental Supervisor	Mr. K W Ho	-	2479-1365
CCC	Safety Officer	Mr. C.C Lui	6086-4658	2479-1365
AUES	Environmental Team Leader	Andrew Lau	2959-6059	2959-6079
AUES	Ecologist	Vincent Lai	9406-9784	2959-6079
AUES	Environmental Team Supervisor	Ben Tam	2959-6059	2959-6079
DSD	Employer	Mr. David K.C. LO	2594-7254	2827-8526

Legend:

DSD (Employer)	-	Drainage Services Department
B&V (Engineer)	-	Black & Veatch Hong Kong Limited
CCC (Contractor)	-	Chit Cheung Construction Company Limited.
ENSR (IEC)	-	ENSR Asia (HK) Ltd.
AUES (ET)	-	Action-United Environmental Services & Consulting

## **Appendix C**

### **Locations of Designated Monitoring Station/Locations/Area**



**LEGEND**

- ⊕ REPRESENTATIVE AIR QUALITY/ NOISE SENSITIVE RECEIVERS
- KT15-2 CONSTRUCTION AIR QUALITY MONITORING STATIONS
- A10 CONSTRUCTION NOISE MONITORING STATIONS
- N10 WATER QUALITY MONITORING LOCATIONS
- W9A ⊕ CONSTRUCTION NOISE MONITORING STATIONS

Figure No.	ATT4-4.3	Revision	-
Reference	-	File Name	3820470201-137.DGN
Prepared	WYC	Checked	MC
Date	DEC. 2002	Scale	1 : 2000

**CONSTRUCTION PHASE AIR QUALITY/NOISE/WATER QUALITY  
 MONITORING LOCATIONS AT KT15**

Title :

YUEN LONG, KAM TIN,  
 NGAU TAM MEI AND TIN SHUI WAI  
 DRAINAGE IMPROVEMENT, STAGE 1, PHASE 2B



**BLACK & VEATCH HONG KONG LIMITED**  
 博威工程顧問有限公司



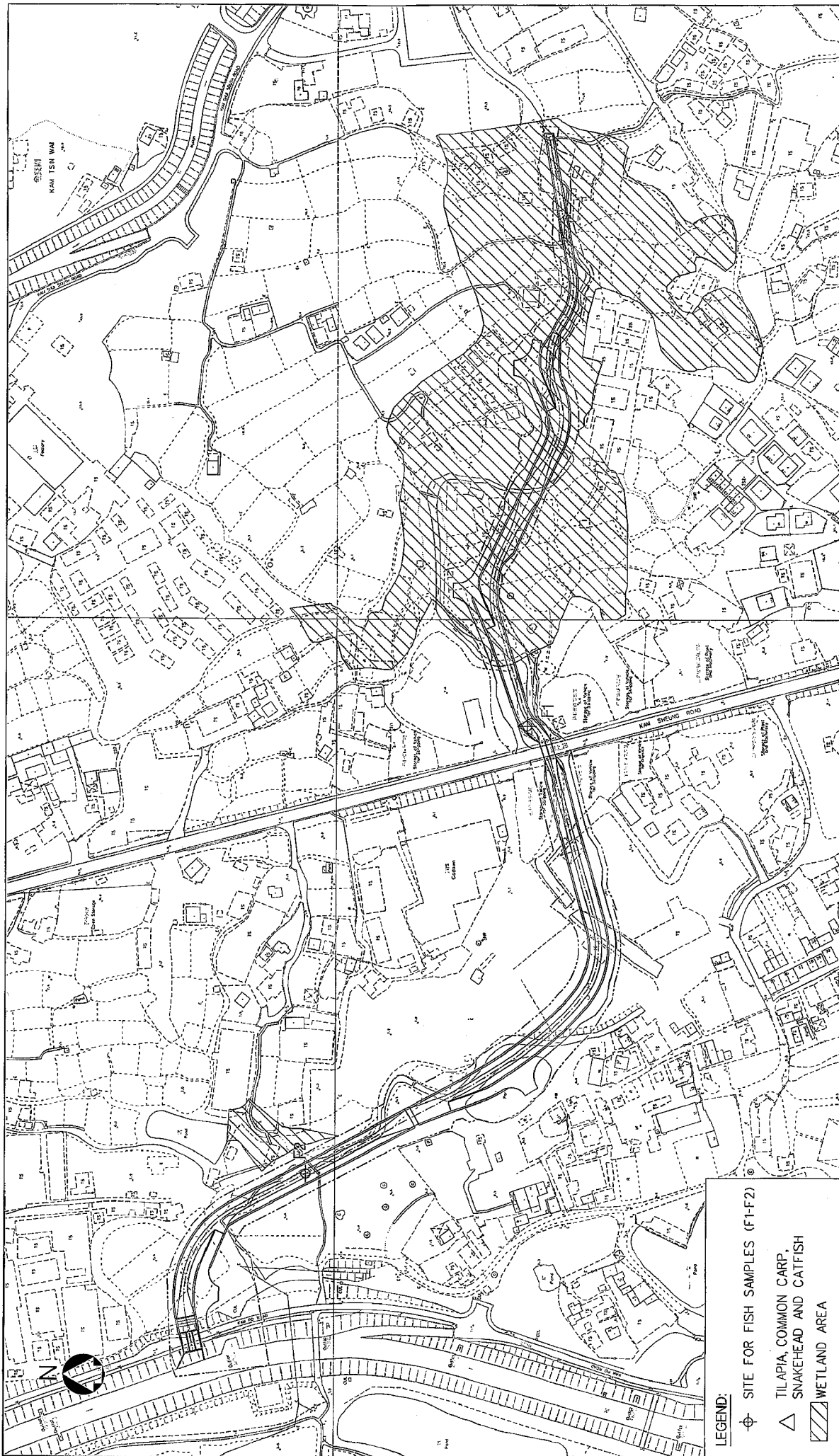



Figure No.	3.3	Revision	0
Reference		File Name	3820470201-114.DGN
Prepared	AEC	Checked	WYC
Date	MAR. 2003	Scale	1 : 2000

ECOLOGICAL MONITORING AREA KT15

Title :

- LEGEND:**
- ⊕ SITE FOR FISH SAMPLES (F1-F2)
  - △ TILAPIA, COMMON CARP, SNAKEHEAD AND CATFISH
  - ▨ WETLAND AREA

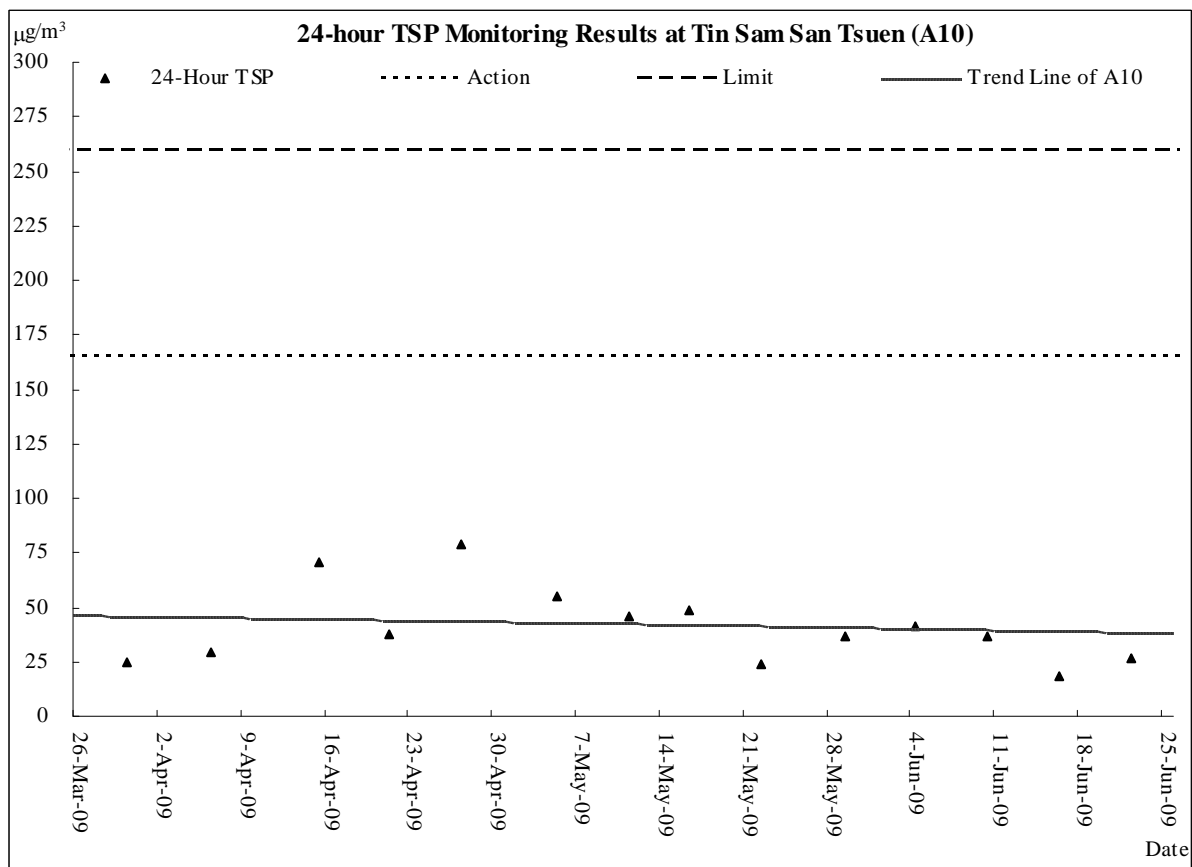
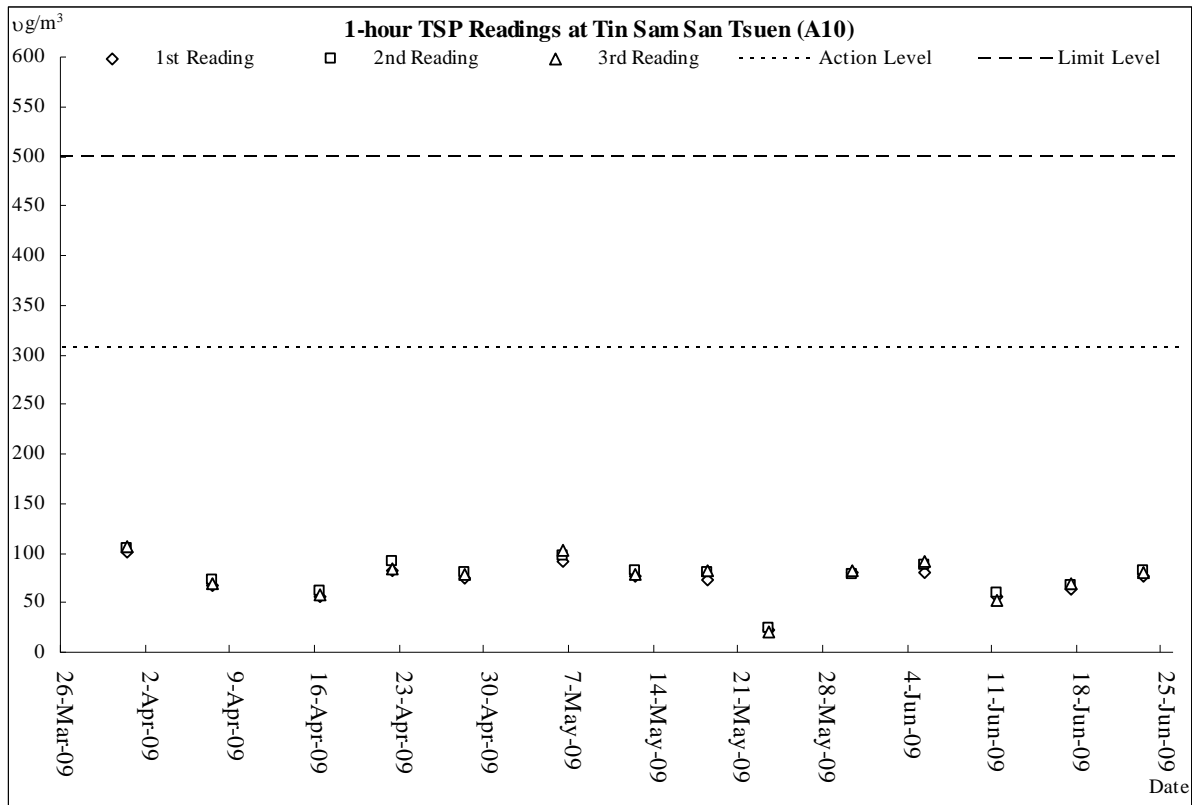
YUEN LONG, KAM TIN,  
 NGAU TAM MEI AND TIN SHUI WAI  
 DRAINAGE IMPROVEMENT, STAGE1, PHASE 2B

 **BLACK & VEATCH HONG KONG LIMITED**  
 博威工程顧問有限公司

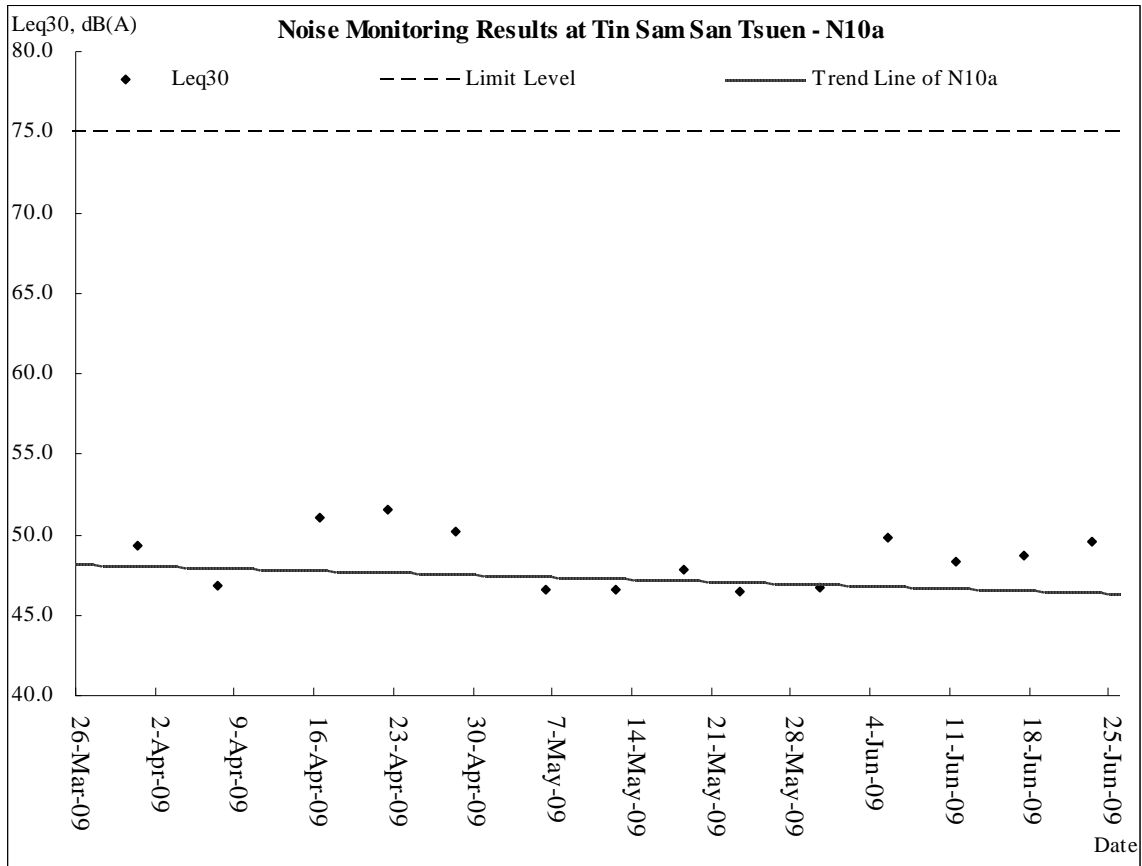
## **Appendix D**

# **Graphical Plots of Air Quality, Construction Noise & Stream Water Quality Monitoring**

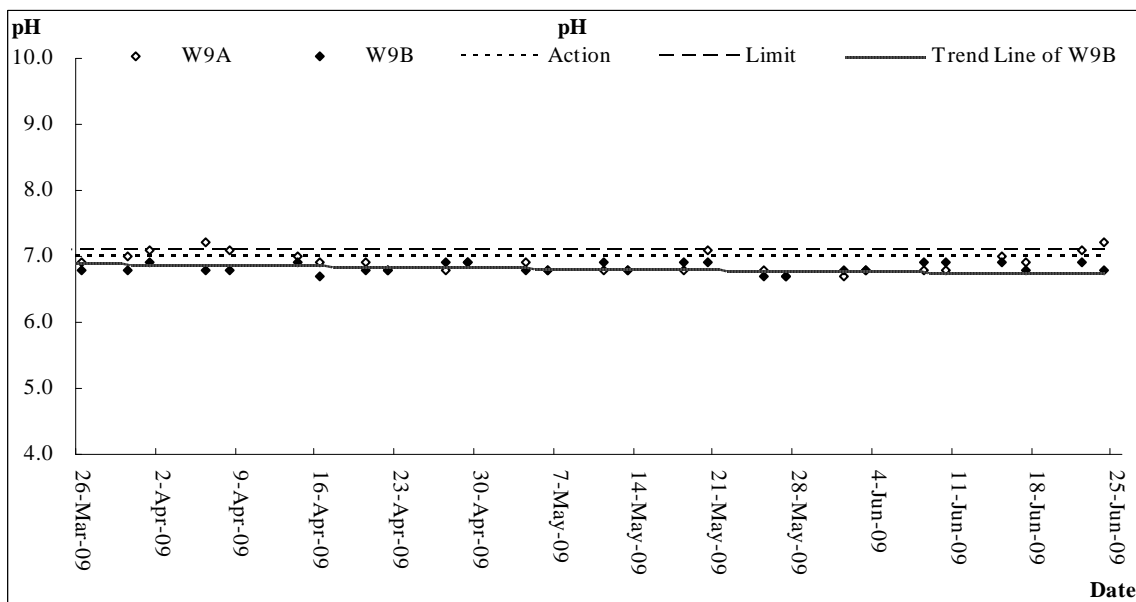
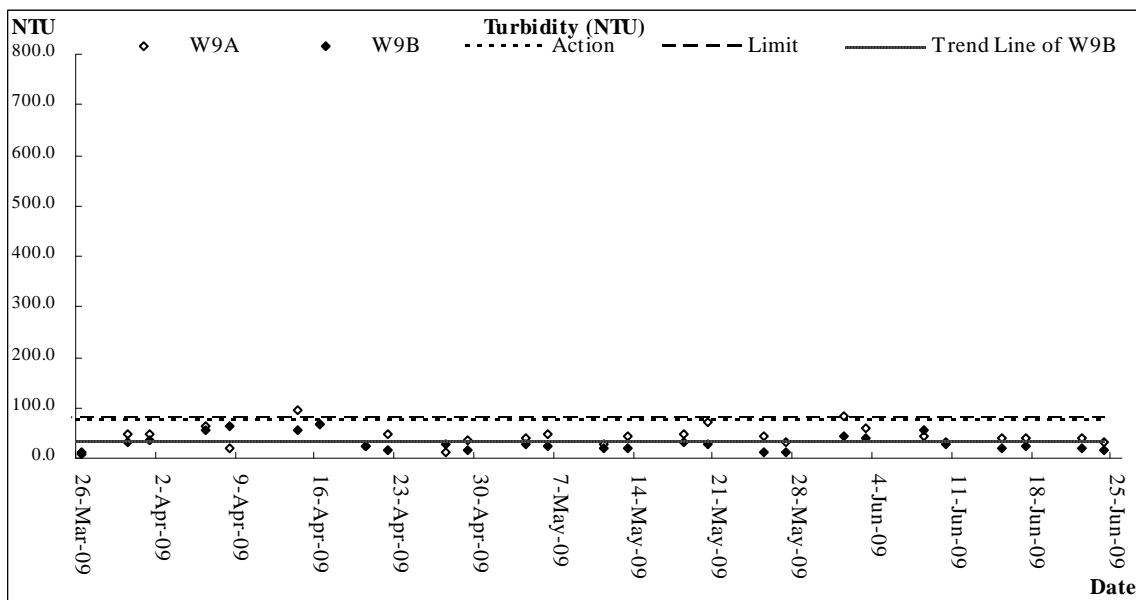
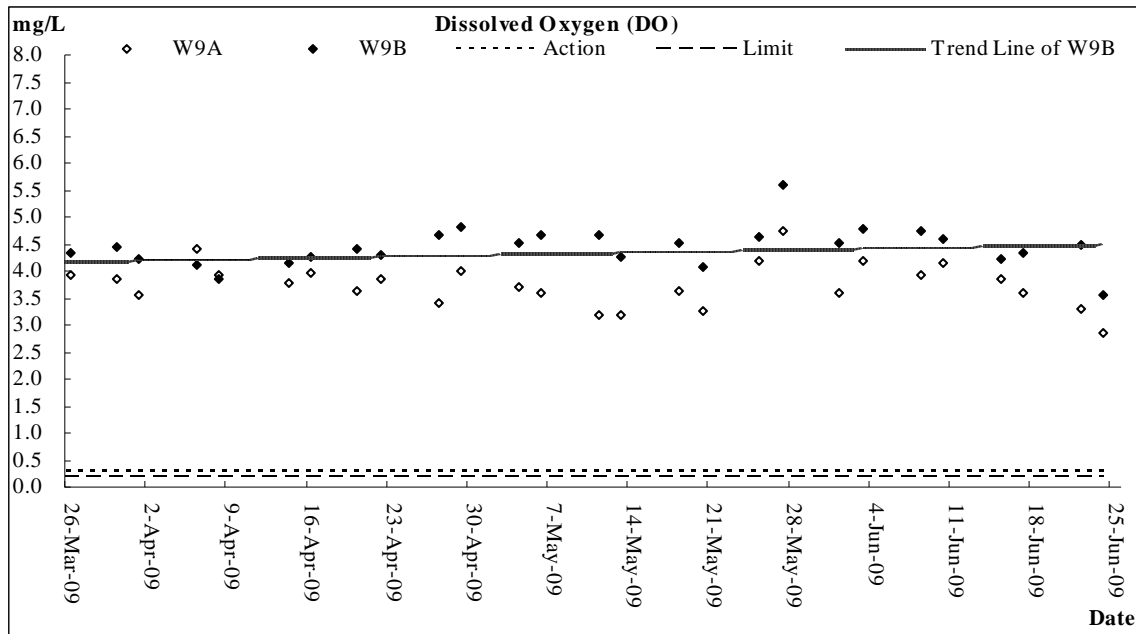
**Air Quality**

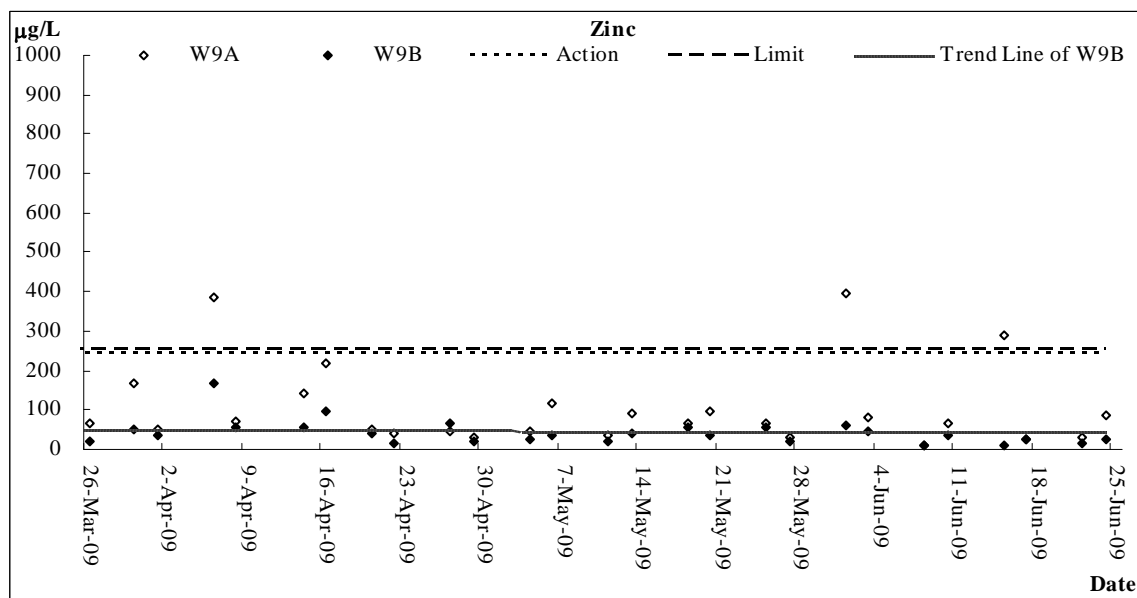
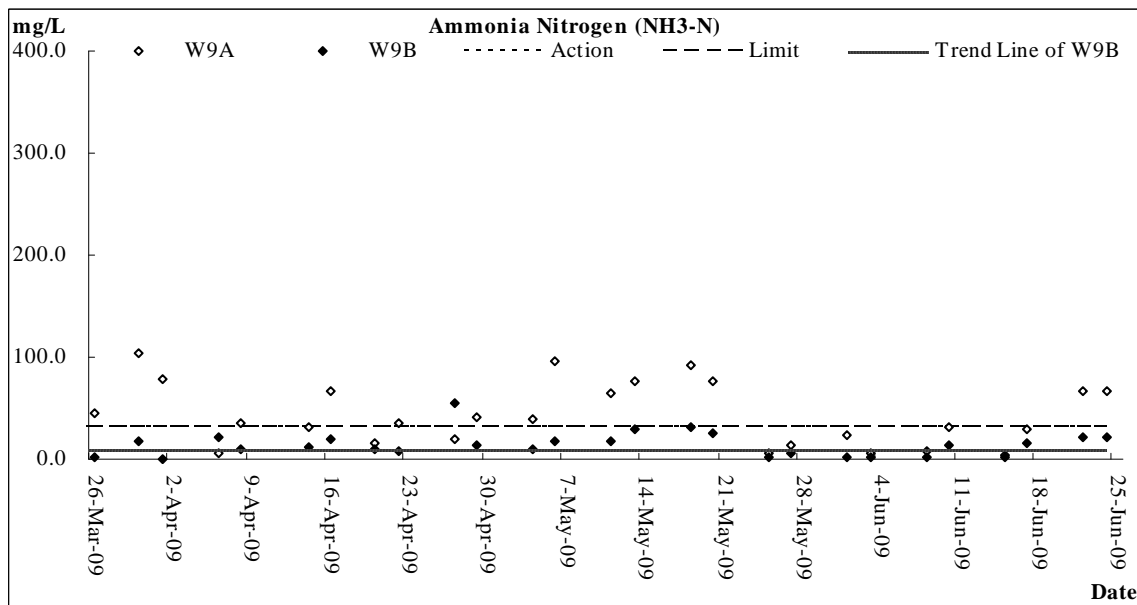
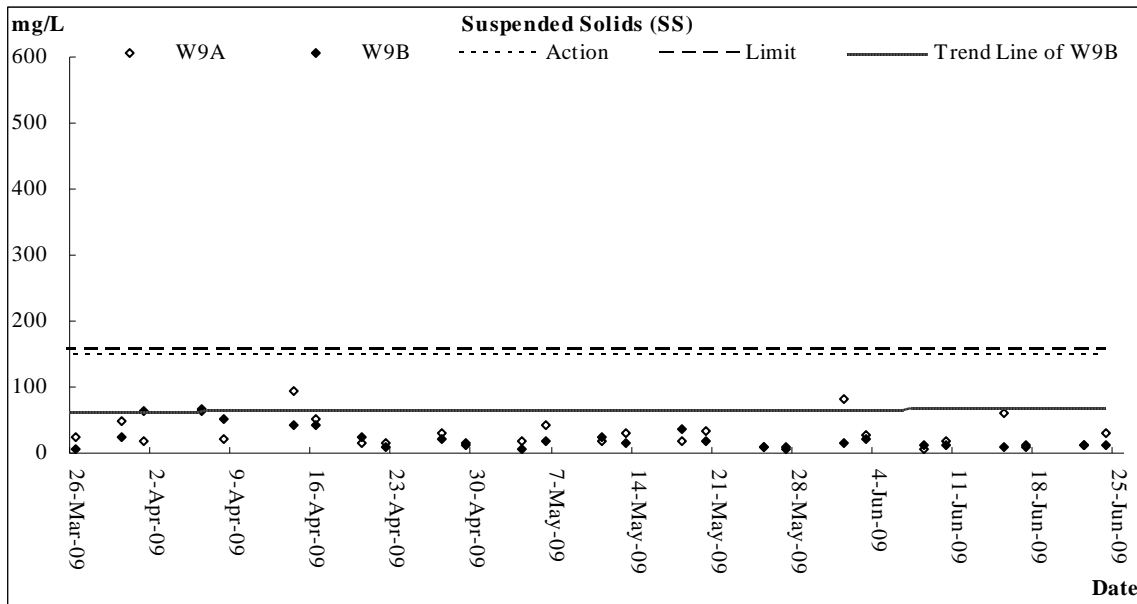


**Construction Noise**



### Stream Water Quality





## **Appendix E**

### **Meteorological Data**

**Meteorological Data Extracted from HKO in the Reporting Quarter**

Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-Mar-09	Thu	cloudy/rain/moderate/fresh	Trace	18.1	11.5	76.5	E/NE
27-Mar-09	Fri	cloudy/rain/mist/moderate/fresh	10.4	20.6	14	84.5	E
28-Mar-09	Sat	cloudy/fog/rain/thunderstorm/moderate	0.6	24.4	10	86.2	E/NE
29-Mar-09	Sun	cloudy/rain/fresh/strong	2.6	19.1	11.5	84.5	E/NE
30-Mar-09	Mon	sunny intervals/cloudy/fresh/strong	Trace	18.7	12.5	78.5	E/NE
31-Mar-09	Tue	sunny periods/cloudy/intervals/fresh	Trace	20	12	75	E/NE
1-Apr-09	Wed	sunny periods/dry/cloudy/moderate/fresh	0	21.8	11.2	68.5	E/NE
2-Apr-09	Thu	cloudy/dry/rain/fresh/strong	Trace	19.7	17.2	58.5	E
3-Apr-09	Fri	cloudy/sunny intervals/fresh/strong	Trace	20.4	16.5	62.5	E
4-Apr-09	Sat	Holiday					
5-Apr-09	Sun	cloudy/moderate/fresh	0	23.7	14	68.5	W/NW
6-Apr-09	Mon	cloudy/rain/moderate	8.1	18.2	13	76	E/NE
7-Apr-09	Tue	cloudy/dry/moderate	0.6	17.7	9.2	78.5	E/NE
8-Apr-09	Wed	cloudy/sunny periods/moderate/fresh	0	21.6	8.5	72.2	E/NE
9-Apr-09	Thu	dry/sunny periods/fresh/strong	0	22.7	14	57	E
10-Apr-09	Fri	Holiday					
11-Apr-09	Sat	Holiday					
12-Apr-09	Sun	Holiday					
13-Apr-09	Mon	Holiday					
14-Apr-09	Tue	fine/hazy/isolated showers/light winds	0	25.4	10.5	82	W/SW
15-Apr-09	Wed	sunny periods/cloudy/a few showers/moderate/fresh	4.3	25	10	74.5	E/NE
16-Apr-09	Thu	sunny periods/showers/moderate	2.9	23	23.5	76.2	E/NE
17-Apr-09	Fri	haze/sunny intervals/cloudy/moderate/fresh	0	24.5	7.5	78	E/NE
18-Apr-09	Sat	cloudy/a few showers/fresh/strong	34.1	22.2	17.5	71	E/SE
19-Apr-09	Sun	cloudy/rain/strong	4.5	25.3	21	86	S/SW
20-Apr-09	Mon	sunny periods/cloudy/moderate	0	27.3	13.7	76	W/SW
21-Apr-09	Tue	cloudy/moderate	1.5	26.7	11.5	55.5	E/NE
22-Apr-09	Wed	cloudy/rain/fresh/strong	Trace	24.1	16.5	63	E
23-Apr-09	Thu	cloudy/rain/fresh/strong	0.2	25.1	20.5	70	E
24-Apr-09	Fri	cloudy/mist/moderate	Trace	25.3	11.7	78	E/SE
25-Apr-09	Sat	overcast/rain/squally thunderstorm/moderate/fresh	43	21.4	15	81.5	E/NE



Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-Apr-09	Sun	cloudy/sunny intervals/moderate/fresh	4.5	19	11	87	E/SE
27-Apr-09	Mon	sunny periods/cloudy/moderate/fresh	0	22.7	15.2	67	E/NE
28-Apr-09	Tue	fine/dry/fresh/strong	0	23.3	19.5	48.5	E
29-Apr-09	Wed	sunny periods/cloudy/moderate/fresh	0	23.2	16.2	44	E/SE
30-Apr-09	Thu	cloudy/sunny periods/moderate/fresh	Trace	24.3	17	61	E
1-May-09	Fri	Holiday					
2-May-09	Sat	Holiday					
3-May-09	Sun	Holiday					
4-May-09	Mon	cloudy/sunny periods/moderate	0.3	25.1	12.5	71	E
5-May-09	Tue	fine/dry/moderate/fresh	0	24.9	11.2	66	E/NE
6-May-09	Wed	fine/dry/moderate/fresh	0	24.5	13	59	E/NE
7-May-09	Thu	sunny/very dry/fine/moderate/fresh	0	24.6	15	45.7	E
8-May-09	Fri	fine/dry/moderate/fresh	0	25.2	12	49.7	E/SE
9-May-09	Sat	fine/dry/cloudy/moderate	Trace	25.4	12.5	65	E/NE
10-May-09	Sun	cloudy/sunny periods/showers/moderate	Trace	27.2	11.5	67.2	E/SE
11-May-09	Mon	sunny periods/cloudy/moderate	0	26.8	6	76.5	E/NE
12-May-09	Tue	fine/hot/light winds	0	26.6	12.5	75.5	S/SE
13-May-09	Wed	fine/hot/cloudy/light winds/moderate	Trace	27.4	13	74.5	S/SE
14-May-09	Thu	cloudy/sunny intervals/fresh	T	27.3	15	69.3	E/SE
15-May-09	Fri	sunny periods/cloudy/moderate	0	27.6	10.5	69	E/NE
16-May-09	Sat	cloudy/rain/moderate/	0.1	26.4	11.5	65	S/SE
17-May-09	Sun	sunny periods/a few showers/moderate	0.2	28.3	14	78	W/SW
18-May-09	Mon	sunny periods/hot/moderate	0	29.6	10.5	79.5	W/SW
19-May-09	Tue	cloudy/showers/sunny periods/moderate	0.3	30.3	14.5	67	S/SE
20-May-09	Wed	cloudy/showers/sunny periods/moderate	10.9	26.9	19.5	79.5	S/SE
21-May-09	Thu	sunny intervals/shower/squally thunderstorm/moderate	1.4	27.5	3	83	E/SE
22-May-09	Fri	cloudy/a few showers/squally thunderstorm/moderate	2.3	28.8	12.7	73.5	E/NE
23-May-09	Sat	overcast/rain/squally thunderstorm/fresh/strong	62.3	25.2	16.5	76.2	E/NE
24-May-09	Sun	cloudy/showers/squally thunderstorm/showers/strong	61.2	24.8	18.5	91.7	E/NE
25-May-09	Mon	showers/squally thunderstorm/showers/fresh	29.8	25.5	18.5	87	E/NE

Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-May-09	Tue	cloudy/a few showers/moderate	20.2	26.2	12.7	86	E
27-May-09	Wed	cloudy/showers/sunny intervals/moderate	39.2	28	12	78.5	E/NE
28-May-09	Thu	Holiday					
29-May-09	Fri	cloudy/rain/moderate/fresh	5.5	21.8	14.5	78	E/NE
30-May-09	Sat	cloudy/sunny periods/dry/moderate	0	24.8	10	73.5	E
31-May-09	Sun	fine/light winds	0	26.6	13.7	65	S/SE
1-Jun-09	Mo	fine/light winds	0	27.3	8	67	S/SE
2-Jun-09	Tue	sunny periods/isolated	Trace	27	14.5	67.7	S/SE
3-Jun-09	Wed	cloudy/showers/squally	10.4	28.5	20	79.5	S/SE
4-Jun-09	Thu	cloudy/sunny periods/showers/moderate	36.8	27.5	27.5	79.2	W/NW
5-Jun-09	Fri	hot/fine/dry/light winds	0	28.1	15	66.5	W/NW
6-Jun-09	Sat	fine/day/hot/light winds	0	28.5	10.5	68	S/SE
7-Jun-09	Sun	cloudy/a few showers/moderate/fresh	Trace	28.1	16.5	63.5	S/SE
8-Jun-09	Mo	sunny intervals/a few	11.2	27.8	16.5	67.5	S/SE
9-Jun-09	Tue	cloudy/rain/squally	16.5	27.1	16	76.7	S/SE
10-Jun-09	Wed	cloudy/showers/squally	Trace	28.4	11.5	81.7	S/SE
11-Jun-09	Thu	overcast/rain/squally thunderstorm/moderate	49.2	25.8	11.5	86	S/SE
12-Jun-09	Fri	cloudy/rain/squally thunderstorm/moderate	7.9	26.5	26.5	82	E/SE
13-Jun-09	Sat	cloudy/squally thunderstorm/fresh	Trace	28.6	16	87	E/SE
14-Jun-09	Sun	cloudy/scattered showers/moderate/fresh	24	28.3	13.7	78.2	SE
15-Jun-09	Mo	cloudy/rain/squally thunderstorm/sunny	17.3	28.4	10.7	79.5	E
16-Jun-09	Tue	cloudy/scattered showers/squally	6.1	27	13.5	85.5	E/NE
17-Jun-09	Wed	sunny periods/isolated	Trace	28.8	9.7	81	E/NE
18-Jun-09	Thu	fine/hot/haze/light winds	0	28.6	10.2	79	S/SE
19-Jun-09	Fri	isolated showers/thunderstorm/sunny	5.7	28.9	12.5	75.5	S/SE
20-Jun-09	Sat	sunny periods/isolated	0	30	10.5	77	E/NE
21-Jun-09	Sun	cloudy/moderate/fresh/sunny intervals	0	29.3	13.7	77.5	W/SW
22-Jun-09	Mo	cloudy/scattered showers/squally	15.7	30.1	23.7	78	S/SW
23-Jun-09	Tue	hot/a few showers/squally	12.5	28.9	17.5	82.5	S/SW
24-Jun-09	Wed	cloudy/showers/squally	8.5	29.5	15.5	82.5	W/SW
25-Jun-09	Thu	a few showers/squally	6.6	29.5	13.5	76.7	S/SE

## **Appendix F**

### **Response to Comments**

Contract No. DC/2006/02

Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai  
KT15 – Quarterly EM&A Summary Report for 26 March 2009 – 25 June 2009 (R1361 Version 2) submitted on 14 July 2009  
Response to IEC's comments [Received from e-mail on 16 July 2009]

Items	Section / Paragraph	Comments	Response to Comments
1	ES15./Section 10.05	Please rewrite the sentence as “No intrusions of construction activities into the wetland areas or adverse impacts were observed (24 April 2009, 25 May 2009 and 22 June 2009).	Done
2	Section 5.07	Please rewrite the sentence as “...the last photographic records were taken in recent month (June 2009) and..”.	Done.
3	Appendix F	Please update on the submission date of IEC's comments.	Amended.

**Contract No. DC/2006/02**

**Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai  
 KT15 – Quarterly EM&A Summary Report for 26 March 2009 – 25 June 2009 (R1361 Version 1) submitted on 9 July 2009  
 Response to IEC's comments [Received from e-mail on 13 July 2009]**

Items	Section / Paragraph	Comments	Response to Comments
1	ES05.	- No Limit Level exceedances were recorded for number of species of wetland birds on 22 June 2009 and total number of wetland birds on 24 April 2009.  - Please update the table with records on Action/Limit Level exceedances for wetland fauna.	The table has updated.
2	ES09./Table 2-1	Please update the table with separation on construction activities for each reporting periods as some of the listed construction activities were not conducted during all reporting periods.	Done.
3	ES15./Sectin 10.05	Please rewrite the sentence as “Non-compliances with the ecological criteria were found during the quarter (24 April 2009 and 25 May2009).”  Please add the dates of observations were recorded as for easy reference.	Amended.
4	ES16./Table 10-1	Please update the sections on “decrease in the total number of species or individuals of wetland fauna from baseline.”. No “N/A” should be provided as monitoring were conducted for the reporting quarter.  There is a typo in the table. It should be “wetland fauna from baseline”.	Done.
5	Table 3-5	Please add the Action and Limit Levels for wetland fauna from baseline.	Done.
6	Table 5-1	<ul style="list-style-type: none"> <li>• For April 2009, no “Limit Level breaching” should be recorded on individual number of wetland dependent birds.</li> <li>• For May 2009, “Limit Level breaching” should be recorded on individual number of wetland dependent birds.</li> <li>• For June 2009, no “Limit Level breaching” should be recorded for both wetland dependent birds and fauna on species number and individual numbers.</li> </ul>	Amended.
7	Section 5.07	Please update the text with correct date of photographic records and date of next photographic records.	Done.
8	Table 6-2	0.007kg of general refuse shall be recorded in April 2009 rather than June 2009.	Noted.
9	Section 7.02 and 10.07	17 observations shall be recorded in the reporting quarter.	Noted.
10	Table 8-1, 8-2, 8-3	Please keep consistency on the period presentation format.	Noted

Items	Section / Paragraph	Comments	Response to Comments
11	Appendix B	Please keep consistency between the environmental organization structure and contact details of key personnel.	Done.
12	Appendix C	The monitoring location plan for air, noise and water quality impact is missing	Done.