## Contract No. DC/2002/06

## Construction of Yuen Long Bypass Floodway

Environmental Monitoring and Audit Monthly Report (Version 1.0)

November 2006

Certified By

(Environmental Team Leader)

#### REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

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#### ABBREVIATION AND ACRONYM

AL Levels Action and Limit Levels

DSD Drainage Services Department

E / ER Engineer/Engineer's Representative

EIA Environmental Impact Assessment

EM&A Environmental Monitoring and Audit

EMIS Environmental Mitigation Implementation Schedule

EP Environmental Permit

FEP Further Environmental Permit

EPD Environmental Protection Department

ET Environmental Team

HVS High Volume Sampler

IEC Independent Environmental Checker

RH Relative Humidity

TSP Total Suspended Particulates

QA/QC Quality Assurance / Quality Control

SLM Sound Level Meter

WMP Waste Management Plan

#### **EXECUTIVE SUMMARY**

#### A) Introduction

This is the monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the project "Construction of Yuen Long Bypass Floodway" (the Project). This report documents the findings of EM&A Works conducted in November 2006 (26<sup>th</sup> of each month as the cut-off day, i.e. 26<sup>th</sup> October 2006 to 26<sup>th</sup> November 2006).

The construction activities undertaken in the reporting month included:

- Paving and road works; and
- Landscape works

#### **B)** Environmental Monitoring Works

Environmental monitoring for the Project was performed regularly as stipulated in the Updated EM&A Manual and the results were checked and reviewed. Site audits were conducted once per week. Implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked. The major construction activities for the Project were substantially completed at the end of November 2006 and the outstanding minor construction activities, which would not cause any major environmental impacts, remained. The EM&A program was terminated with approval on 27<sup>th</sup> November 2006.

## B1 Air Quality

#### 1-hour TSP Monitoring

The 1-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.

#### 24-hour TSP Monitoring

The 24-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.

#### Construction Noise

Construction noise monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.

#### Water Quality

Water quality monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.

#### C) Environmental Licensing and Permitting

License/Permits granted to the Project include the Further Environmental Permit (FEP), Variation of Environmental Permit (VEP), Wastewater Discharge License, Chemical Waste Producer Registration and Construction Noise Permit (CNP). The FEP for the Project was attached in the monthly EM&A report for March 2003. The VEP were attached in the monthly EM&A report for May 2003. The Chemical Waste Producer Registration was attached in the monthly EM&A report for January 2004. The Wastewater Discharge License was attached in the monthly EM&A report for June 2004.

#### D) Complaints and Prosecutions

No environmental prosecution and complaint was received in the reporting month.

#### E) Future Key Issues

No more environmental issues are anticipated for the Project since all major construction site activities have been completed. The EM&A program has been proposed to be terminated and was approved by the IEC on 24<sup>th</sup> November 2006.

#### 1. INTRODUCTION

#### **Background**

- 1.1 Serious flooding has occurred in and around Yuen Long Town at least seven times over the last fifteen years. Government studies including the Northwest New Territories (NWNT) Base Strategy Studies, TELADFLOCCOSS I and II and the NWNT Village Flood Protection Study have identified the major causes of flooding and recommended appropriate mitigation measures. The studies identified that the capacity of the Yuen Long Nullah drainage system was inadequate mainly due to rapid urban growth over the last 20 years which has reduced the flood plain storage capacities and increased runoff volumes. In addition Yuen Long Town has a relatively low ground level and the drainage design standards and methods used at the time were less rigorous than present design requirements. The studies recommended the construction of a Bypass Floodway as the most cost-effective option for providing additional drainage capacity to cater for present needs and to provide additional capacity for new development in the area to the south of Yuen Long.
- 1.2 The Yuen Long Bypass Floodway is therefore to be designed to divert part of the flows entering the Yuen Long Drainage system from the south of Yuen Long into the Kam Tin River Floodway, which is at present under construction, to reduce the risk of flooding in Yuen Long Town. The Project site layout is shown in *Figure 1.1*.
- 1.3 The Project works mainly comprise the construction and operation of a drainage channel (YLBF) from the south side of Yuen Long to the Kam Tin River. The Project works was scheduled to commence in March 2003.
- 1.4 According to the EIAO, this Project is a designated project. The Further Environmental Permit (FEP) No. FEP 01-075-2003 was issued on 6 February 2003 and Variation of Environmental Permit (EP-01/075/2003/A) was issued on 19 May 2003 for this project to the Sun Fook Kong (Civil) Limited (hereinafter called the "Contractor") as Permit Holder. An Updated Environmental Monitoring and Audit Manual (Updated EM&A Manual) was prepared to fulfill requirement stipulated in the Particular Specification Clause 1.106(6).
- 1.5 Cinotech Consultants Limited was commissioned by Sun Fook Kong (Civil) Limited to provide professional services for "Contract No. DC/2002/06 Environmental Team (ET) for Construction of the Yuen Long Bypass Floodway". This Environmental Monitoring and Audit Reports were prepared by Cinotech for the Project prior to the commencement of any construction activity for the Yuen Long Bypass Floodway in accordance with the Updated EM&A Manual.

#### **Project Organizations**

- 1.6 Different parties with different levels of involvement in the project organization include:
  - Engineer or Engineer's Representative (E/ER) Drainage Services Department (DSD)
  - Environmental Team (ET) Cinotech Consultants Limited
  - Independent Environmental Checker (IEC) CH2M HILL Hong Kong Limited
  - Contractor Sun Fook Kong (Civil) Ltd.
- 1.7 The responsibilities of respective parties are detailed in Section 1 of the Updated EM&A

Manual and the project organization chart is presented in *Figure 1.2*.

1.8 The key contacts of the Project are shown in *Table 1.1*.

**Table 1.1 Key Project Contacts** 

Party	Name	Role	Phone No.	Fax No.
DSD Mr. Nelson IP En		Engineer Representative	2594 7576	2827 8700
	Dr. Priscilla Choy	ET Leader	2151 2083	3107 1388
ET	Mr. Kenneth Lam	Project Manager	2151 2078	3107 1388
ET	Mr. Ray Yan	Audit Team Leader	2947 8682	3107 1388
	Mr. Henry Leung	Monitoring Team Leader	9779 7340	3107 1388
IEC	Mr. David Yeung	Independent Environmental Checker	2507 2203	2507 2293
Contractor	Mr. Wallace Lee	Project Manager	2448 0683	2448 0260
Contractor	Mr. Horace Lee	Assistant Engineer	2448 0683	2448 0260

#### **Construction Programme**

- 1.9 The construction activities undertaken in the reporting month were:
  - Paving and road works; and
  - Landscape works

#### **Summary of EM&A Requirements**

- 1.10 The EM&A programme requires construction phase monitoring for air quality, construction noise, water quality and environmental site audits. The Updated EM&A Manual requirements for each parameter are described in following sections, including:
  - All monitoring parameters:
  - Action and Limit levels for all environmental parameters;
  - Event / Action Plans;
  - Environmental mitigation measures, as recommended in the project EIA study final report; and
  - Environmental requirements in contract documents.
- 1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 5 of this report.
- 1.12 This report presents the monitoring results, observations, locations, equipments, period, methodology and QA/QC procedures of the required monitoring parameters, namely dust, water quality and noise levels and audit works for the Project in November 2006.

#### 2. AIR QUALITY

#### **Monitoring Requirements**

2.1 1-hour and 24-hour TSP monitoring was conducted to monitor the air quality. *Appendix A* shows the established Action/Limit Levels for the environmental monitoring works.

## **Monitoring Locations**

2.2 Three designated monitoring stations, A, B and C were selected for impact dust monitoring. Table 2.1 describes the air quality monitoring locations. *Figure 2.1* shows the locations of these stations.

 Table 2.1
 Locations for Air Quality Monitoring Station

Monitoring Stations	Description
A	Village house at No. 60, Kong Tau Tsuen
В	Small Traders New Village Public School Yuen Long
С	豪州嶺 1 號

2.3 The monitoring at Station B has been stopped since September 2006. The school principal has informed the monitoring team that the school has been closed down after August 2006.

#### **Monitoring Equipment**

2.4 Table 2.2 summarizes the equipment used in the impact air monitoring programme. Calibrations of equipments are conducted once per two months. Copies of renewed calibration certificates for the reporting month are attached in *Appendix B*.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Qty.
HVS Sampler	Graseby GMW Model GS2310 High Volume TSP Sampler and associated equipment and shelter in accordance with the USA standard Title 40, code of Federal regulations, Chapter 1 (part 50), Appendix B	3
Calibrator	GMW 25	1

#### **Monitoring Parameters, Frequency and Duration**

2.5 Table 2.3 summarizes the monitoring parameters and frequencies of impact dust monitoring for the whole construction period. The air quality monitoring schedule for this reporting period is shown in *Appendix C*.

**Table 2.3 Impact Dust Monitoring Parameters, Frequencies and Durations** 

Parameters	Frequency
1-hour TSP	Three times / 6 days
24-hour TSP	Once / 6 days

#### Monitoring Methodology and QA/QC Procedures

1-hour and 24-hour TSP Monitoring

#### Instrumentation

2.6 High volume samplers (HVS) (Model GMWS-2310 Accu-Vol) completed with appropriate sampling inlets was employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50) Appendix B. Moreover, the HVS also met all the requirements in section 2.3 of the EM&A Manual.

#### Operating/Analytical Procedures

2.7 The details of operating/analytical procedures for dust monitoring are described in the previous EM&A Monthly reports.

#### Maintenance/Calibration

2.8 The details of requirements of maintenance/calibration are described in the previous EM&A Monthly reports.

#### **Results and Observations**

- 2.9 Dust monitoring was conducted as scheduled in the reporting period. The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in *Appendices D* and *E* respectively.
- 2.10 A wind data monitoring equipment was installed at monitoring station B for logging wind speeds and wind directions. The wind data for the reporting month are summarized in *Appendix G*.
- 2.11 The weather during the monitoring session was mainly sunny or cloudy. Weather conditions on the monitoring days are provided in *Appendices D* and E.

#### 1-hour TSP Monitoring

2.12 The 1-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.

## 24-hour TSP Monitoring

2.13 The 24-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.

#### 3. NOISE

## **Monitoring Requirements**

3.1 Noise monitoring was conducted in accordance with the Updated EM&A Manuals. *Appendix A* shows the established Action and Limit Levels for the environmental monitoring works.

#### **Monitoring Locations**

Noise monitoring was conducted at three designated monitoring stations, namely N1, N2 and N3, as summarized in Table 3.1. *Figure 3.1* shows the locations of these stations.

**Table 3.1 Noise Monitoring Stations** 

Monitoring Stations	Description
I N I	At ground level of Village house at No.49-50, Shung Ching San Tsuen
N2	At ground level of Village house at No.17 Chuk San Tsuen
II N 4	At ground level of Small Traders New Village Public School besides the Pok Oi Hospital

## **Monitoring Equipment**

- 3.3 Integrating Sound Level Meters were used for noise monitoring. They were Type 1 sound level meters capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level ( $L_{eq}$ ) and percentile sound pressure level ( $L_x$ ). They comply with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1).
- 3.4 Table 3.2 summarizes the noise monitoring equipment model being used. Calibrations of equipments are conducted annually. Copies of renewed calibration certificates for the reporting month are attached in *Appendix B*.

**Table 3.2 Noise Monitoring Equipment** 

Equipment	Model and Make	Qty.
Integrating Sound	B&K Model 2238	4
Level Meter	Rion NL14	1
Calibrator	B&K 4231	2
Wind Speed Anemometer	Vane Anemometer, Model 451104	1

#### **Monitoring Parameters, Frequency and Duration**

3.5 Table 3.3 summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in *Appendix C*.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency	Measurement
N1	L <sub>10</sub> (30 min.)dB(A)	0700-1900		Free field + 3dB correction
$L_{90}(30)$	L <sub>90</sub> (30 min.)dB(A) L <sub>eq</sub> (30 min.)dB(A)	on normal weekdays	Once per week	Free field + 3dB correction
N3				Facade

#### Monitoring Methodology and QA/QC Procedures

3.6 The details of operating/analytical procedures for noise monitoring are described in the previous EM&A Monthly reports.

#### **Maintenance and Calibration**

3.7 The details of requirements of maintenance/calibration are described in the previous EM&A Monthly reports.

#### **Results and Observations**

- 3.8 Noise monitoring was performed at the designated locations during the daytime period (0700 to 1900) as scheduled in the reporting month. Results and graphical presentations are shown in *Appendix F*.
- 3.9 The weather during the monitoring sessions was mainly sunny. Weather conditions are provided in *Appendix F*.
- 3.10 Construction noise monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.

#### 4. WATER QUALITY

#### **Monitoring Requirements**

4.1 Water quality monitoring was conducted in accordance with the Updated EM&A Manual. Compliance Levels for the environmental monitoring works are shown in *Appendix A*.

## **Monitoring Equipment**

4.2 Table 4.1 summarizes the equipment used in the water quality monitoring program. All the monitoring equipments complied with the specifications stipulated in the Updated EM&A Manual. Calibrations of equipments are conducted quarterly. Copies of renewed calibration certificates for the reporting month are attached in *Appendix B*.

Table 4.1 Water Quality Monitoring Equipment

Equipment	Model and Make	Qty.
Multi-parameter Water Quality System	YSI 6820	2
Monitoring Position Equipment	"Magellan" Handheld GPS Model GPS- 320	1

#### **Monitoring Parameters, Frequencies and Durations**

4.3 Table 4.2 summarizes the monitoring parameters, monitoring periods and frequencies of water quality monitoring. The water quality monitoring schedule for this reporting period is shown in *Appendix C*.

Table 4.2 Water Quality Monitoring Parameters and Frequencies

Monitoring Station	Parameters	Frequencies
W1	DO, Turbidity, pH, NH <sub>4</sub> -N and Temperature	Once per week during mid ebb
W2.1, W2.2 (Before 6/7/04)	pH and Temperature	Once per week (during mid ebb at ultimate discharge)
DP1-DP8 (After 6/7/04)	COD and SS	Once per month (during mid ebb at ultimate discharge)

#### **Monitoring Locations**

4.4 The Updated EM&A Manual specifies one water quality monitoring location for mixing zone of YLBF and Kam Tin River. Other monitoring locations for site discharges will follow the actual discharge locations for the reporting month. Table 4.3 describes the location of these monitoring stations. According to ET's facsimile (Ref.: MA2049/Corres/Out/an40706v2), the monitoring locations of W2.1 and W2.2 were relocated on 6 July 2004. The revised monitoring locations were shown in *Figure 4.1*.

Table 4.3 Location for Impact Water Quality Monitoring Stations

Monitoring Station	Coordinate
W1	823000.7E
	834889.7N
W2.1, W2.2	
(Before 6/7/04)	To follow actual discharge location on site. (1)
DP1-DP8	To follow actual discharge location on site.
(After $6/7/04$ )	

Note: 1) Monitoring will be conducted according to the monitoring schedule and water sample will be taken for analysis if water discharge from the construction site was observed at these locations.

#### Monitoring Methodology, Calibration Details and QA/QC Procedures

Operating/Analytical Procedures

4.5 The details of operating/analytical procedures for water quality monitoring are described in the previous EM&A Monthly reports.

Maintenance and Calibration

4.6 The details of requirements of maintenance/calibration are described in the previous EM&A Monthly reports.

#### **Results and Observations**

- 4.7 Water quality monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month
- 4.8 There was no water discharge from the construction site during the reporting month. Therefore, no water sample was taken at DP1 to DP8.
- 4.9 The monitoring data and graphical presentations of the monitoring results are shown in *Appendix H*.

#### 5. ENVIRONMENTAL AUDIT

#### **Site Audits**

- 5.1 According to the EM&A Manual, site audit is to be carried out once a month. In order to facilitate a higher level on environmental management, site audits were increased to weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The EM&A program was terminated with approval on 27<sup>th</sup> November 2006 as such no more regular weekly site audit is to be conducted from 27<sup>th</sup> November 2006 onwards.
- 5.2 The site audits for the reporting month were conducted on 27<sup>th</sup> October and 3<sup>rd</sup>, 10<sup>th</sup>, 17<sup>th</sup> and 24<sup>th</sup> November 2006. The summaries of site audit are attached in *Appendix I*.

## **Review of Environmental Monitoring Procedures**

5.3 The monitoring works were conducted by the monitoring team regularly. The following information have been recorded during the monitoring:

#### Air Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations within and outside of the construction site.
- The monitoring team recorded the temperature and weather conditions on the monitoring day.

#### Noise Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

#### Water Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- The monitoring team recorded the temperature and weather conditions on the monitoring day.

#### Status of Environmental Licensing and Permitting

5.4 All permits/licenses obtained are summarized in Table 5.1.

Table 5.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Section	Chadasa	
i ei iiit ivo.	From	To	Section	Status	
Further Env	vironmental	Permit			
FEP- 01/075/2003	6/2/2003	N/A	A drainage channel of width less than 100m. The scope of the project includes construction of i) A main drainage channel from Yuen Long Main Nullah to Kam Tin Channel. The channel will have concrete lined bed with grasscrete sides; ii) An ancillary road system; iii) Association pumping facilities; and iv) Landscaping works.	Valid	
Variation of	f Environme	ntal Permi	t		
EP- 01/075/2003/ A	19/5/2003	N/A	Vary Condition 3.6 in Part C of the FEP- 01/075/2003 and add Figure 5 to FEP- 01/075/2003.	Valid	
Chemical W	aste Produc	cer			
5118-523- S3090-05	15/1/2004	N/A	License to produce chemical waste types of spent lubricating oil, spent dry battery and waste paint containers.	Valid	
Wastewater	Discharge 1	License			
1U370/2	24/5/2004	28/2/2008	Effluent arising from construction site	Valid	

#### **Status of Waste Management**

- 5.5 The amounts of wastes generated by the activities of the project in November 2006 are shown in *Appendix K*.
- 5.6 The solid waste generated from the Project site office was mainly general refuse that was collected by a licensed collector on an as need basis.

#### **Implementation Status of Weekly Site Audit and Mitigation Measures**

5.7 During the site inspections in the month, the following observations and recommendations were made.

Water Quality

5.8 No environmental deficiency was observed during the audit sessions.

Air Quality

- 5.9 The Contractor was reminded to provide water spraying for stockpile of silt at Tai Shui Ha works area.
- 5.10 The Contractor was reminded to provide water-spraying for the unpaved road at Tai Shui Ha Road and the site area opposite to Pok Oi Hospital.

Noise

5.11 No environmental deficiency was observed during the audit sessions.

#### Chemical and Waste Management

5.12 No environmental deficiency was observed during the audit sessions.

Permit / Licenses

5.13 No environmental deficiency was observed during the audit sessions.

Environmental Mitigation Implementation Schedule (EMIS)

5.14 According to the Environmental Permit and the Updated EM&A Manuals, the mitigation measures detailed in the documents are required to be implemented. A summary of the EMIS is described in the previous EM&A Monthly reports.

## **Summary of Exceedances of the Environmental Quality Performance Limit**

- 5.15 The summary of exceedances(s) is presented in *Appendix J*.
- 5.16 No exceedance due to the Project was recorded in this reporting month.

#### **Implementation Status of Event Action Plans**

- 5.17 The Event Action Plans for air quality, noise and water quality are presented in the Updated EM&A Manual.
- 5.18 The 1-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.
- 5.19 The 24-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down since August 2006. No Action/Limit Level exceedance was recorded in the reporting month.
- 5.20 Construction noise monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.
- 5.21 Water quality monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.

#### **Summary of Complaints and Prosecutions**

5.22 No environmental prosecution and complaint was received in the reporting month.

## **Environmental Meeting**

- 5.23 No environmental and safety trainings were conducted by the Contractor and their sub-contractors in the reporting month.
- 5.24 No monthly environmental meeting was conducted by EPD, DSD, Contractor, IEC and ET in the reporting month.

#### 6. FUTURE KEY ISSUES

## **Key Issues for the Coming Month**

No more environmental issues are anticipated for the Project since all major construction site activities have been completed. The EM&A program has been proposed to be terminated and was approved by the IEC on 24<sup>th</sup> November 2006.

#### 7. CONCLUSIONS AND RECOMMENDATIONS

#### **Conclusions**

7.1 The Project was commenced on 20<sup>th</sup> March 2003. Environmental monitoring works were performed in the reporting month and all the monitoring results were checked and reviewed. The major construction activities for the Project were substantially completed at the end of November 2006 and the outstanding minor construction activities, which would not cause any major environmental impacts, remained. The EM&A program was terminated with approval on 27<sup>th</sup> November 2006.

#### 1-hr TSP

7.2 The 1-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.

#### 24-hr TSP

7.3 The 24-hour TSP monitoring was conducted as scheduled except monitoring at Station B. Monitoring at Station B was not permitted as the school has been closed down after August 2006. No Action/Limit Level exceedance was recorded in the reporting month.

#### Construction Noise

7.4 Construction noise monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.

#### Water Quality

7.5 Water quality monitoring was conducted as scheduled. No Action/Limit Level exceedance was recorded in the reporting month.

#### Complaint and Prosecution

7.6 No environmental prosecution and complaint was received in the reporting month.

#### Recommendations

7.7 According to the environmental audit performed in this reporting month, the following recommendations were made:

## Dust Impact

- To prohibit any open burning on site.
- To regularly maintain the machinery and vehicles on site.
- To implement dust suppression measures on all haul roads, stockpiles and dry surfaces.
- To provide sufficient dust control measures on site especially for present dry season.

#### Noise Impact

- To inspect the noise sources from inside and outside of the site.
- To space out noisy equipment and position as far away as possible from sensitive receivers.
- To schedule noisy activities in order to minimize noise level expose to nearby sensitive

#### receivers.

 To liaise with schools and Examination Authority for examination times during contract period and liaise with Pok Oi Hospital on timing as well as duration of project. Noise shall be considered as an environmental constraint.

#### Water Impact

- To identify any wastewater discharges from site.
- To regularly maintain the condition of u-channel and catch pits.
- To avoid stagnant water accumulation on site.
- To prevent surface runoff on the public road from the wheel washing bay or facilities.

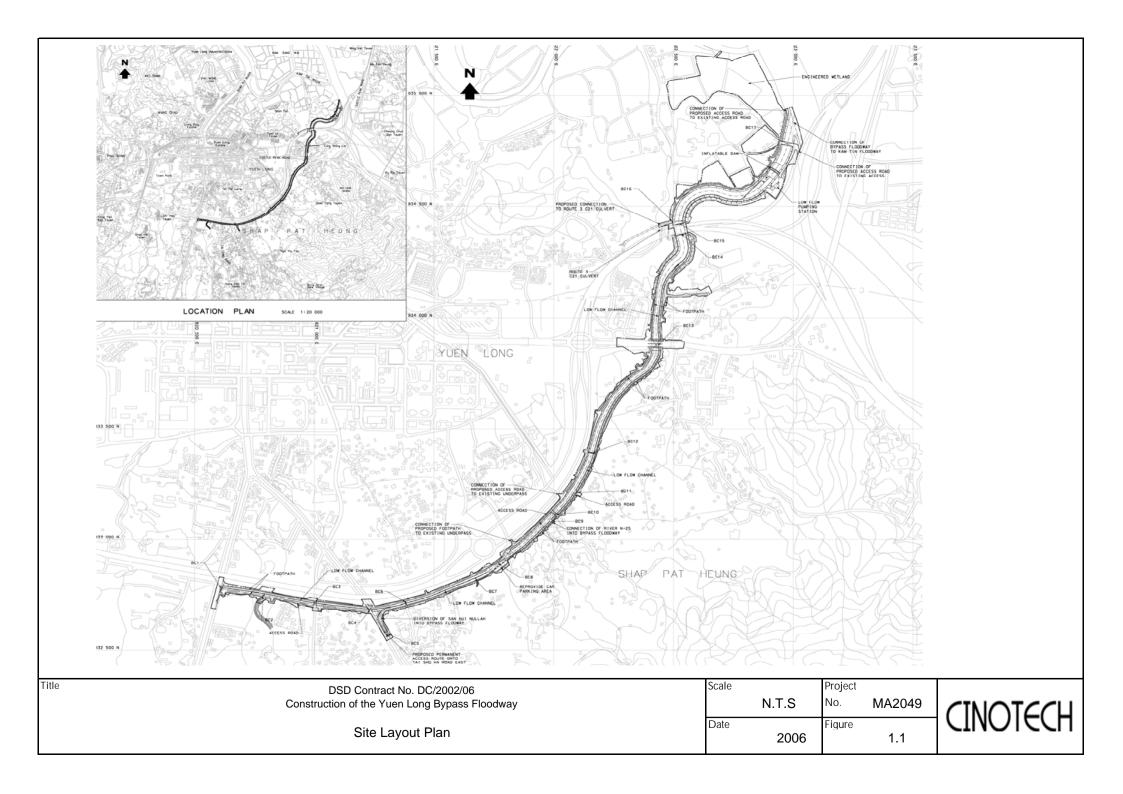
#### Waste/Chemical Management

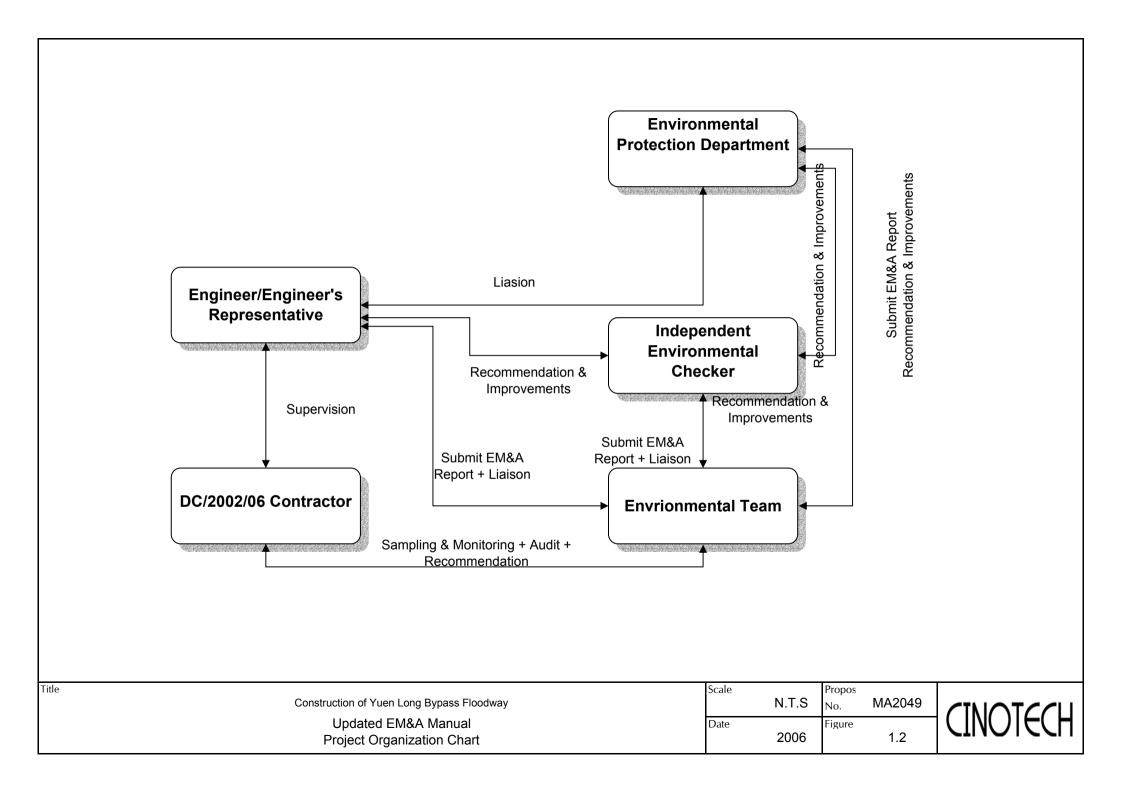
- To check for any accumulation of waste materials or rubbish on site.
- To check for any oil/chemical leakage from drip tray or chemical storage areas.
- To avoid any discharge of chemical waste or oil directly from the site.

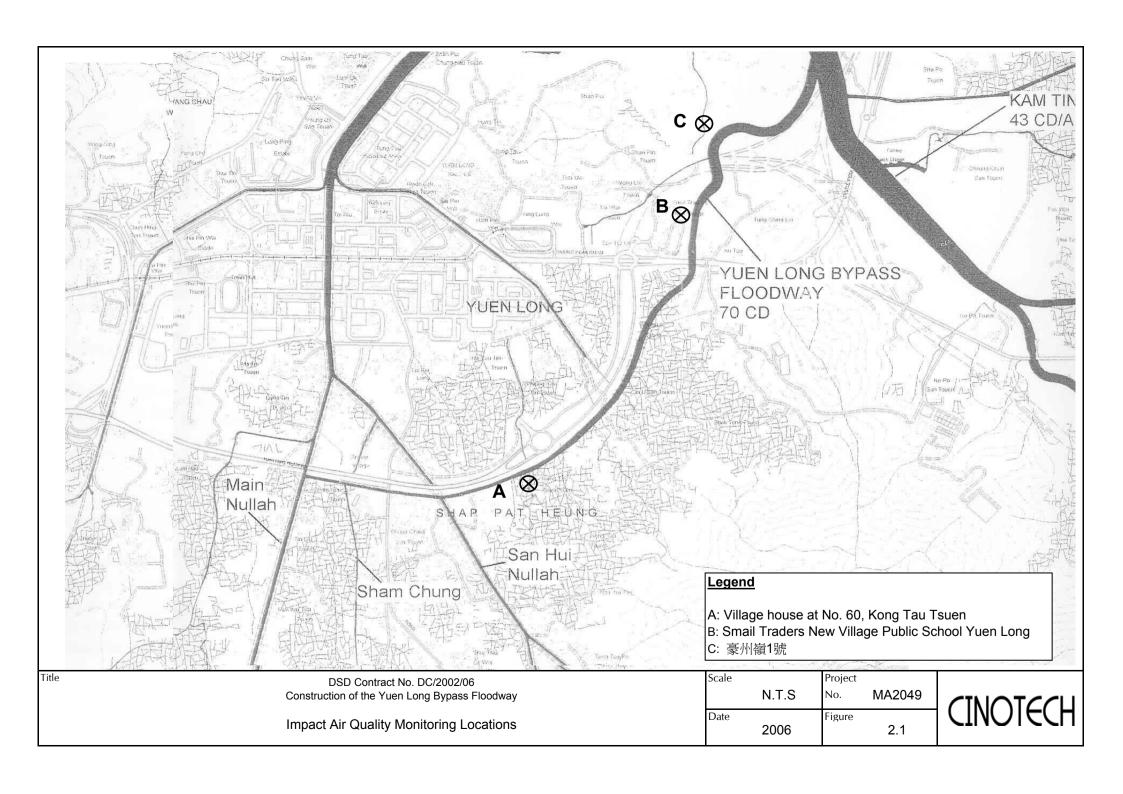
#### Permit / Licenses

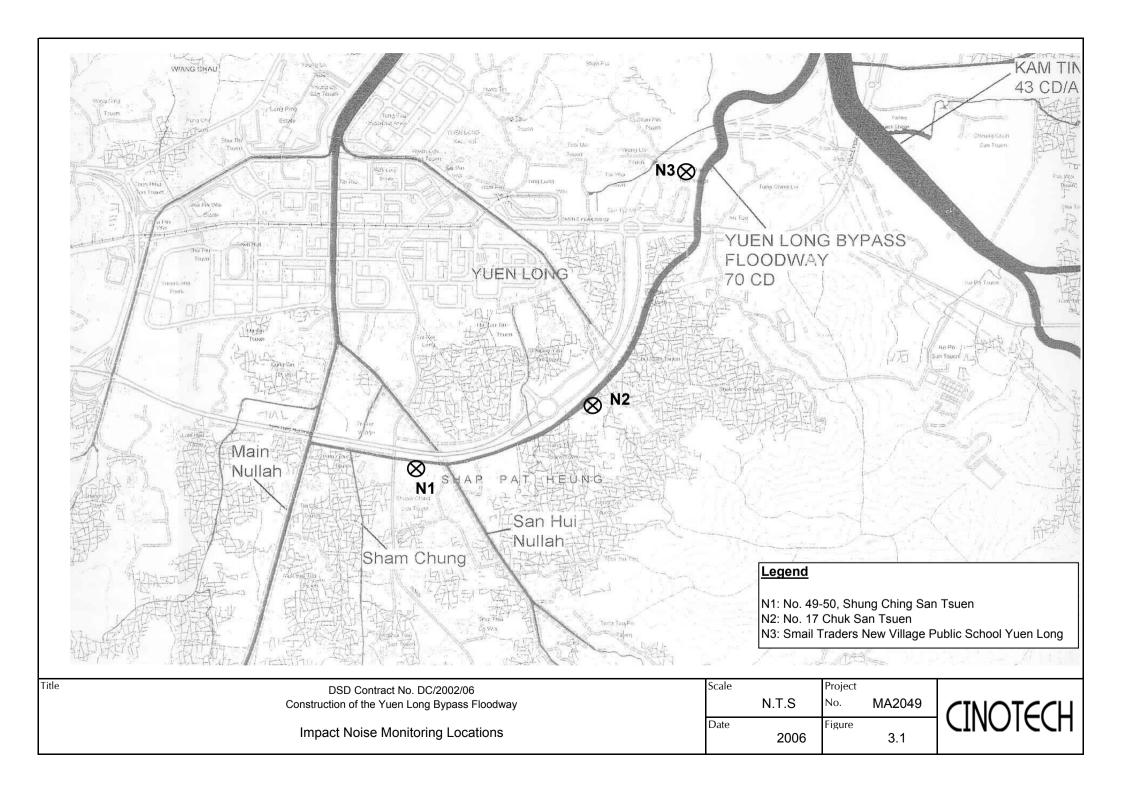
• To display the EP and applicable CNP conspicuously on the construction sites at all site entrances/exits or at a convenient location for public information at all time.

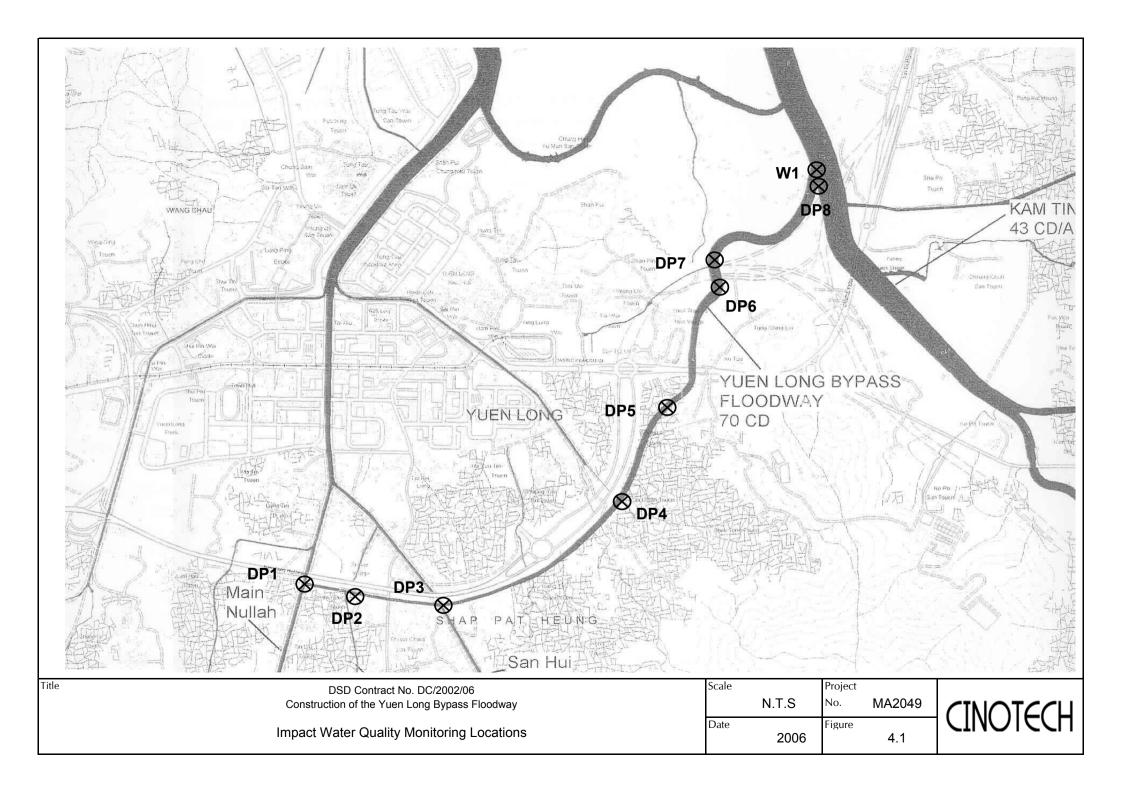
## **FIGURES**











APPENDIX A
ACTION AND LIMIT LEVELS
FOR AIR QUALITY AND NOISE AND
COMPLIANCE LEVELS FOR WATER
QUALITY

## Appendix A - Action and Limit Levels

Table A-1 Action and Limit Levels for 1-Hour TSP

Location	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m <sup>3</sup>
A		
В	328	500
С		

Table A-2 Action and Limit Levels for 24-Hour TSP

Location	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m³
A		
В	196	260
С		

**Table A-3** Action and Limit Level for Construction Noise

Period	Action Level (2)	Limit Level		
1 enou		N1*	N2*	N3
0700-1900 hrs on normal weekdays		75 d	B(A)	70 dB(A)
1900-2300 hrs on holidays & 0700-2300 hrs on all other days	When one documented complaint is received		<b>-</b> <sup>(1)</sup>	
2300-0700 hrs of next day			<b>-</b> <sup>(1)</sup>	

<sup>\*</sup>Free field noise levels were adjusted with a correction of +3 dB(A)

#### Notes:

- (1) The noise limits shall be determined by EPD during the application of the construction noise permit (CNP).
- (2) Stated in the "Environmental Monitoring and Audit Guidelines for Development Projects in Hong Kong", Appendix D2, Section 2.6, Table 2.1

# **Remarks:** Referring to the fax from DSD (DSD ref.: DP/8/7070CD/DC0206/17) dated of 17<sup>th</sup> December 2003, the noise action and limit level has been revised. Table A-3 is already the updated action and limit level for

construction noise.

Table A-4 **Compliance Level for Water Quality** 

Monitoring Station	Parameters	Limit
	Turbidity	N/A
	Dissolved Oxygen	> 4 mg/L
W1	рН	< 8
	Temperature	$30^{\circ}\mathrm{C}$
	$NH_4$ - $N$	20 mg/L
W2.1, W2.2, DP1, DP2, DP3, DP4, DP5,	рН	6.5 - 8.5
	Temperature	$30^{\circ}\mathrm{C}$
DP6, DP7, DP8	Suspended Solids	30 mg/L
DP0, DP7, DP8	Chemical Oxygen Demand	80 mg/L

Remarks:

Referring to the fax from DSD (DSD ref.: DP/8/7070CD/DC0206/17) dated of 17<sup>th</sup> December 2003, the water quality compliance level has been revised. Table A-4 is already the updated compliance level for water

quality.

APPENDIX B
COPIES OF RENEWED CALIBRATION
CERTIFICATES FOR THE REPORTING
MONTH

## High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA2049/02/0024

WK Operator: Village house at Kong Tau Tsuen (A) Station 30-Dec-06 Next Due Date: 31-Oct-06 Date: Serial No. \_\_\_\_\_10593 Equipment No.: \_\_\_ A-01-02 Ambient Condition 762.3 Pressure, Pa (mmHg)\_ 300.7 Temperature, Ta (K) Orifice Transfer Standard Information Intercept, be 0.0575 Equipment No.: Slope, me A-04-04 me x Qstd + bc =  $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 13-Mar-06 Qstd =  $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc\} / mc$ 12-Mar-07 Next Calibration Date: Calibration of TSP Sampler Orfice Calibration  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$  $\Delta W$ Ostd (CFM) ΔH (orifice), [ΔH x (Pa/760) x (298/Ta)]<sup>1/2</sup> Point. Y-axis X - axis (HVS), in. of oil in, of water 2.84 8.1 59.63 3.47 12.1 2.56 6.6 54.14 3.15 10.0 2.04 4.2 42.83 2.50 6.3 3 1.81 3.3 38.47 2.25 5.1 4 1.44 2.1 30.33 1.78 5 3.2 By Linear Regression of Y on X Intercept, bw · \_\_\_\_\_\_\_-0.0024 Slope, mw = 0.0475Correlation coefficient\* = \*If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw =  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = 4.19$ Remarks: Date: Conducted by: WK TANA Signature: \_\_ Date:

## High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. <u>MA2049/12/0021</u> WK. Operator: 麥州嶺1號 (C) Station 30-Dec-06 Next Duc Date: \_\_ 31-Oct-06 Date: Serial No. 1801 Equipment No.: A-01-12 Ambient Condition 762.3 300.7 Pressure, Pa (mmHg) Temperature, Ta (K) Orifice Transfer Standard Information 0.0395 Intercept, be 0.0575 Slope, me A-04-04 Equipment No.: mc x Qstd + bc =  $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 13-Mar-06 Last Calibration Date: Qstd =  $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc\} / mc$ 12-Mar-07 Next Calibration Date: Calibration of TSP Sampler HVS Orfice  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2} V$ Calibration Qstd (CFM)  $\Delta W$ AH (orifice),  $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Point axis (HVS), in. of oil X - axis in, of water 2.87 61.10 8.3 3,55 12.7 2.64 7.0 54.69 3.18 2 10.2 2.25 5.1 49.57 2.89 8.4 3 1.76 3.1 39.61 5.4 2.32 4 1.30 1.7 29.84 1,76 3.1 By Linear Regression of Y on X -0.2627Intercept, bw =\_\_\_ Slope, mw = 0.0517 Correlation coefficient" = \*If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw =  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = ( mw x Qstd + bw )  $^2$  x ( 760 / Pa ) x ( Ta / 298 ) = Remarks: Date: Signature: Conducted by: Date:

Checked by:

## WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong.

Tel: (852) 2898 7388 Fax: (852) 2898 7076

## **TEST REPORT**

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. 

 Date of Issue:
 2006-11-16

 Date Received:
 2006-11-15

 Date Tested:
 2006-11-15

 Date Completed:
 2006-11-16

 Next Due Date:
 2007-11-15

ATTN:

Mr. Henry Leung

Page:

Test Report No.:

1 of 1

C/N/61116/1

#### Certificate of Calibration

#### Item for calibration:

Description ·

: Integrating Sound Level Meter

Manufacturer Model No.

: Brüel & Kjær : B&K 2238

Serial No.

: 2337666

Microphone No.

: 2289750

Equipment No.

: N-01-02

#### Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 59%

#### **Test Specifications:**

Performance checking at 94 and 114 dB

#### Methodology:

In-house method, according to manufacturer instruction manual

#### Results:

Reference Set Point, dB	Instrument Readings, dB	
94	94.0	
114	114.0	

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

## WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong.

Tel: (852) 2898 7388 Fax: (852) 2898 7076

## TEST REPORT

APPLICANT:

Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. 

 Test Report No.:
 C/N/61116/2

 Date of Issue:
 2006-11-16

 Date Received:
 2006-11-15

 Date Tested:
 2006-11-15

 Date Completed:
 2006-11-16

 Next Due Date:
 2007-11-15

ATTN:

Mr. Henry Leung

Page:

1 of 1

#### Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.
Project No.

: 2326353

Equipment No.

: C13

1971 UM21

: N-02-01

#### Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 59%

Pressure

: 1015.2 hPa

#### Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

#### Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	$94.0 \pm 0.1  \mathrm{dB}$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

## WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong.

Tel: (852) 2898 7388 Fax: (852) 2898 7076

## **TEST REPORT**

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/W/61111-1
Date of Issue: 2006-11-11
Date Received: 2006-11-11
Date Tested: 2006-11-11
Date Completed: 2006-11-13
Next Due Date: 2007-02-12

ATTN:

Mr. Henry Leung

Page:

1 of 2

## **Certificate of Calibration**

#### Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No.

: 02D0126AA

Equipment No. Project No.

: W.03.01 : C013

Test conditions:

Room Temperature

: 23 degree Celsius

Relative Humidity

: 68%

#### **Test Specifications:**

Conductivity & Salinity Sensor, Model: 6560, S/N: 02C0465

- 1. Conductivity performance check with Potassium Chloride standard solution
- 2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 02C1269-1

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6026, S/N: 5389

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 01J

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

#### Methodologies:

- 1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
- 2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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#### WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong.

Tel: (852) 2898 7388 Fax: (852) 2898 7076

## **TEST REPORT**

Test Report No.: C/W/61111-1
Date of Issue: 2006-11-11
Date Received: 2006-11-11
Date Tested: 2006-11-11
Date Completed: 2006-11-13
Next Due Date: 2007-02-12

Page:

2 of 2

#### Results:

1. Conductivity performance check

1. Conductivity po	TOTTIMITOC CITCOR		
Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C	) Theoretical Value (C2)	D = C1 - C2	
1421	1420	1	$1420 \pm 20$

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading Theoretical Value			
30.0	30.0	0.0	$30.0 \pm 3$

3. Dissolved Oxygen check

Oxygen level in	Dissolved Oxygen, mg O <sub>2</sub> /L		Correction, mg	Acceptable
water at 20°C	D.O. Meter	Winkler Titration	O <sub>2</sub> /L	range
Saturated	9.1	9.1	0.0	± 0.1
Half-saturated	5.6	5.6	0.0	± 0.1
Zero	0.0	0.0	0.0	± 0.1

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	$0.00 \pm 0.05$
100	100	0	$100 \pm 5$

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH <sub>i</sub> , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH <sub>s</sub> , pH unit	0.01	Less than 0.02
Noise ΔpH <sub>n</sub> , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	$1.00 \pm 0.05$

#### WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong.

Tel: (852) 2898 7388 Fax: (852) 2898 7076

#### TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T.

Test Report No.: Date of Issue:

C/W/61111-2 2006-11-11

Date Received:

2006-11-11

Date Tested:

2006-11-11

Date Completed:

2006-11-13

Next Due Date:

2007-02-12

ATTN:

Mr. Henry Leung

Page:

1 of 2

#### **Certificate of Calibration**

#### Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M : 02D0293AA

Serial No. Equipment No.

: W.03.02

Project No.

: C013

#### **Test conditions:**

Room Temperature

: 23 degree Celsius

Relative Humidity

: 68%

#### **Test Specifications:**

Conductivity & Salinity Sensor, Model: 6560, S/N: 02C0886

1. Conductivity performance check with Potassium Chloride standard solution

2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 02C1269-2

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6026, S/N: 5390

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 02A

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

#### Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual

2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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Tel: (852) 2898 7388 Fax: (852) 2898 7076

#### **TEST REPORT**

 Test Report No.:
 C/W/61111-2

 Date of Issue:
 2006-11-11

 Date Received:
 2006-11-11

 Date Tested:
 2006-11-11

 Date Completed:
 2006-11-13

 Next Due Date:
 2007-02-12

Page:

2 of 2

#### Results:

1. Conductivity performance check

Specific Conductivity, μS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1) Theoretical Value (C2)		D = C1 - C2	
1418	1418	0	$1418 \pm 20$

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading Theoretical Value			
30.0	30.0	0.0	$30.0 \pm 3$

3. Dissolved Oxygen check

Oxygen level in	Dissolved Oxygen, mg O <sub>2</sub> /L		Correction, mg	Acceptable
water at 20°C	D.O. Meter	Winkler Titration	$O_2/L$	range
Saturated	9.1	9.0	0.1	± 0.1
Half-saturated	5.8	5.8	0.0	± 0.1
Zero	0.0	0.0	0.0	± 0.1

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	$0.00 \pm 0.05$
100	100	0	$100 \pm 5$

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH <sub>i</sub> , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH <sub>s</sub> , pH unit	0.01	Less than 0.02
Noise $\Delta pH_n$ , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	$1.00 \pm 0.05$

#### APPENDIX C ENVIRONMENTAL MONITORING SCHEDULES

#### Contract No.: DC/2002/06

#### Construction of Yuen Long Bypass Floodway Water Quality Monitoring Schedule for October 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct
		Air Quality: 1-hr TSP at A, C Noise	Air Quality: 1-hr TSP at A, C	Air Quality: 24-hr	Air Quality: 1-hr TSP at A, C	
				at A, C		
8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct
	Air Quality: 1-hr TSP at A, C	Air Quality: 1-hr TSP at A, C	Air Quality: 24-hr	Air Quality: 1-hr TSP at A, C Noise		
47.0	16.0	17.0	at A, C	10.0	20.0	21.0
15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct
	Air Quality: 1-hr TSP at A, C		Air Quality: 1-hr TSP at A, C Noise	Air Quality: 1-hr TSP at A, C		
		Air Quality: 24-hr at A, C				
22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct
		Air Quality: 1-hr TSP at A, C		Air Quality: 1-hr TSP at A, C Noise	Air Quality: 1-hr TSP at A, C	
	Air Quality: 24-hr at A, C					Air Quality: 24-hr at A, C
29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov
		Air Quality: 1-hr TSP at A, C	Air Quality: 1-hr TSP at A, C Noise		Air Quality: 1-hr TSP at A, C Air Quality: 24-hr	
					at A, C	

#### Contract No. DC/2002/06

## Construction of Yuen Long Bypass Floodway

#### **Water Quality Monitoring Schedule for October 2006**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct
			W1, DP1-8 Mid Ebb 11:20			
8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct
		W1, DP1-8 Mid Ebb 15:35				
15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct
				W1, DP1-8 Mid Ebb 12:02		
22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct
		W1, DP1-8 Mid Ebb 14:49				
29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov
					W1, DP1-8 Mid Ebb 11:42	

#### Contract No. DC/2002/06

# Construction of Yuen Long Bypass Floodway Air Quality and Noise Monitoring Schedule for November 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Nov	2-Nov	3-Nov	4-Nov
			Air Quality: 1-hr TSP at A, C Noise		Air Quality: 1-hr TSP at A, C Air Quality: 24-hr at A, C	
5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov
	Air Quality: 1-hr TSP at A, C	Air Quality: 1-hr TSP at A, C Noise		Air Quality: 24-hr	Air Quality: 1-hr TSP at A, C	
				at A, C		
12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov
		Air Quality: 1-hr TSP at A, C Noise	Air Quality: 24-hr at A, C	Air Quality: 1-hr TSP at A, C	Air Quality: 1-hr TSP at A, C	
19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
		Air Quality: 1-hr TSP at A, C Noise Air Quality: 24-hr at A, C	Air Quality: 1-hr TSP at A, C	Air Quality: 1-hr TSP at A, C		
26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec
	Air Quality: 24-hr at A, C	Air Quality: 1-hr TSP at A, C	Air Quality: 1-hr TSP at A, C Noise		Air Quality: 1-hr TSP at A, C	Air Quality: 24-hr at A, C

#### Contract No. DC/2002/06

#### Construction of Yuen Long Bypass Floodway Water Quality Monitoring Schedule for November 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Nov	2-Nov	3-Nov	4-Nov
					W1, DP1-8 Mid Ebb 11:42	
5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov
					W1, DP1-8 Mid Ebb 16:27	
12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov
					W1, DP1-8 Mid Ebb 11:22	
19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
				W1, DP1-8 Mid Ebb 15:08		
26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec
					W1, DP1-8 Mid Ebb 10:12	

#### APPENDIX D 1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

#### **Appendix D - 1-hour TSP Monitoring Results**

Location A - Village House at No.60, Kong Tau Tsuen

Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elapse	e Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
26-Oct-06	2.8952	2.9018	1.23	1.23	14970.7	14971.7	1.0	89.4	Sunny	298.2	766.0	0.0066	1.23	73.8
27-Oct-06	2.8687	2.8807	1.23	1.23	14971.7	14972.7	1.0	162.8	Sunny	299.1	766.0	0.0120	1.23	73.7
31-Oct-06	2.8723	2.8866	1.22	1.22	14996.7	14997.7	1.0	195.0	Sunny	300.6	762.4	0.0143	1.22	73.4
1-Nov-06	2.8680	2.8869	1.23	1.23	14997.7	14998.7	1.0	257.1	Sunny	297.5	762.4	0.0189	1.23	73.5
3-Nov-06	2.8448	2.8618	1.23	1.23	14998.7	14999.7	1.0	230.5	Sunny	296.1	763.5	0.0170	1.23	73.8
6-Nov-06	2.8427	2.8529	1.23	1.23	15023.7	15024.7	1.0	138.5	Sunny	297.1	763.9	0.0102	1.23	73.6
7-Nov-06	2.9032	2.9126	1.23	1.23	15024.7	15025.7	1.0	127.1	Sunny	295.7	766.1	0.0094	1.23	73.9
10-Nov-06	2.8954	2.9147	1.23	1.23	15049.7	15050.7	1.0	261.9	Sunny	297.5	765.9	0.0193	1.23	73.7
14-Nov-06	2.8696	2.8838	1.23	1.23	15050.7	15051.7	1.0	192.9	Windy	297.6	765.0	0.0142	1.23	73.6
16-Nov-06	2.8573	2.8618	1.23	1.23	15075.7	15076.7	1.0	60.9	Cloudy	295.6	764.3	0.0045	1.23	73.9
17-Nov-06	2.8598	2.8677	1.23	1.23	15076.7	15077.7	1.0	107.4	Sunny	297.6	763.9	0.0079	1.23	73.6
21-Nov-06	2.8360	2.8505	1.23	1.23	15077.7	15078.7	1.0	197.2	Cloudy	296.8	760.9	0.0145	1.23	73.5
22-Nov-06	2.8503	2.8650	1.23	1.23	15102.6	15103.6	1.0	200.9	Rainy	293.6	760.5	0.0147	1.23	73.2
23-Nov-06	2.8679	2.8771	1.23	1.23	15126.9	15127.9	1.0	124.7	Cloudy	295.7	762.7	0.0092	1.23	73.8
							Min	60.9						
							Max	261.9						

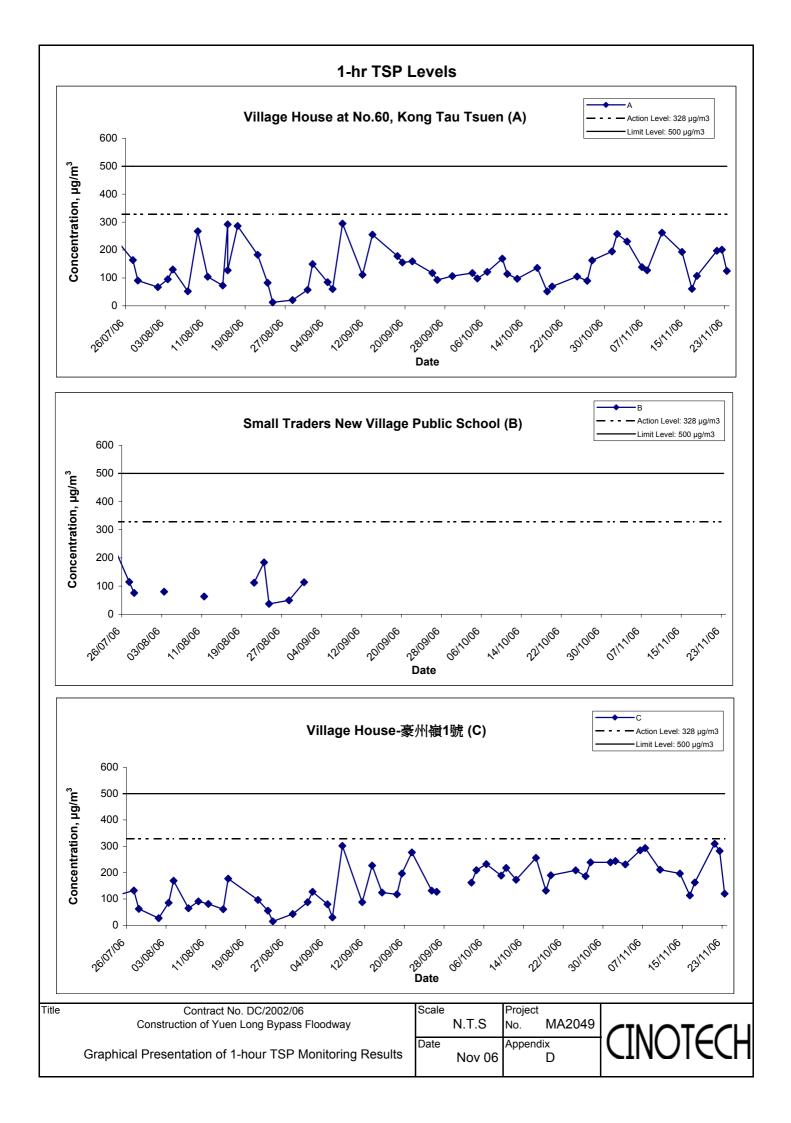
Average 167.6

Location C - Village House (豪州嶺1號)

Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	e Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
26-Oct-06	2.8717	2.8855	1.23	1.23	6059.1	6060.1	1.0	186.3	Sunny	298.2	766.0	0.0138	1.23	74.1
27-Oct-06	2.8738	2.8915	1.23	1.23	6060.1	6061.1	1.0	239.4	Sunny	299.1	766.0	0.0177	1.23	73.9
31-Oct-06	2.9001	2.9177	1.23	1.23	6085.1	6086.1	1.0	239.2	Sunny	300.6	762.4	0.0176	1.23	73.6
1-Nov-06	2.8469	2.8649	1.23	1.23	6086.1	6087.1	1.0	244.4	Sunny	297.5	762.4	0.0180	1.23	73.7
3-Nov-06	2.8707	2.8878	1.23	1.23	6087.1	6088.1	1.0	231.6	Sunny	296.1	763.5	0.0171	1.23	73.8
6-Nov-06	2.8722	2.8932	1.23	1.23	6112.1	6113.1	1.0	284.7	Sunny	297.1	763.9	0.0210	1.23	73.8
7-Nov-06	2.8822	2.9039	1.23	1.23	6113.1	6114.1	1.0	293.2	Sunny	295.7	766.1	0.0217	1.23	74.0
10-Nov-06	2.8762	2.8918	1.23	1.23	6138.1	6139.1	1.0	211.4	Sunny	297.5	765.9	0.0156	1.23	73.8
14-Nov-06	2.8744	2.8889	1.23	1.23	6139.1	6140.1	1.0	196.6	Windy	297.6	765.0	0.0145	1.23	73.7
16-Nov-06	2.8940	2.9024	1.23	1.23	6164.1	6165.1	1.0	113.6	Cloudy	295.6	764.3	0.0084	1.23	73.9
17-Nov-06	2.8899	2.9019	1.23	1.23	6165.1	6166.1	1.0	162.8	Sunny	297.6	763.9	0.0120	1.23	73.7
21-Nov-06	2.8460	2.8688	1.23	1.23	6166.1	6167.1	1.0	309.5	Cloudy	296.8	760.9	0.0228	1.23	73.7
22-Nov-06	2.8608	2.8817	1.23	1.23	6191.1	6192.1	1.0	282.5	Rainy	293.7	760.3	0.0209	1.23	74.0
23-Nov-06	2.8807	2.8896	1.23	1.23	6192.1	6193.1	1.0	120.3	Cloudy	294.9	763.0	0.0089	1.23	74.0
							Min	113.6						
							Max	309.5						

Average 222.6

App D - 1hr TSP 1hr Dust



APPENDIX E 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

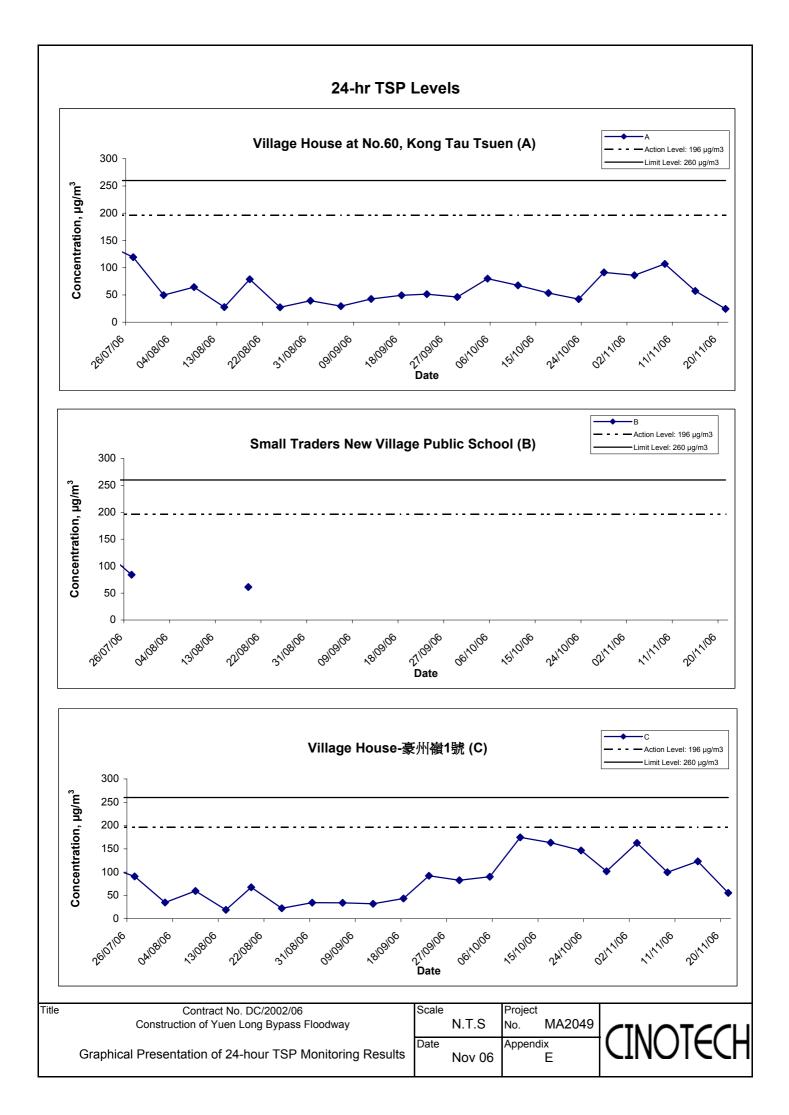
## Appendix E - 24-hour TSP Monitoring Results

#### Location A - Village House at No.60, Kong Tau Tsuen

Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	e Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	$(\mu g/m^3)$	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
28-Oct-06	2.8788	3.0395	1.22	1.22	14972.7	14996.7	24.0	91.3	Sunny	301.4	764.5	0.1607	1.22	1760.4
3-Nov-06	2.8897	3.0420	1.23	1.23	14999.7	15023.7	24.0	86.0	Sunny	296.1	763.5	0.1523	1.23	1769.9
9-Nov-06	2.8774	3.0665	1.23	1.23	15025.7	15049.7	24.0	106.8	Sunny	297.5	767.4	0.1891	1.23	1770.3
15-Nov-06	2.8898	2.9914	1.23	1.23	15051.7	15075.7	24.0	57.4	Cloudy	297.4	766.4	0.1016	1.23	1769.5
21-Nov-06	2.8542	2.8973	1.23	1.23	15078.7	15102.6	23.9	24.5	Rainy	295.8	757.8	0.0431	1.23	1759.9
							Min	24.5						
							Max	106.8						
							Average	73.2						

#### Location C - Village House (豪州嶺1號)

Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	se Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m <sup>3</sup> /min)	$(m^3)$
28-Oct-06	2.8475	3.0269	1.23	1.23	6061.1	6085.1	24.0	101.6	Sunny	301.4	764.5	0.1794	1.23	1765.9
3-Nov-06	2.8896	3.1774	1.23	1.23	6088.1	6112.1	24.0	162.4	Sunny	296.1	763.5	0.2878	1.23	1772.3
9-Nov-06	2.8642	3.0410	1.23	1.23	6114.1	6138.1	24.0	99.7	Sunny	297.5	767.4	0.1768	1.23	1772.6
15-Nov-06	2.8638	3.0817	1.23	1.23	6140.1	6164.1	24.0	123.0	Cloudy	297.4	766.4	0.2179	1.23	1771.8
21-Nov-06	2.8812	2.9795	1.24	1.24	6167.1	6191.1	24.0	55.3	Rainy	295.6	768.0	0.0983	1.24	1777.5
							Min	55.3						
							Max	162.4						
							Average	108.4						



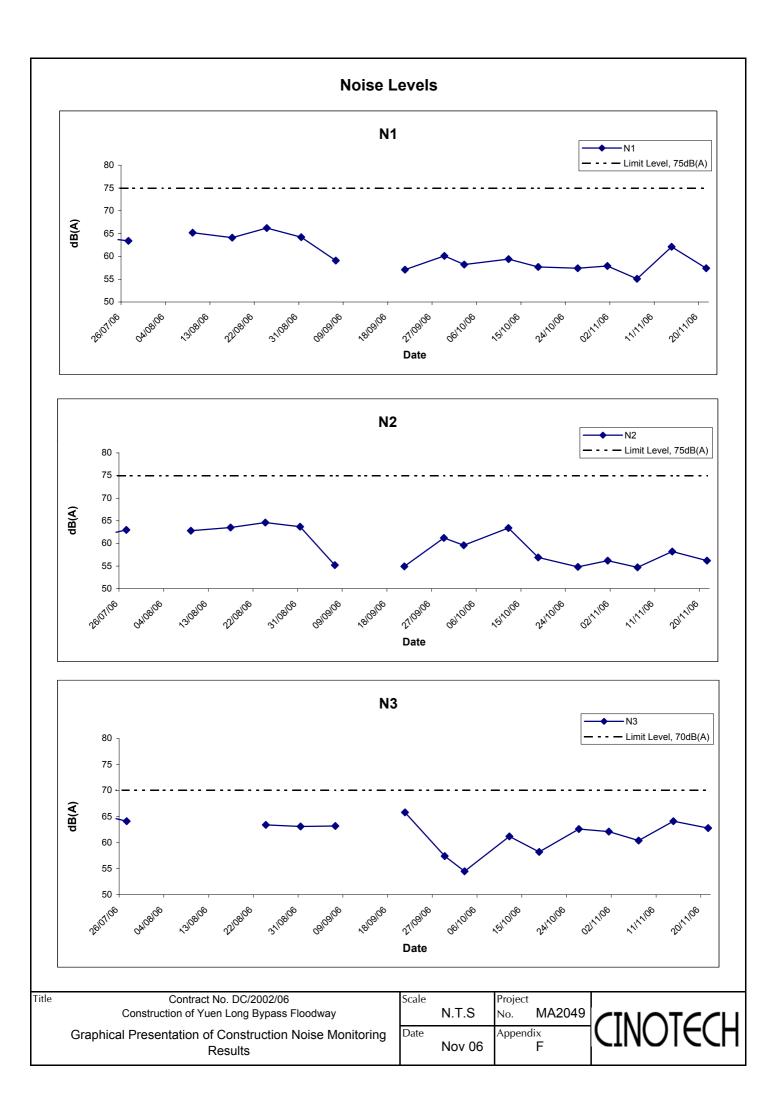
APPENDIX F NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

## **Appendix F - Noise Monitoring Results**

Location N1 -	Location N1 - Shung Ching San Tsuen										
Doto	Time	\\/oothor	dB	(A) (30-min	)						
Date	Time	Weather	L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>						
26-Oct-06	13:10	Sunny	57.4	59.5	55.0						
1-Nov-06	13:03	Sunny	57.9	59.5	55.0						
7-Nov-06	09:40	Sunny	55.1	57.0	52.5						
14-Nov-06	11:10	Windy	62.1	64.5	59.0						
21-Nov-06	11:41	Cloudy	57.4	59.5	51.5						
		Average	58.6	60.8	55.4						
		Minimum	55.1	57.0	51.5						
		Maximum	62.1	64.5	59.0						

Location N2 -	Location N2 - Chuk San Tsuen										
Date	Time	Weather	dB	3 (A) (30-min)	)						
Date	Time	weather	L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>						
26-Oct-06	11:22	Sunny	54.8	56.5	50.5						
1-Nov-06	13:49	Sunny	56.2	58.0	54.0						
7-Nov-06	10:24	Sunny	54.7	56.5	51.0						
14-Nov-06	10:20	Windy	58.2	60.5	55.5						
21-Nov-06	10:59	Cloudy	56.2	58.5	50.5						
		Average	56.2	58.3	52.8						
		Minimum	54.7	56.5	50.5						
		Maximum	58.2	60.5	55.5						

Location N3 - Small Traders New Village Public School									
Data	Time	Weather	dE	3 (A) (30-min)	)				
Date	Time	weather	L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>				
26-Oct-06	13:51	Sunny	62.6	65.5	58.5				
1-Nov-06	14:47	Sunny	62.1	66.0	58.5				
7-Nov-06	11:14	Sunny	60.4	64.0	56.0				
14-Nov-06	09:30	Windy	64.1	66.0	60.0				
21-Nov-06	10:17	Cloudy	62.8	65.5	58.0				
		Average	62.6	65.5	58.4				
		Minimum	60.4	64.0	56.0				
		Maximum	64.1	66.0	60.0				



#### APPENDIX G WIND DATA

Date	Time	Wind Speed m/s	Direction
26-Oct-06	00:00	0.1	
26-Oct-06	01:00	0.1	SSW
26-Oct-06	02:00	0.1	SW
26-Oct-06	03:00	0.1	
26-Oct-06	04:00	0.1	
26-Oct-06	05:00	0.1	
26-Oct-06	06:00	0.1	
26-Oct-06	07:00	0.1	SW
26-Oct-06	08:00	0.1	
26-Oct-06	09:00	2.0	WNW
26-Oct-06	10:00	2.7	W
26-Oct-06	11:00	4.6	W
26-Oct-06	12:00	4.6	W
26-Oct-06	13:00	4.6	W
26-Oct-06	14:00	5.3	W
26-Oct-06	15:00	5.9	WNW
26-Oct-06	16:00	4.6	W
26-Oct-06	17:00	4.0	WNW
26-Oct-06	18:00	4.0	W
26-Oct-06	19:00	2.7	WNW
26-Oct-06	20:00	2.7	WNW
26-Oct-06	21:00	2.7	NW
26-Oct-06	22:00	2.0	W
26-Oct-06	23:00	2.7	W
27-Oct-06	00:00	4.0	WNW
27-Oct-06	01:00	4.0	WNW
27-Oct-06	02:00	4.0	WNW
27-Oct-06	03:00	4.6	WNW
27-Oct-06	04:00	3.3	WNW
27-Oct-06	05:00	4.0	WNW
27-Oct-06	06:00	3.3	WNW
27-Oct-06	07:00	4.6	WNW
27-Oct-06	08:00	5.3	WNW
27-Oct-06	09:00	5.3	WNW
27-Oct-06	10:00	5.9	W
27-Oct-06	11:00	7.2	W
27-Oct-06	12:00	4.6	W
27-Oct-06	13:00	3.3	W
27-Oct-06	14:00	5.3	WNW
27-Oct-06	15:00	2.7	WNW
27-Oct-06	16:00	4.6	WNW
27-Oct-06	17:00	4.0	WNW
27-Oct-06	18:00	4.0	WNW
27-Oct-06	19:00	4.0	WNW
27-Oct-06	20:00	4.0	W
27-Oct-06	21:00	4.0	W
27-Oct-06	22:00	4.0	W
27-Oct-06	23:00	5.3	W
28-Oct-06	00:00	4.0	W
28-Oct-06	01:00	3.3	WNW
28-Oct-06	02:00	3.3	WNW
28-Oct-06	03:00	5.3	WNW
28-Oct-06	04:00	2.7	WNW
28-Oct-06	05:00	2.7	SSW

Date	Time	Wind Speed m/s	Direction
28-Oct-06	06:00	2.7	SW
28-Oct-06	07:00	2.7	SW
28-Oct-06	08:00	3.3	SW
28-Oct-06	09:00	3.3	WNW
28-Oct-06	10:00	3.3	WNW
28-Oct-06	11:00	3.3	WNW
28-Oct-06	12:00	4.6	NW
28-Oct-06	13:00	5.9	WNW
28-Oct-06	14:00	5.3	WNW
28-Oct-06	15:00	4.6	WNW
28-Oct-06	16:00	5.3	WNW
28-Oct-06	17:00	4.0	W
28-Oct-06	18:00	3.3	W
28-Oct-06	19:00	3.3	WSW
28-Oct-06	20:00	0.1	N
28-Oct-06	21:00	1.4	SSW
28-Oct-06	22:00	1.4	S
28-Oct-06	23:00	1.4	S
29-Oct-06	00:00	0.1	S
29-Oct-06	01:00	0.1	S
29-Oct-06	02:00	0.1	W
29-Oct-06	03:00	0.7	WSW
29-Oct-06	04:00	0.1	WNW
29-Oct-06	05:00	0.1	SSW
29-Oct-06	06:00	2.0	SSW
29-Oct-06	07:00	3.3	SW
29-Oct-06	08:00	5.9	W
29-Oct-06	09:00	7.2	WNW
29-Oct-06	10:00	7.2	WNW
29-Oct-06	11:00	5.3	WNW
29-Oct-06	12:00	8.0	WNW
29-Oct-06	13:00	8.0	WNW
29-Oct-06	14:00	5.3	W W
29-Oct-06	15:00	5.9	
29-Oct-06	16:00	4.0	WSW
29-Oct-06	17:00 18:00	3.3 4.6	SW WSW
29-Oct-06			
29-Oct-06	19:00	3.3	SW
29-Oct-06 29-Oct-06	20:00 21:00	3.3 5.3	SW W
29-Oct-06	22:00	3.3	WSW
29-Oct-06	23:00	2.7	SW
30-Oct-06	00:00	3.3	WSW
30-Oct-06	01:00	4.0	SW
30-Oct-06	02:00	4.6	WNW
30-Oct-06	03:00	5.3	WNW
30-Oct-06	04:00	4.0	SW
30-Oct-06	05:00	3.3	SW
30-Oct-06	06:00	4.0	SW
30-Oct-06	07:00	5.3	SW
30-Oct-06	08:00	3.3	SW
30-Oct-06	09:00	3.3	SW
30-Oct-06	10:00	5.3	SW
30-Oct-06	11:00	5.3	SW
00 001-00	11.00	0.0	O V V

Date	Time	Wind Speed m/s	Direction
30-Oct-06	12:00	7.2	WNW
30-Oct-06	13:00	6.7	WNW
30-Oct-06	14:00	7.2	WNW
30-Oct-06	15:00	5.9	WNW
30-Oct-06	16:00	5.9	W
30-Oct-06	17:00	4.6	WNW
30-Oct-06	18:00	2.7	SSW
30-Oct-06	19:00	3.3	SSW
30-Oct-06	20:00	5.9	WNW
30-Oct-06	21:00	5.9	WNW
30-Oct-06	22:00	5.9	WNW
30-Oct-06	23:00	7.2	WNW
31-Oct-06	00:00	5.3	WNW
31-Oct-06	01:00	6.7	WNW
31-Oct-06	02:00	5.3	WSW
31-Oct-06	03:00	4.6	WSW
31-Oct-06	04:00	5.3	WSW
31-Oct-06	05:00	5.9	WSW
31-Oct-06	06:00	6.7	WSW
31-Oct-06	07:00	5.9	SW
31-Oct-06	08:00	5.9	SW
31-Oct-06	09:00	5.9	WSW
31-Oct-06	10:00	5.9	SW
31-Oct-06	11:00	5.9	SW
31-Oct-06	12:00	6.7	SW
31-Oct-06	13:00	5.3	WSW
31-Oct-06	14:00	4.6	SW
31-Oct-06	15:00	4.6	SW
31-Oct-06	16:00	4.0	SW
31-Oct-06	17:00	2.0	SSW
31-Oct-06	18:00	1.4	WNW
31-Oct-06	19:00	2.0	SSW
31-Oct-06	20:00	3.3	WNW
31-Oct-06	21:00	3.3	WNW
31-Oct-06	22:00	4.6	W
31-Oct-06	23:00	5.3	W
1-Nov-06	00:00	0.9	W
1-Nov-06	01:00	0.8	W
1-Nov-06	02:00	0.7	WNW
1-Nov-06	03:00	0.7	W
1-Nov-06	04:00	0.6	W
1-Nov-06	05:00	0.6	WSW
1-Nov-06	06:00	0.8	WSW
1-Nov-06	07:00	0.7	SW
1-Nov-06	08:00	0.6	SW
1-Nov-06	09:00	0.6	SW
1-Nov-06	10:00	0.5	WSW
1-Nov-06	11:00	0.9	W
1-Nov-06	12:00	0.9	WNW
1-Nov-06	13:00	0.7	W
1-Nov-06	14:00	1.1	W
1-Nov-06	15:00	1.2	W
1-Nov-06	16:00	1.2	W
1-Nov-06	17:00	0.8	WNW

Date	Time	Wind Speed m/s	Direction
1-Nov-06	18:00	0.6	WNW
1-Nov-06	19:00	0.6	WNW
1-Nov-06	20:00	0.6	SW
1-Nov-06	21:00	0.6	SSW
1-Nov-06	22:00	1.6	SW
1-Nov-06	23:00	1.4	SW
2-Nov-06	00:00	1.6	SW
2-Nov-06	01:00	1.2	SSW
2-Nov-06	02:00	1.3	W
2-Nov-06	03:00	1.6	SSW
2-Nov-06	04:00	1.6	W
2-Nov-06	05:00	1.4	WNW
2-Nov-06	06:00	1.3	W
2-Nov-06	07:00	1.2	W
2-Nov-06	08:00	1.0	W
2-Nov-06	09:00	1.2	SSW
2-Nov-06	10:00	1.2	SW
2-Nov-06	11:00	1.0	WSW
2-Nov-06	12:00	1.3	W
2-Nov-06	13:00	1.8	W
2-Nov-06	14:00	1.4	WNW
2-Nov-06	15:00	1.5	W
2-Nov-06	16:00	1.5	SSW
2-Nov-06	17:00	1.2	WSW
2-Nov-06	18:00	1.1	S
2-Nov-06	19:00	1.2	E
2-Nov-06	20:00	1.4	SSW
2-Nov-06	21:00	1.4	SSW
2-Nov-06	22:00	1.7	SSW
2-Nov-06	23:00	1.4	WNW
3-Nov-06	00:00	1.2	W
3-Nov-06	01:00	1.2	W
3-Nov-06	02:00	1.2	WNW
3-Nov-06	03:00	1.2	WNW
3-Nov-06	04:00	1.1	WNW
3-Nov-06	05:00	0.9	WNW
3-Nov-06	06:00	0.9	W
3-Nov-06	07:00	1.0	WSW
3-Nov-06	08:00	1.0	SW
3-Nov-06	09:00	1.3	WNW
3-Nov-06	10:00	1.4	WNW
3-Nov-06	11:00	1.5	WNW
3-Nov-06	12:00	1.6	WNW
3-Nov-06	13:00	1.6	WNW
3-Nov-06	14:00	1.4	WNW
3-Nov-06	15:00	1.3	WNW
3-Nov-06	16:00	1.2	WNW
3-Nov-06	17:00	1.1	WNW
3-Nov-06	18:00	0.7	WSW
3-Nov-06	19:00	0.4	W
3-Nov-06	20:00	0.5	WSW
3-Nov-06	21:00	0.4	WSW
3-Nov-06	22:00	0.5	W
3-Nov-06	23:00	0.4	WNW

Date	Time	Wind Speed m/s	Direction
4-Nov-06	00:00	0.7	WNW
4-Nov-06	01:00	0.9	WNW
4-Nov-06	02:00	0.8	WNW
4-Nov-06	03:00	0.9	WNW
4-Nov-06	04:00	0.8	WNW
4-Nov-06	05:00	0.8	WNW
4-Nov-06	06:00	0.9	WSW
4-Nov-06	07:00	1.0	SSW
4-Nov-06	08:00	0.9	SW
4-Nov-06	09:00	1.3	WNW
4-Nov-06	10:00	1.7	WNW
4-Nov-06	11:00	1.6	WNW
4-Nov-06	12:00	1.7	WNW
4-Nov-06	13:00	1.8	WNW
4-Nov-06	14:00	1.8	WNW
4-Nov-06	15:00	1.4	WNW
4-Nov-06	16:00	1.2	WNW
4-Nov-06	17:00	0.9	W
4-Nov-06	18:00	0.9	WSW
4-Nov-06	19:00	0.3	W
4-Nov-06	20:00	0.1	W
4-Nov-06	21:00	0.0	SSW
4-Nov-06	22:00	0.0	SSW
4-Nov-06	23:00	0.0	SW
5-Nov-06	00:00	0.1	SW
5-Nov-06	01:00	0.0	SSW
5-Nov-06	02:00	0.1	SSW
5-Nov-06	03:00	0.0	SSW
5-Nov-06	04:00	0.0	WSW
5-Nov-06	05:00	0.1	SSW
5-Nov-06	06:00	0.1	W
5-Nov-06	07:00	0.2	SW
5-Nov-06	08:00	0.4	W
5-Nov-06	09:00	0.9	WNW
5-Nov-06	10:00	0.9	W
5-Nov-06	11:00	0.7	W
5-Nov-06	12:00	0.7	WNW
5-Nov-06	13:00	1.1	W
5-Nov-06	14:00	0.9	WSW
5-Nov-06	15:00	1.0	W
5-Nov-06	16:00	0.7	WSW
5-Nov-06	17:00	0.7	SW
5-Nov-06	18:00	0.3	SW
5-Nov-06	19:00	0.0	SW
5-Nov-06	20:00	0.0	WSW
5-Nov-06	21:00	0.0	SW
5-Nov-06	22:00	0.0	SW
5-Nov-06	23:00	0.0	SW
6-Nov-06	00:00	0.0	SW
6-Nov-06	01:00	0.0	WSW
6-Nov-06	02:00	0.0	WSW
6-Nov-06	03:00	0.0	WSW
6-Nov-06	04:00	0.0	WSW
6-Nov-06	05:00	0.1	WSW

Date	Time	Wind Speed m/s	Direction
6-Nov-06	06:00	0.1	SW
6-Nov-06	07:00	0.0	WSW
6-Nov-06	08:00	0.1	SW
6-Nov-06	09:00	0.6	WSW
6-Nov-06	10:00	0.7	SW
6-Nov-06	11:00	1.0	W
6-Nov-06	12:00	1.0	WNW
6-Nov-06	13:00	1.1	WNW
6-Nov-06	14:00	0.9	WNW
6-Nov-06	15:00	0.9	WNW
6-Nov-06	16:00	0.9	WSW
6-Nov-06	17:00	0.8	WSW
6-Nov-06	18:00	0.5	WNW
6-Nov-06	19:00	0.2	WNW
6-Nov-06	20:00	0.1	WNW
6-Nov-06	21:00	0.1	W
6-Nov-06	22:00	0.0	WSW
6-Nov-06	23:00	0.1	WSW
7-Nov-06	00:00	0.2	SW
7-Nov-06	01:00	0.1	WSW
7-Nov-06	02:00	0.2	WNW
7-Nov-06	03:00	0.1	WSW
7-Nov-06	04:00	0.3	WNW
7-Nov-06	05:00	0.3	WNW
7-Nov-06	06:00	0.2	WNW
7-Nov-06	07:00	0.3	WNW
7-Nov-06	08:00	0.3	WNW
7-Nov-06	09:00	0.5	WNW
7-Nov-06	10:00	0.7	WNW
7-Nov-06	11:00	0.7	WNW
7-Nov-06	12:00	0.9	NW
7-Nov-06	13:00	0.9	WNW
7-Nov-06	14:00	1.0	W
7-Nov-06	15:00	0.9	WNW
7-Nov-06	16:00	0.9	W
7-Nov-06	17:00	0.9	W
7-Nov-06	18:00	0.8	W
7-Nov-06	19:00	0.6	W
7-Nov-06	20:00	0.4	W
7-Nov-06	21:00	0.5	W
7-Nov-06	22:00	0.5	SSW
7-Nov-06	23:00	0.7	W
8-Nov-06	00:00	0.7	W
8-Nov-06	01:00	0.7	SSW
8-Nov-06	02:00	0.7	W
8-Nov-06	03:00	0.9	W
8-Nov-06	04:00	0.8	W
8-Nov-06	05:00	0.7	W
8-Nov-06	06:00	0.7	W
8-Nov-06	07:00	0.8	W
8-Nov-06	08:00	0.9	W
8-Nov-06	09:00	1.2	W
8-Nov-06	10:00	1.3	W
8-Nov-06	11:00	1.4	W
2 1.07 00			• •

Date	Time	Wind Speed m/s	Direction
8-Nov-06	12:00	1.6	WNW
8-Nov-06	13:00	1.7	WNW
8-Nov-06	14:00	1.1	WNW
8-Nov-06	15:00	1.0	W
8-Nov-06	16:00	1.2	W
8-Nov-06	17:00	0.8	WSW
8-Nov-06	18:00	0.5	WSW
8-Nov-06	19:00	0.3	S
8-Nov-06	20:00	0.3	S
8-Nov-06	21:00	0.3	S
8-Nov-06	22:00	0.4	S
8-Nov-06	23:00	0.5	SW
9-Nov-06	00:00	0.5	SW
9-Nov-06	01:00	0.7	WSW
9-Nov-06	02:00	0.6	SW
9-Nov-06	03:00	0.5	W
9-Nov-06	04:00	0.4	S
9-Nov-06	05:00	0.5	S
9-Nov-06	06:00	0.5	WSW
9-Nov-06	07:00	0.5	SW
9-Nov-06	08:00	0.5	SW
9-Nov-06	09:00	0.8	W
9-Nov-06	10:00	1.4	WNW
9-Nov-06	11:00	1.3	WNW
9-Nov-06	12:00	1.4	WNW
9-Nov-06	13:00	1.2	WNW
9-Nov-06	14:00	0.9	N
9-Nov-06	15:00	0.9	N
9-Nov-06	16:00	1.2	NNE
9-Nov-06	17:00	0.9	N N
9-Nov-06	18:00	0.6	E E
9-Nov-06	19:00	0.4	ENE
9-Nov-06	20:00	0.5	ENE
9-Nov-06	21:00	0.3	N
9-Nov-06	22:00	0.3	WNW
9-Nov-06	23:00	0.4	W
10-Nov-06	00:00	0.4	SW
10-Nov-06	01:00	0.5	SW
10-Nov-06	02:00	0.2	W
10-Nov-06	03:00	0.2	WSW
10-Nov-06	04:00	0.3	WSW
10-Nov-06	05:00	0.3	WSW
10-Nov-06	06:00	0.3	NW
10-Nov-06	07:00	0.3	N
10-Nov-06	08:00	0.3	WNW
10-Nov-06	09:00	0.3	SW
10-Nov-06	10:00	0.6	WSW
10-Nov-06	11:00	0.8	WSW
10-Nov-06	12:00	0.8	W
10-Nov-06	13:00	0.9	WSW
10-Nov-06	14:00	1.0	NW
10-Nov-06	15:00	1.0	N
10-Nov-06	16:00	0.9	WNW
10-Nov-06	17:00	0.7	WNW
	17.00		**: ***

Date	Time	Wind Speed m/s	Direction
10-Nov-06	18:00	0.3	W
10-Nov-06	19:00	0.3	WSW
10-Nov-06	20:00	0.1	SW
10-Nov-06	21:00	0.3	N
10-Nov-06	22:00	0.3	N
10-Nov-06	23:00	0.2	N
11-Nov-06	00:00	0.3	N
11-Nov-06	01:00	0.2	NNW
11-Nov-06	02:00	0.1	N
11-Nov-06	03:00	0.1	NW
11-Nov-06	04:00	0.1	N
11-Nov-06	05:00	0.0	N
11-Nov-06	06:00	0.0	SW
11-Nov-06	07:00	0.1	SW
11-Nov-06	08:00	0.0	SW
11-Nov-06	09:00	0.2	W
11-Nov-06	10:00	0.3	WSW
11-Nov-06	11:00	0.5	WNW
11-Nov-06	12:00	0.9	W
11-Nov-06	13:00	0.7	W
11-Nov-06	14:00	0.8	W
11-Nov-06	15:00	0.9	WNW
11-Nov-06	16:00	1.0	N
11-Nov-06	17:00	0.6	N
11-Nov-06	18:00	0.3	W
11-Nov-06	19:00	0.1	W
11-Nov-06	20:00	0.1	S
11-Nov-06	21:00	0.1	SSE
11-Nov-06	22:00	0.0	SW
11-Nov-06	23:00	0.0	SW
12-Nov-06	00:00	0.0	
12-Nov-06	01:00	0.0	
12-Nov-06	02:00	0.0	
12-Nov-06	03:00	0.0	
12-Nov-06	04:00	0.0	SW
12-Nov-06	05:00	0.0	SW
12-Nov-06	06:00	0.1	W
12-Nov-06	07:00	0.1	W
12-Nov-06	08:00	0.3	W
12-Nov-06	09:00	0.3	W
12-Nov-06	10:00	0.9	SW
12-Nov-06	11:00	1.2	SW
12-Nov-06	12:00	1.5	WSW
12-Nov-06	13:00	1.4	SW
12-Nov-06	14:00	1.3	W
12-Nov-06	15:00	1.5	W
12-Nov-06	16:00	1.6	WNW
12-Nov-06	17:00	1.4	WNW
12-Nov-06	18:00	1.1	W
12-Nov-06	19:00	1.3	WNW
12-Nov-06	20:00	1.2	W
12-Nov-06	21:00	1.3	W
12-Nov-06	22:00	1.4	W
12-Nov-06	23:00	1.1	WNW
	_0.00		

Date	Time	Wind Speed m/s	Direction
13-Nov-06	00:00	1.2	W
13-Nov-06	01:00	1.2	W
13-Nov-06	02:00	1.2	W
13-Nov-06	03:00	1.0	W
13-Nov-06	04:00	1.2	W
13-Nov-06	05:00	1.2	W
13-Nov-06	06:00	1.2	W
13-Nov-06	07:00	0.9	W
13-Nov-06	08:00	0.7	W
13-Nov-06	09:00	1.4	SW
13-Nov-06	10:00	1.6	WSW
13-Nov-06	11:00	1.6	WSW
13-Nov-06	12:00	1.5	W
13-Nov-06	13:00	1.8	WSW
13-Nov-06	14:00	1.5	W
13-Nov-06	15:00	1.3	WNW
13-Nov-06	16:00	1.0	W
13-Nov-06	17:00	0.7	NW
13-Nov-06	18:00	0.5	NNE
13-Nov-06	19:00	0.5	NNE
13-Nov-06	20:00	0.5	NNE
13-Nov-06	21:00	0.3	SW
13-Nov-06	22:00	0.5	WSW
13-Nov-06	23:00	0.4	SSW
14-Nov-06	00:00	0.4	W
14-Nov-06	01:00	0.4	S
14-Nov-06	02:00	0.5	SW
14-Nov-06	03:00	0.5	SW
14-Nov-06	04:00	0.5	SSW
14-Nov-06	05:00	0.3	SSE
14-Nov-06	06:00	0.3	NNE
14-Nov-06	07:00	0.3	NNE
14-Nov-06	08:00	0.4	NNE
14-Nov-06	09:00	0.8	N
14-Nov-06	10:00	0.8	N
14-Nov-06	11:00	0.9	WSW
14-Nov-06	12:00	1.0	W
14-Nov-06	13:00	1.0	W
14-Nov-06	14:00	1.0	W
14-Nov-06	15:00	1.2	N
14-Nov-06	16:00	1.4	N
14-Nov-06	17:00	1.4	N
14-Nov-06	18:00	0.8	E
14-Nov-06	19:00	0.7	NE
14-Nov-06	20:00	0.8	NE
14-Nov-06	21:00	0.6	NE
14-Nov-06	22:00	0.7	WSW
14-Nov-06	23:00	0.7	WNW
15-Nov-06	00:00	0.7	WNW
15-Nov-06	01:00	0.9	W
15-Nov-06	02:00	0.7	WNW
15-Nov-06	03:00	0.7	W
15-Nov-06	04:00	0.7	W
15-Nov-06	05:00	0.9	W

Date	Time	Wind Speed m/s	Direction
15-Nov-06	06:00	0.7	SW
15-Nov-06	07:00	0.8	SW
15-Nov-06	08:00	0.7	SSW
15-Nov-06	09:00	0.9	SSW
15-Nov-06	10:00	0.0	
15-Nov-06	11:00	0.0	
15-Nov-06	12:00	0.0	
15-Nov-06	13:00	0.0	
15-Nov-06	14:00	0.0	
15-Nov-06	15:00	0.0	
15-Nov-06	16:00	0.0	
15-Nov-06	17:00	0.0	
15-Nov-06	18:00	1.2	WNW
15-Nov-06	19:00	1.1	WNW
15-Nov-06	20:00	0.9	WSW
15-Nov-06	21:00	0.7	WSW
15-Nov-06	22:00	0.6	SW
15-Nov-06	23:00	0.7	SW
16-Nov-06	00:00	0.7	SW
16-Nov-06	01:00	1.1	SW
16-Nov-06	02:00	0.7	WSW
16-Nov-06	03:00	0.8	WNW
16-Nov-06	04:00	0.7	SW
16-Nov-06	05:00	0.9	WSW
16-Nov-06	06:00	0.7	WSW
16-Nov-06	07:00	1.0	WSW
16-Nov-06	08:00	1.0	W
16-Nov-06	09:00	1.3	WNW
16-Nov-06	10:00	1.3	WNW
16-Nov-06	11:00	1.2	W
16-Nov-06	12:00	1.5	WSW
16-Nov-06	13:00	1.3	W
16-Nov-06	14:00	1.0	WNW
16-Nov-06	15:00	0.9	WNW
16-Nov-06	16:00	0.9	WNW
16-Nov-06	17:00	0.7	SW
16-Nov-06	18:00	0.5	SSW
16-Nov-06	19:00	0.6	SSW
16-Nov-06	20:00	0.7	SW
16-Nov-06	21:00	0.7	W
16-Nov-06	22:00	1.0	WNW
16-Nov-06	23:00	0.7	SW
17-Nov-06	00:00	0.7	SW
17-Nov-06	01:00	0.7	SW
17-Nov-06	02:00	0.6	WNW
			W
17-Nov-06	04:00	0.6	WSW
17-Nov-06	05:00	0.5	SW
17-Nov-06	06:00	0.5	WNW
17-Nov-06	07:00	0.3	WNW
			WNW
		1.0	WNW
17-Nov-06		1.1	WNW
17-Nov-06 17-Nov-06 17-Nov-06 17-Nov-06 17-Nov-06 17-Nov-06 17-Nov-06 17-Nov-06	02:00 03:00 04:00 05:00 06:00	0.6 0.6 0.6 0.5 0.5 0.3 0.5 1.0	WNW WSW SW WNW WNW WNW WNW WNW

Date	Time	Wind Speed m/s	Direction
17-Nov-06	12:00	1.2	WNW
17-Nov-06	13:00	1.1	WNW
17-Nov-06	14:00	1.2	WSW
17-Nov-06	15:00	1.4	WNW
17-Nov-06	16:00	1.0	WNW
17-Nov-06	17:00	0.7	W
17-Nov-06	18:00	0.4	W
17-Nov-06	19:00	0.2	WNW
17-Nov-06	20:00	0.5	WSW
17-Nov-06	21:00	0.5	SW
17-Nov-06	22:00	1.1	W
17-Nov-06	23:00	1.0	WSW
18-Nov-06	00:00	1.0	WSW
18-Nov-06	01:00	0.8	SW
18-Nov-06	02:00	0.9	WSW
18-Nov-06	03:00	1.0	WSW
18-Nov-06	04:00	0.9	WSW
18-Nov-06	05:00	0.9	WSW
18-Nov-06	06:00	0.8	WSW
18-Nov-06	07:00	0.6	WSW
18-Nov-06	08:00	0.7	WSW
18-Nov-06	09:00	1.6	WNW
18-Nov-06	10:00	2.0	WNW
18-Nov-06	11:00	2.2	W
18-Nov-06	12:00	1.7	WSW
18-Nov-06	13:00	1.6	W
18-Nov-06	14:00	1.6	WNW
18-Nov-06	15:00	1.7	W
18-Nov-06	16:00	1.3	W
18-Nov-06	17:00	0.9	W
18-Nov-06	18:00	0.3	SSW
18-Nov-06	19:00	0.4	S
18-Nov-06	20:00	0.3	
18-Nov-06	21:00	0.2	
18-Nov-06	22:00	0.3	
18-Nov-06	23:00	0.3	
19-Nov-06	00:00	0.4	
19-Nov-06	01:00	0.3	SSW
19-Nov-06	02:00	0.3	SW
19-Nov-06	03:00	0.4	SW
19-Nov-06	04:00	0.5	SW
19-Nov-06	05:00	0.6	WSW
19-Nov-06	06:00	0.8	SW
19-Nov-06	07:00	1.0	WSW
19-Nov-06	08:00	1.1	WNW
19-Nov-06	09:00	1.4	WNW
19-Nov-06	10:00	1.6	WNW
19-Nov-06	11:00	1.4	WNW
19-Nov-06	12:00	1.7	WNW
19-Nov-06	13:00	1.5	W
19-Nov-06	14:00	1.3	WNW
19-Nov-06	15:00	1.2	WNW
19-Nov-06	16:00	1.1	W
19-Nov-06	17:00	0.9	W
		1 0.0	• •

	Time	Wind Speed m/s	Direction
19-Nov-06	18:00	0.6	W
19-Nov-06	19:00	0.4	NW
19-Nov-06	20:00	0.0	NW
19-Nov-06	21:00	0.0	NW
19-Nov-06	22:00	0.0	NW
19-Nov-06	23:00	0.0	WNW
20-Nov-06	00:00	0.9	WNW
20-Nov-06	01:00	0.7	SW
20-Nov-06	02:00	0.7	SW
20-Nov-06	03:00	0.5	WSW
20-Nov-06	04:00	0.6	WSW
20-Nov-06	05:00	0.5	SW
20-Nov-06	06:00	0.4	SW
20-Nov-06	07:00	0.5	SW
20-Nov-06	08:00	0.8	SW
20-Nov-06	09:00	1.0	NW
20-Nov-06	10:00	1.9	WNW
20-Nov-06	11:00	2.0	WNW
20-Nov-06	12:00	1.8	WNW
20-Nov-06	13:00	1.7	WNW
20-Nov-06	14:00	0.0	WNW
20-Nov-06	15:00	0.0	W
20-Nov-06	16:00	0.7	W
20-Nov-06	17:00	0.5	ENE
20-Nov-06	18:00	0.2	ENE
20-Nov-06	19:00	0.3	ENE
20-Nov-06	20:00	0.3	ESE
20-Nov-06	21:00	0.3	SSE
20-Nov-06	22:00	0.3	WSW
20-Nov-06	23:00	0.3	SW
21-Nov-06	00:00	0.5	W
21-Nov-06	01:00	0.5	WSW
21-Nov-06	02:00	0.4	WSW
21-Nov-06	03:00	0.5	WSW
21-Nov-06	04:00	0.5	WSW
21-Nov-06	05:00	0.5	WSW
21-Nov-06	06:00	0.7	WSW
21-Nov-06	07:00	0.6	WSW
21-Nov-06	08:00	0.8	WSW
21-Nov-06	09:00	0.8	WSW
21-Nov-06	10:00	1.4	WSW
21-Nov-06	11:00	1.8	WSW
21-Nov-06	12:00	1.6	WSW
21-Nov-06	13:00	1.5	WSW
21-Nov-06	14:00	1.4	SW
21-Nov-06	15:00	1.6	WSW
21-Nov-06	16:00	1.4	WSW
21-Nov-06	17:00	1.2	WSW
21-Nov-06	18:00	0.9	SW
21-Nov-06	19:00	0.7	WSW
21-Nov-06	20:00	0.4	WSW
21-Nov-06	21:00	0.3	WSW
21-Nov-06	22:00	0.1	WSW
21-Nov-06	23:00	0.2	WSW

Date	Time	Wind Speed m/s	Direction
22-Nov-06	00:00	0.1	WSW
22-Nov-06	01:00	0.4	WSW
22-Nov-06	02:00	0.2	WSW
22-Nov-06	03:00	0.5	SW
22-Nov-06	04:00	0.7	WSW
22-Nov-06	05:00	0.8	WSW
22-Nov-06	06:00	0.5	WSW
22-Nov-06	07:00	0.7	WNW
22-Nov-06	08:00	1.1	WSW
22-Nov-06	09:00	1.5	W
22-Nov-06	10:00	1.6	WSW
22-Nov-06	11:00	1.7	WNW
22-Nov-06	12:00	1.3	W
22-Nov-06	13:00	1.3	WNW
22-Nov-06	14:00	1.4	WNW
22-Nov-06	15:00	1.2	WNW
22-Nov-06	16:00	1.1	W
22-Nov-06	17:00	0.9	W
22-Nov-06	18:00	0.6	SSW
22-Nov-06	19:00	0.3	S
22-Nov-06	20:00	0.5	SW
22-Nov-06	21:00	0.4	SW
22-Nov-06	22:00	0.0	
22-Nov-06	23:00	0.0	
23-Nov-06	00:00	0.0	
23-Nov-06	01:00	0.0	
23-Nov-06	02:00	0.0	
23-Nov-06	03:00	0.0	
23-Nov-06	04:00	0.1	WSW
23-Nov-06	05:00	0.0	
23-Nov-06	06:00	0.0	
23-Nov-06	07:00	0.0	
23-Nov-06	08:00	0.8	WSW
23-Nov-06	09:00	1.2	W
23-Nov-06	10:00	1.4	WNW
23-Nov-06	11:00	1.7	WNW
23-Nov-06	12:00	1.8	WNW
23-Nov-06	13:00	1.5	WNW
23-Nov-06	14:00	1.4	WNW
23-Nov-06	15:00	1.3	W
23-Nov-06	16:00	1.4	W
23-Nov-06	17:00	0.9	WNW
23-Nov-06	18:00	0.5	S
23-Nov-06	19:00	0.0	
23-Nov-06	20:00	0.0	
23-Nov-06	21:00	0.1	SSW
23-Nov-06	22:00	0.0	
23-Nov-06	23:00	0.0	
24-Nov-06	00:00	0.3	SSW
24-Nov-06	01:00	0.5	WSW
24-Nov-06	02:00	0.5	W
24-Nov-06	03:00	0.6	WSW
24-Nov-06	04:00	0.7	WNW
24-Nov-06	05:00	0.8	W

Date	Time	Wind Speed m/s	Direction
24-Nov-06	06:00	0.3	WNW
24-Nov-06	07:00	0.5	WNW
24-Nov-06	08:00	0.7	WNW
24-Nov-06	09:00	1.1	SSW
24-Nov-06	10:00	1.7	WNW
24-Nov-06	11:00	1.5	WNW
24-Nov-06	12:00	1.5	WNW
24-Nov-06	13:00	1.6	W
24-Nov-06	14:00	1.4	WNW
24-Nov-06	15:00	1.0	W
24-Nov-06	16:00	0.9	WNW
24-Nov-06	17:00	0.8	W
24-Nov-06	18:00	0.5	SW
24-Nov-06	19:00	0.1	W
24-Nov-06	20:00	0.3	ESE
24-Nov-06	21:00	0.1	SSE
24-Nov-06	22:00	0.2	WSW
24-Nov-06	23:00	0.3	SW
25-Nov-06	00:00	0.1	W
25-Nov-06	01:00	0.0	W
25-Nov-06	02:00	0.0	WNW
25-Nov-06	03:00	0.0	WNW
25-Nov-06	04:00	0.0	W
25-Nov-06	05:00	0.0	SSW
25-Nov-06	06:00	0.0	SW
25-Nov-06	07:00	0.1	SW
25-Nov-06	08:00	0.3	SW
25-Nov-06	09:00	0.9	
25-Nov-06	10:00	1.4	SW
25-Nov-06	11:00	1.4	SW
25-Nov-06	12:00	1.2	WNW
25-Nov-06	13:00	0.9	W
25-Nov-06	14:00	0.9	WNW
25-Nov-06	15:00	1.1	WNW
25-Nov-06	16:00	0.7	WNW
25-Nov-06	17:00	0.4	W
25-Nov-06	18:00	0.2	SSW
25-Nov-06	19:00	0.1	ESE
25-Nov-06	20:00	0.0	WNW
25-Nov-06	21:00	0.0	W
25-Nov-06	22:00	0.3	SSW
25-Nov-06	23:00	0.6	ESE

# APPENDIX H WATER MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

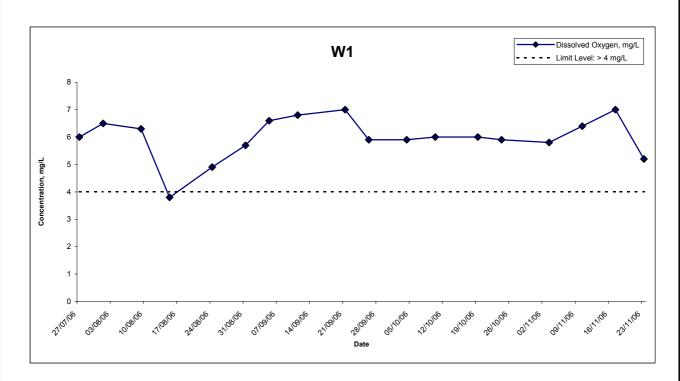
## Appendix H Water Quality Monitoring Results

#### Location W1

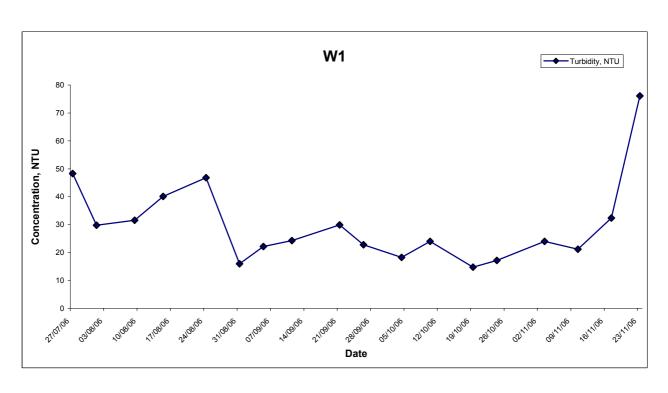
Date	Weather	Sampling	Depth (m)		Temperature (°C)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		pН		Ammoniacal-Nitrogen (mg/L)
Date	Condition	Time			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value
2006/11/3	Sunny	14:00	Middle	0.5	21.2 21.4	21.3	86.5 85.8	86.2	5.8 5.7	5.8	24.1 23.8	24.0	7.8 7.9	7.9	9.0
2006/11/10	Cloudy	13:02	Middle	0.5	20.7 20.5	20.6	92.6 93.4	93.0	6.4 6.4	6.4	21.4 21.0	21.2	7.9 7.9	7.9	7.0
2006/11/17	Cloudy	11:02	Middle	0.5	21.6 21.7	21.7	92.6 93.9	93.3	7.0 7.0	7.0	32.9 31.9	32.4	7.9 7.9	7.9	8.0
2006/11/23	Cloudy	15:20	Middle	0.5	24.9 24.9	24.9	58.1 58.2	58.2	5.2 5.2	5.2	75.9 76.3	76.1	7.3 7.3	7.3	7.0

No water discharge from DP1 to DP8

#### **Dissolved Oxygen**

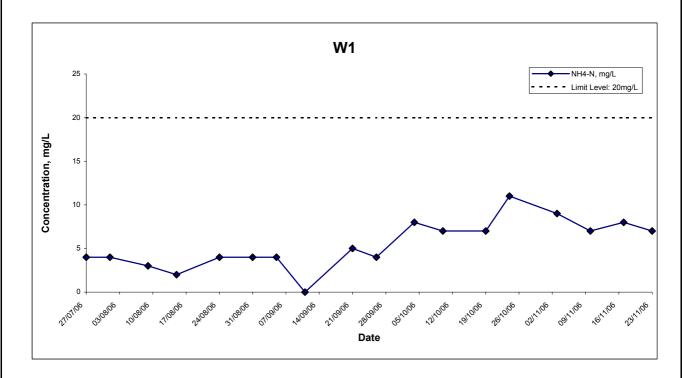


## **Turbidity**

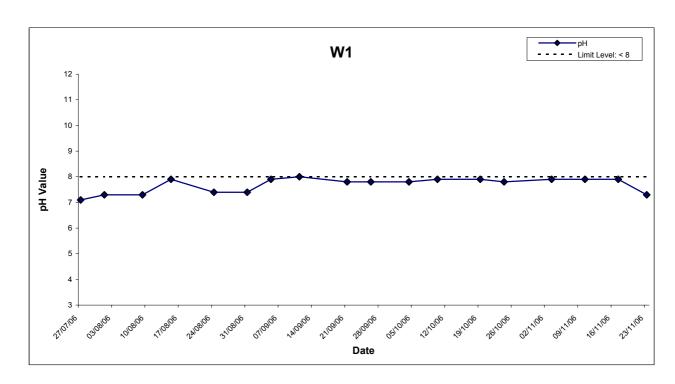


Title Contract No. DC/2002/06 Construction of Yuen Long Bypass Floodway		Project No. MA2049	CINOTEC
Graphical Presentation of Water Quality Monitoring Results	Date Nov 06	Appendix <b>H</b>	CINOIE

#### **Ammoniacal-Nitrogen**



pН



Litle	Contract No. DC/2002/06						
	Construction of Yuen Long Bypass Floodway						
	Graphical Presentation of Water Quality Monitoring						
	Results						

Scale		Project	
	N.T.S	No.	MA2049
Date		Appendi	х
	Nov 06		Н



## APPENDIX I SITE AUDIT SUMMARY

# Construction of the Yuen Long Bypass Floodway

## Site Inspection Record Sheet

Checklist Reference Number	61027
Date	27 October 2006
Time	15:00 – 16:00

Observations	Reference No.
A. Water Quality	
No environmental deficiencies were identified during the audit session.	
B. Air Quality	
Provide water spraying for stockpile of silt at Tai Shu Ha works area was reminded.	.1
C. Noise	
No environmental deficiencies were identified during the audit session.	
D. Waste / Chemical Management	
No environmental deficiencies were identified during the audit session.	
E. Permit / Licenses	
No environmental deficiencies were identified during the audit session.	
F Follow Up Action	
All the environmental deficiencies recorded in the previous audit session were	
rectified.	

	Name	Signature	Date
Recorded by	Jason Lai	Loui	27 October 2006
Checked by	Ray Yan	Zan	27 October 2006

# Construction of the Yuen Long Bypass Floodway

## Site Inspection Record Sheet

Checklist Reference Number	umber 61103	
Date	3 November 2006	
Time	15:00 – 15:50	

Observations	Reference No.
A. Water Quality	
No environmental deficiencies were identified during the audit session.	
B. Air Quality	
No environmental deficiencies were identified during the audit session.	
C. Noise	
No environmental deficiencies were identified during the audit session.	
D. Waste / Chemical Management	
No environmental deficiencies were identified during the audit session.	
E. Permit / Licenses	
No environmental deficiencies were identified during the audit session.	
F Follow Up Action	
All the environmental deficiencies recorded in the previous audit session were rectified.	

	Name	Signature	Date
Recorded by	Tommy Ho	7	6 November 2006
Checked by	Ray Yan	Dan.	6 November 2006

## Construction of the Yuen Long Bypass Floodway

#### Site Inspection Record Sheet

Inspection Information

Checklist Reference Number	61110	
Date	10 November 2006	
Time	15:00 – 15:50	

A. Water Quality

No environmental deficiencies were identified during the audit session.

B. Air Quality

No environmental deficiencies were identified during the audit session.

C. Noise

No environmental deficiencies were identified during the audit session.

D. Waste / Chemical Management

No environmental deficiencies were identified during the audit session.

E. Permit / Licenses

No environmental deficiencies were identified during the audit session.

F Follow Up Action

All the environmental deficiencies recorded in the previous audit session were rectified.

	Name	Signature	Date
Recorded by	Tommy Ho	7	10 November 2006
Checked by	Ray Yan	Pan	10 November 2006

# Construction of the Yuen Long Bypass Floodway

## Site Inspection Record Sheet

Checklist Reference Number	er 61117	
Date	17 November 2006	
Time	15:10 – 15:45	

Observations	Reference No.
A. Water Quality	
No environmental deficiencies were identified during the audit session.	
	(S
B. Air Quality	
The Contractor was reminded to provide water-spraying for the unpaved road at Tai     Shui Ha Road and the site area opposite to Pok Oi Hospital.	1
C. Noise	
No environmental deficiencies were identified during the audit session.	
D. Waste / Chemical Management	
No environmental deficiencies were identified during the audit session.	
E. Permit / Licenses	
No environmental deficiencies were identified during the audit session.	
F Follow Up Action	
No environmental deficiency was identified in the previous audit session.	

	Name	Signature	Date
Recorded by	Tommy Ho	7	22 November 2006
Checked by	Dr. Priscilla Choy	With	22 November 2006

# Construction of the Yuen Long Bypass Floodway

## Site Inspection Record Sheet

Checklist Reference Number	61124
Date	24 November 2006
Time	15:10 – 15:45

Observations	Reference No.
A. Water Quality	
No environmental deficiencies were identified during the audit session.	
B. Air Quality	
No environmental deficiencies were identified during the audit session.	
C. Noise	
No environmental deficiencies were identified during the audit session.	
D. Waste / Chemical Management	
No environmental deficiencies were identified during the audit session.	
E. Permit / Licenses	
No environmental deficiencies were identified during the audit session.	
F Follow Up Action	
No environmental deficiency was identified in the previous audit session.	

	Name	Signature	Date
Recorded by	Tommy Ho	3	27 November 2006
Checked by	Ray Yan	Kan	27 November 2006

## APPENDIX J SUMMARY OF EXCEEDANCES

## Contract No. DC/2002/06 Construction of Yuen Long Bypass Floodway

## **Exceedance Summary**

## **Air Quality Monitoring:**

- No exceedance was recorded in the reporting month.

#### **Noise Monitoring:**

- No exceedance was recorded in the reporting month.

## Water Quality Monitoring:

- No exceedance was recorded in the reporting month.

## APPENDIX K AMONUT OF WASTE GENERATED

# Contract No. DC/2002/06 Construction of the Yuen Long Bypass Floodway

**Summary Table of Waste Quantity** 

**Month: November 2006** 

Waste Type	Quantity of this month (m <sup>3</sup> )	Disposal Site	Accumulated Amount (m3)
Inert Portion of	C&D materials (public fill)		
Public fill that			
can be reused			
and/or recycled			
in order to			
enable it to be	10	-	399630
Surplus public		Public filling area at Tuen Mun Area 38, or	
fill to be		when instructed by the Engineer, the public	
delivered to		filling area at Tseung Kwan O Area 137 or any	
public filling		other authorized locations within the Territory	
facilities	28	of the Hong Kong Special Administrative	568,645
Non-inert portio	n of C&D materials (C&D waste	), including general refuse	
Chemical waste	0	-	0
C&D waste to		-	
be recycled	5		355
C&D waste to		-	
be re-used	0		175
C&D waste to		-	
be returned	0		5
C&D waste		WENT and NENT Landfills, or any other	
which cannot be		authorized locations within the Territory of the	
reused or		Hong Kong Special Administrative Region.	
recycled and			
has to be	0		15849

								Source of			Net Vehicle Load	
Contract No	DDF Serial No	Transaction Ref No	Disposal Date	Time In	Time Out	Vehicle No	GVW	Material	Type of Material	Weight In (tonne)	(tonne)	Remarks
合約編號	運載記錄票編號	交收備考號碼	卸置日期	進入時間	離開時間	車輛登記號碼	車輛總重	物料來源地	物料類別	入載重量 (公噸)	物料淨重量(公噸)	備註
DC/2002/06	0000105819		02-Nov-06	15:57:00	16:11:00	JC6013	24	Yuen Long		18.15	3.62	
DC/2002/06	0000105820	060088912	07-Nov-06	10:07:00	10:13:00	JC6013	24	Yuen Long	Mixed rock and soil	21.61	7.01	
DC/2002/06	0000105821	060089351	08-Nov-06	11:32:00	11:40:00	JC6013	24	Yuen Long	Mixed Construction Waste >50%	21.18	6.67	
DC/2002/06	0000105822		22-Nov-06	16:08:00	16:21:00	JC6013	24	Yuen Long		19.39	4.55	

Total: 4 trucks load (Quantity)

Truck load x 13 ton  $\div$  1.85 (Mg/m<sup>3</sup>) = 28.11 m<sup>3</sup> (Volume)

### APPENDIX M COMPLAINT LOGS

# Appendix M - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
30825-1	Fish Pond No. 9	25 Aug 03	EPD received a complaint about the malodour emitted from dead fishes at ponds due to the Project on 23 <sup>rd</sup> August 2003. EPD subsequently referred the complaint to the ET Leader of the Project on 25 <sup>th</sup> August 2003.  The complaint was concerning malodour emitted from fish ponds next to Hung Mo Kiu on 23 <sup>rd</sup> August 2003.	The ET contacted the complaint on 25th August 2003 and was told that the malodour was emitted from dead fishes in the ponds. The complaint said that the condition was alleviated as the said fish ponds were refilled with water on that day.  Information about the complaint was sent to the Contractor on 25 <sup>th</sup> August 2003. The Contractor was requested to confirm the exact pond location with the complainant and propose mitigation measures for same case in the future.  The Contractor confirmed that the malodour was generated from pond No. 9 which is close to the Kam Tin River. The fish pond was refilled with water on 25th August 2003 and the condition was alleviated. The Contractor had made telephone conversation with the complainant was satisfied with the improved pond condition.  The ET had carried out a site investigation on 26 <sup>th</sup> August 2003 and observed that the said fish pond was filled up with water and no malodour was emitted.	Closed
40112_16	Kong Tau Tsuen	12 Jan 04 16 Jan 04	EPD Ref.: EP3/N06/TW/1118-04  On 3 <sup>rd</sup> , 5 <sup>th</sup> , 10 <sup>th</sup> and 15 <sup>th</sup> January 2004, the EPD received a total of four environmental complaints about the dust nuisance produced from the site of the Project at Kong Tau Tsuen. The EPD referred the complaints to the IEC on 10 <sup>th</sup> and 16 <sup>th</sup> January 2004 and the IEC forwarded the complaints to the ET on 12 <sup>th</sup> and 16 <sup>th</sup> January 2004 respectively.  The investigation report was submitted to EPD	According to IEC's weekly site audit and ET's monthly site audit in the concerned periods, no air quality violation was observed.  Kong Tau Tsuen itself is a designated dust monitoring station. Regular dust monitoring were conducted on 3 <sup>rd</sup> , 5 <sup>th</sup> , 6 <sup>th</sup> , 9 <sup>th</sup> , 12 <sup>th</sup> , 13 <sup>th</sup> , 15 <sup>th</sup> and 16 <sup>th</sup> January 2004. Although 1-hr TSP Action Level exceedances were recorded on 5 <sup>th</sup> and 6 <sup>th</sup> January 2004, the exceedances were due to poor ambient air quality but not the Project.	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			on 27 <sup>th</sup> January 2004.	The 1-hr TSP Limit Level exceedance on 9 <sup>th</sup> January 2004 was due to the operation of excavators and dump trucks. However, mitigation measures by (1) Increasing the frequency of watering of the concerned road; and (2) Washing the access road at the end of each day, were taken place and no further exceedance was recorded.	
40113	Tai Shu Ha Road West	13 Jan 04	On 13 <sup>th</sup> January 2004, the EPD received an environmental complaint about the exhaust gas emission from dump trucks parked in the Project at Tai Shu Ha Road West. The EPD	For the 1-hr TSP monitoring on 13 <sup>th</sup> January 2004, no Action/Limit Level exceedance was recorded in all designated monitoring stations of the Project.	
			referred the complaint to IEC and the IEC forwarded the complaint to the ET on the same day.  The investigation report was submitted to EPD on 30 <sup>th</sup> January 2004.	According to IEC's weekly site audit and ET's monthly site audit in the concerned periods, no air quality violation was observed.	
				According to Contractor's investigation and ET's monthly site audit, Tai Shu Ha Road West itself is a dual lane road with double white line as the separator. No parking area is spaced at the construction site of the Project and in both sides of the road. Therefore, parking of dump trucks is impossible at Tai Shu Ha Road West.	Closed
					There is also no evidence showing that the parked dump truck as complained was from the Project "Widening of Yuen Long Highway" or the captioned Project.
		The exhaust gas emission might due to road traffic at Tai Sha Ha Road West other than parked dump trucks.			
40116	Nam Sang Wai Road	16 Jan 04	EPD Ref.: EP3/N06/TW/771-04 On 12 <sup>th</sup> January 2004, the EPD received an environmental complaint about the dust nuisance and deposit of soil from the Project at	For the 1-hr TSP monitoring on 12 <sup>th</sup> January 2004, no Action/Limit Level exceedance was recorded at the monitoring station in Nam Sang Wai.	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			Nam Sang Wai Road. The EPD referred the complaint to IEC on 16 <sup>th</sup> January 2004 and the IEC forwarded the complaint to the ET on the same day.  The investigation report was submitted to EPD on 30 <sup>th</sup> January 2004.	According to IEC's weekly site audit and ET's monthly site audit in the concerned periods, no air quality violation was observed.  Although lack of wheel washing facilities and dust emission were observed by EPD on 19 <sup>th</sup> January 2004, the Contractor has provided temporary concrete paving and additional wheel washing facilities as the mitigation measures. The effectiveness of these mitigation measures have been confirmed as no Action/Limit Level exceedance records at ET's designated dust monitoring on 19 <sup>th</sup> , 20 <sup>th</sup> , 21 <sup>st</sup> and 26 <sup>th</sup> January 2004.	
40205	Kong Tau Tsuen	5 Feb 04	EPD Ref.: EP3/N06/TW/2050-04  On 4 <sup>th</sup> February 2004, the EPD received an environmental complaint about the noise uisance produced from the Project near Kong Tau Tsuen and Sheung Yau Tin Tsuen. The EPD referred the complaint to the IEC on 4 <sup>th</sup> February 2004 and the IEC forwarded the complaint to the ET on 5 <sup>th</sup> February 2004.  The complaint was about the noise nuisance produced from loading/unloading activities by the lorries at the construction site. The complainant indicated that such noise problem had happened between 4:00am to 6:00am in the period of 20 <sup>th</sup> January 2004 to 3 <sup>rd</sup> February 2004.  The investigation report was submitted to EPD on 13 <sup>th</sup> February 2004.	According to the information provided by the Contractor, there was no construction activity on the site in the duration as mentioned by the complainant. Instead, all of the construction activities were limited in the period of 7:00am to 7:00pm in each working day. Furthermore, the site was closed during Chinese New Year Holidays from 22 <sup>nd</sup> to 25 <sup>th</sup> January 2004. Since there was no construction activity on the site within the period as mentioned by the complainant, the ET and the Contractor has considered the allegation from the complainant was not due to the Project and the complaint was invalid.	Closed
40206	Castle Peak Road	6 Feb 04	EPD Ref.: EP3/N06/TW/2034-04 On 4 <sup>th</sup> February 2004, the EPD received an environmental complaint about the muddy	According to the information provided by the Contractor, the construction site of "Pok Oi Hospital Extension" is located adjacent to the	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			effluent produced from the Project near Au Tau at Castle Peak Road. The EPD referred the complaint to the IEC on 5 <sup>th</sup> February 2004 and the IEC forwarded the complaint to the ET on 6 <sup>th</sup> February 2004.  The investigation report was submitted to EPD on 17 <sup>th</sup> February 2004.	captioned project. There is no clear indication of the muddy effluent discharge from which construction site.  Since there was no clear evidence indicating that the muddy effluent was came from the Project, the ET and the Contractor has concluded that the effluent might not be due to the Project. In order to prevent the discharge of muddy effluent to public roads, the Contractor has employed a full-time labour to clean the site exit at Castle Peak Road during working hours. A close monitoring on the cleanliness is also provided by the Contractor.	
40216	Yau Tin West Road	16 Feb 04	EPD Ref.: EP3/N06/TW/2622-04  On 13 <sup>th</sup> February 2004, the EPD received an environmental complaint about the soil deposited with muddy water and dust nuisance from the Project at Yau Tin West Road. The EPD referred the complaint to the IEC on 16 <sup>th</sup> February 2004 and the IEC forwarded the complaint to the ET on the same day.  The investigation report was submitted to EPD on 1 <sup>st</sup> March 2004.	According to the site investigation by IEC and ET on 20 <sup>th</sup> February 2004, no environmental deficiency was observed at Yau Tin West Road. The Contractor has revised the routing of haul road and provided a wheel washing facility at Yau Tin West Road in order to improve the situation. Based on the information provided by Mr. Li of EPD on 26 <sup>th</sup> February 2004 at 4:05pm, the complainant has confirmed that the situation has been improved and the Contractor has washed the road regularly.	Closed
40309	Sheung Yau Tin Tsuen	9 Mar 04	EPD Ref.: EP3/N06/TW/4574-04  On 8 <sup>th</sup> March 2004, the EPD received an environmental complaint about the dust nuisance due to the operation of dump trucks at Sheung Yau Tin Tsuen. The EPD referred the complaint to the IEC on 9 <sup>th</sup> March 2004 and the IEC forwarded the complaint to the ET Leader on the same day for investigation.  The investigation report was submitted to EPD on 17 <sup>th</sup> March 2004.	<ul> <li>The Contractor has agreed with the complainant, Mr. Lam, and the following mitigation measures are applied:</li> <li>Routing of dump trucks is separated from the village access in order to minimize the dust nuisance to villagers;</li> <li>Frequency of water spraying at both haul road and village access is increased;</li> <li>Labours are employed to clear the muddy water; and</li> </ul>	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				Wheel washing facilities are provided at the site entrance.	
40316	Kong Tau Tsuen	16 Mar 04	EPD Ref.: EP3/N06/TW/5044-04  On 15 <sup>th</sup> March 2004, the EPD received an environmental complaint about the dust nuisance at Kong Tau Tsuen produced from the construction site of the Project. The EPD referred the complaints to the IEC on 16 <sup>th</sup> March 2004 and the IEC forwarded the complaints to the ET Leader of the Project on the same day for investigation.  The investigation report was submitted to EPD on 25 <sup>th</sup> March 2004.	Based on the information provided by the Contractor, the frequency of water spraying was increased in early morning times.  According to ET's site inspection, no violation of air quality was observed at Kong Tau Tsuen.  No dust exceedance was recorded during regular monitoring.  The ET concluded that the dust nuisance was rectified and no further action is required.	Closed
40326_29	Tai Tong Road	26 Mar 04 29 Mar 04	EPD Ref.: EP3/N06/TW/6015-04; and EP3/N06/TW/6076-04  On 25 <sup>th</sup> and 26 <sup>th</sup> March 2004, the EPD received two environmental complaints about the dust nuisance due to insufficient wheel-washing at Tai Tong Road. The EPD referred the complaints to the IEC on 26 <sup>th</sup> and 27 <sup>th</sup> March 2004 respectively and the IEC forwarded the complaints to the ET Leader of the Project on 26 <sup>th</sup> and 29 <sup>th</sup> March 2004 for investigation.  The investigation report was submitted to EPD on 31 <sup>st</sup> March 2004	Based on the information provided the Contractor, concreting works were carried out on that period. Some vehicles leaving the site may cause dust nuisance during a short period of time. A full-time labour has been employed for wheel washing works at the site exit and a water truck would be used to clean the road surface if necessary.  The Contractor has implemented mitigation measures and no dust nuisance was observed in the ET's latest site investigation.	Closed
40507	Chuk San Tsuen	7 May 04	EPD Ref.: EP3/N06/TW/6649-04  On 2 April 2004, the EPD received one environmental complaint about the wastewater discharged near Chuck San Tsuen. The EPD referred the complaint to the IEC on 6 <sup>th</sup> April 2004 and the IEC forwarded the complaint to the ET Leader of the Project on the same day	Based on the information provided by the Contractor, the situation was due to a heavy rainstorm on the complaint date. A large volume of surface runoff flowed from upstream of the construction site, passing through an unpaved area and discharge to Chuk San Tsuen. The situation was rectified on the next day.	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			for investigation. (Remarks: Due to a failure of fax delivery, the ET received the details of the captioned complaint on the monthly progress meeting at 7 May 2004.)	The Contractor has already provided all possible treatment facilities in order to prevent muddy water discharge. The captioned complaint is concluded as an exceptional	
			The investigation report was submitted to EPD on 12 May 2004.	incidence due to heavy rainstorm.	
40615	Yeung Uk Tsuen	15 Jun 04	EPD Ref.: EP3/N06/TW/11909-04 On 15 June 2004, the EPD received one environmental complaint about the dust nuisance near Yeung Uk Tsuen. The EPD referred the complaint to the IEC and the IEC forwarded the complaints to the ET Leader of the Project on the same day for investigation. The investigation report was submitted to EPD on 24 June 2004.	The Contractor noted that the complaint was about the dust nuisance at a lotus pond near CH22+00(L). The pond owner concerned about disturbance to his lotus due to the backfilling activities.  The Contractor has implemented mitigation measures and no dust nuisance was observed in the ET's latest site investigation.	Closed
40707	Tai Shu Ha West Road	7 Jul 04	EPD Ref.: EP3/N06/TW/13356-04  On 6 July 2004, the EPD received one environmental complaint about the muddy water from the construction site at Tai Shu Ha Road West. The EPD referred the complaint to the IEC on 7 July 2004 and the IEC forwarded the complaints to the ET Leader of the Project on the same day for investigation.  The investigation report was submitted to EPD on 12 July 2004.	According to further discussion with the complainant, he concerned about the muddy water caused by dump trucks came from an access ramp during rainy days. Wetted mud was attached in the wheels of the dump truck and then deposited on the pedestrian road.  However, the access ramp and dump truck as mentioned by the complainant is belonging the Project of "Widening of Yuen Long Highway" but not the captioned project. Nevertheless, the Contractor will wash the road every time after rainstorm. Watering will be provided during sunny days in order to prevent dust nuisance.	Closed
40817	Kiu Hing Road	17 Aug 04	EPD Ref.: EP3/N06/RN/15829-04 On 9 August 2004, the EPD received one environmental complaint about the dust nuisance from the construction site of the	Having further discussion between ET and EPD, it is confirmed that the concerned area in the captioned complaint is Kiu Hing Road other than Kung Um Road.	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			Project near Kung Um Road. The EPD referred the complaint to the IEC and the IEC forwarded the complaints to the ET Leader of the Project on 17 August 2004 for investigation.	According to ET's investigation, the dump trucks and vehicles causing dust nuisance as mentioned by the complainant were unidentified.	
			The investigation report was submitted on 26 August 2004.	During the site audits conducted by ET and IEC, no vehicle leaving the site was observed at Kiu Hing Road and site clearing and road washing was conducted by the Contractor of the captioned project only.	
				It is believed that the Contractor has provided wheel washing and road washing. However, particular incidents might happen due to violation by sub-contractors of the captioned project and other adjoining construction projects.	
40830	Kung Um Road Nullah	30 Aug 04	EPD Ref.: EP3/N06/RN/15829-04  On 26 August 2004, the EPD received one environmental complaint about the muddy water found discharging into the nullah, which was suspected to be from the construction site of the Project near Kung Um Road. The EPD referred the complaint to IEC and the IEC forwarded the complaints to the ET Leader of the Project on 30 August 2004 for investigation.  The investigation report was submitted on 2 September 2004.	There are four construction sites locating near the nullah. This is no evident showing the muddy water as complained (i.e. on 9 and 10 August 2004) was due to which construction site.  The construction site of the captioned project is located at Kung Um Road but not Kiu Hing Road. On 11 August 2004, ET has conducted a site audit and a source of muddy water was found at Kung Um Road only, which was not due to the captioned project.	Closed
41213	Village Entrance of Kong Tau San Tsuen	13 December 04	EPD Ref.: EP3/N06/RN/25885-04  On 13 December 2004, the EPD received one environmental complaint about road obstruction during the operation water browser near the village entrance of Kong Tau San Tsuen. The EPD referred the complaint to IEC and the IEC forwarded the complaints to the ET Leader of	According to the Contractor, water browser was spraying water on the road section between subway and the village entrance of Kong Tau San Tsuen in order to suppress the dusty materials on ground to further prevent the fugitive dust emission from ground. During the operation of water browser, water was injected	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			the Project on 15 December 2004 for investigation.  The investigation report was submitted on 20 December 2004.	from truck to the road surface preventing and obstructing pedestrians/ villagers accessing to the village entrance directly.  The environmental complaint is not supported based on the available information from the EPO, the RSS and the Contractor. However, it is recommended that the Contractor should take special cares and attention to the passers-by in particular pedestrians/ villagers during the operation of water browser. The scale and coverage of spraying should be limited to allow sufficient access for the pedestrians and villagers whenever possible.	
41229	Site Area Adjacent to Pok Oi Hospital	29 December 04	DSD ref.: DP/8/7070CD/DC0206/5  DSD received a public complaint on 29 December 2004 about the discharge of wheel washing water from construction site near Pok Oi Hospital to the pedestrian access road adjacent to Pok Oi Hospital. DSD subsequently referred the complaint to the IEC of the Project on 31 December 2004 and the IEC forwarded the complaint to the ET Leader of the Project on 20 January 2005 for investigation.  The investigation report was submitted on 3 February 2005.	The Contractor has taken action to control and ensure all the vehicles leaving the site have undergone the wheel washing process within the wheel washing facility immediately. The problem has been rectified immediately by the Contractor who has also informed the complainant afterwards.  The Contractor was reminded to confirm all the construction water including wheel washing water within site boundary and provide sufficient and adequate treatment before discharge.  The Contractor should strictly control all the vehicles leaving the site to complete the wheel washing process within the wheel washing facility in order to prevent the water flowing onto the footway.  Sufficient environmental training should also be provided to all vehicle drivers and worker who is responsible for wheel washing.  All relevant parties including RE, IEC and ET should monitor such item closely	Closed

Con't

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50205	The existing channel connecting to box culvert BC11	5 February 2005	DSD's Ref.: DP/8/7070CD/DC0206/88 On 5 February 2005, the DSD received an environmental complaint regarding the sediment deposited at the existing channel connecting to box culvert BC11. The DSD referred the complaint to the IEC on 7 February 2005 and the IEC forwarded the complaint to the ET Leader of the Project on 8 February 2005 for investigation.  The investigation report was submitted on 16 February 2005.	According to the Contractor, construction works for box culvert BC11 which will connect to the existing live channel has been conducted. In order to avoid the pollution of the water in such channel due to the Project during construction, a sandbag bund, a pump and a plastic conduit were provided to divert the water which beyond the site boundary to Access Ramp AR7. This is an acceptable mitigation measure to prevent the pollution of local water in channel.  The sandbag bund along the site boundary was provided to serve as a sump pit to collect the water in the channel. A layer of foam was formed on the surface layer of the accumulated water. Such layer of foam was formed due to the poor quality of water in live channel. It was also believed that such foam was wrongly considered as the sediment (as stated in the complaint) in the water.  However, the Contractor was reminded to clean and remove such layer of foam frequently to maintain a good house keeping on site. The Contractor should also spray the anti-mosquito repellent on the accumulated water if necessary.	Closed
51229	Ha Yau Tin Tsuen	23 December 2005	On 21 December 2005, the EPD received one environmental complaint regarding the construction dust at Ha Yau Tin Tsuen. The EPD referred the complaint to the IEC on 21 December 2005 and the IEC forwarded	It is believed that the dust complaint was due to wind erosion by strong wind and low relative humidity. Although minor construction works were taken place near the complaint area, such activities are	Closed

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Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			the complaint to the ET Leader of the Project on the same day for investigation.  The investigation report was submitted on 4 January 2006.  (Remarks: Due to the failure of email systems, the ET Leader received the notice of complaint on 23 December 2005.)	unexpected to be a main dust source. Furthermore, the Contractor has already provided measures on the complaint area and no major dust problem was identified during the site audit on 23 December 2005. It is recommended the Contractor should take special precaution on all haul roads, stockpiles and dry surfaces during dry weather especially when strong wind exists.	

### APPENDIX N EXTRACTED MINUTES FOR ENVIRONMENTAL MEETING

# **Contract No. DC/2002/06 Construction of Yuen Long Bypass Floodway**

No environmental and safety training was conducted by the contractor and its subcontractors in the reporting month.