# Contract No. HY/2003/19

# Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Quarterly EM&A Report

(Version 2.0)

February 2009 to April 2009

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.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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#### **EXECUTIVE SUMMARY**

#### Introduction

- 1. This is the 18<sup>th</sup> Quarterly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha" (the Project). This summary report presents EM&A works performed in the period between February 2009 and April 2009.
- 2. The construction activities undertaken in the reporting quarter were:
  - 1. Landscaping works;
  - 2. Street furniture installation;
  - 3. Utilities installation;
  - 4. Construction of drainage;
  - 5. Reinstatement works of the footpath;
  - 6. Construction of the baffle wall and stepped channel; and
  - 7. Construction of retaining wall.

# **Environmental Monitoring Works**

3. 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. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

4. Summary of the non-compliance of the reporting month is tabulated in Table I.

Table I Summary Table for Non-compliance Recorded in the Reporting Quarter

Parameter		ceedances due to roject	Action Taken	Results of Action
	<b>Action Level</b>	Limit Level	Taken	Taken
February 2009				
Air Quality	0	0	N.A.	N.A.
Noise	0	0	N.A.	N.A.
Water Quality	0	0	N.A.	N.A.
March 2009				
Air Quality	0	0	N.A.	N.A.
Noise	0	0	N.A.	N.A.
Water Quality	0	0	N.A.	N.A.
April 2009				
Air Quality	0	0	N.A.	N.A.
Noise	0	0	N.A.	N.A.
Water Quality	0	0	N.A.	N.A.

Air Quality

5. 24-hr TSP monitoring at 3 monitoring stations, AM1, AM2 and AM4, were conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.

Construction Noise

6. Noise monitoring at 7 designated monitoring stations, namely NM1, NM2, NM3, NM4, NM5, NM6 and NM8, were conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded in the reporting month.

Water Quality

- 7. Water quality monitoring was conducted as scheduled at designated monitoring stations (Streams 15, 18, 21, 23, 26, 27, 40, Cheung Sha Stream, Tung Chung Stream and Tung Chung Bay) which are under the influence of the works in the reporting month. No water monitoring was conducted at the streams which were observed dry in the reporting month. As the water depth of Tung Chung Bay was less than 3m, only the mid-depth level was monitored.
- 8. Exceedances of suspended solids (SS) were recorded in the period. No direct evidence demonstrated that the exceedances were caused by the Project.

# **Environmental Licensing and Permitting**

9. License/Permits granted to the Project include Environmental Permit (License No.: EP-170/2003/C), Registration of Chemical Waste Producer (License: WPN5214-950-C1213-01), Water Discharge License (License No.: EP890/W7/XP089, EP890/W7/XP090 and EP890/W2/XG013) and Construction Noise Permit (License GW-RW0439-08 and GW-RS0698-08).

#### Key Information in the Reporting Quarter

10. Summary of key information in the reporting month is tabulated in Table II.

Table II Summary Table for Key Information in the Reporting Quarter

	Even	t Details	Action	Status	Remark
Event	Number	Nature	Taken		
Complaint received	2	Waste Management	Complaint Investigation	Investigation Report Submitted	
Changes to the assumptions and key construction / operation activities recorded	0		N.A.	N.A.	
Notifications of any summons received	0		N.A.	N.A.	
Notifications of any successful prosecution received	0		N.A.	N.A.	

# Complaints and Prosecutions

- 11. A total of 2 environmental complaints were received during the reporting quarter.
- 12. No warning and no summons or notifications of successful prosecution was received in the reporting period.

#### Future Key Issues

- 13. Key issues to be considered in the coming month include:
  - Runoff from exposed slope;
  - Wastewater and runoff discharge from site;
  - Regular removal of silt, mud and sand along u-channels, culverts and gullies;
  - Review and implementation of temporary drainage system for the surface runoff;
  - Proper storage of construction materials near streams;
  - Noise from operation of the equipment, especially for rock-breaking activities and machinery on-site;

- Dust generation from stockpiles of dusty materials, exposed retain wall, excavation works and rock breaking activities;
- Storage of chemicals/fuel and chemical waste/waste oil on site;
- Watering for rock breaking activity, soil nailing and on haul road;
- Accumulation of general and construction waste near stream and on site;
- Proper sorting and segregation of C&D materials in designated areas;
- Provide wheel washing facilities at the site entrance/exit;
- Regular removal of silt, mud and sand along u-channels, the catchment channel, culverts, gullies and sedimentation tanks;
- Clear up and proper storing the oil containers at San Shek Wan;
- Water spraying should be provided frequently at San Shek Wan and outside the site office;
- Provide mitigation measures (sand bag bund/cover with tarpaulin) at between construction area and paved road; and
- Provide sand bag bund at between exposed slopes and drainage system.

#### 1. INTRODUCTION

- 1.1 The Project "Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha" involves the widening and realignment of Tung Chung Road between Lung Tseng Tau in North Lantau and Cheung Sha in South Lantau. The layout plan of the Project is shown in Figure 1.
- 1.2 The scope of the Project includes:
  - a) widening and realignment of a 3.6 km section of Tung Chung Road (TCR) between Lung Tseng Tau and Pak Kung Au from a single-lane road for two-way traffic to a single two-lane road for two-way traffic with a footpath having a minimum width of 1.6 m, and construction of a 2.6 km long single two-lane road between Pak Kung Au and Cheung Sha, including elevated highway structures of a total length of 750 m, with a footpath of a minimum width of 1.6 m;
  - b) provision of 21 passing bays/bus-bays along the road and a roundabout at Cheung Sha; and
  - c) Associated works including road rehabilitation, drainage, utility, environmental mitigation measures, landscaping, slope stabilization, traffic aids, road safety enhancement measures, lighting, traffic control and surveillance system, and electrical and mechanical (E&M) works.
- 1.3 The Environmental Impact Assessment (EIA) Report for the Project was approved on 4 July 2002 under the Environmental Impact Assessment Ordinance (EIAO). An Environmental Permit (EP- 170/2003) for the works was also granted on 27 June 2003. A varied Environmental Permit (EP) (EP-170/2003/B) was issued in June 2006. Environmental Monitoring and Audit (EM&A) Manual for the Project was also included as part of the EIA reports in the register. An updated EM&A Manual (Revision C) has been issued on 28 April 2006.
- 1.4 Highways Department awarded the construction of the Project to CCECC & CRWJ Joint Venture (being a joint venture of China Civil Engineering Construction Corporation & China Railway Wuju Group Corporation) (hereinafter called "the Contractor") in June 2004. The construction works commenced on 4 November 2004 and are scheduled to be completed by September 2007.
- 1.5 Cinotech Consultants Limited (Cinotech) was commissioned by the Contractor to undertake the Environmental Team (ET) Services for the Project since 1 September 2006. All environmental and audit works were conducted by Cinotech and the laboratory testing works were conducted by a HOKLAS laboratory, Wellab Limited. This is the 18<sup>th</sup> quarterly EM&A report summarizing the EM&A works for the Project in the period between February 2009 and April 2009.

#### 2. PROJECT CHARACTERISTICS

# **Project Organization and Contacts of Key Management**

- 2.1 Different parties with different levels of involvement in the project organization include:
  - Project Proponent Major Works Project Management Office (MWPMO) of Highways Department (HyD)
  - Engineer (E) / Engineer's Representative (ER) Mott Connell Limited
  - Contractor CCECC & CRWJ Joint Venture
  - Environmental Team (ET) Cinotech Consultants Limited
  - Independent Environmental Checker (IEC) ENSR Asia (HK) Limited
- 2.2 The responsibilities of respective parties are detailed in Section 1.5 of the Updated EM&A Manual (Revision C, issued on 28 April 2006) of the Project. The project organization chart is presented in Figure 2.
- 2.3 The key contacts of the Project are shown in Table 2.1.

**Table 2.1** Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.
HyD	Project Proponent	Mr. Sam Wong	Chief Engineer	2762 3622	2714 5289
		Mr. K.W. Lee	The Engineer	9108 6050	2827 1823
Mott Connell	Engineer	Mr. P.H. Ho	Senior Resident Engineer	6533 3500	2988 1677
CCECC and CRJV Joint Venture	Contractor	Contractor Mr. Alan Kwong		2988 2217	2988 1601
Cinotech Environmen Team		Dr. Priscilla Choy	ET Leader	2151 2089	3107 1388
ENSR	Independent Environmental Checker	Mr. Y.T. Tang	Independent Environmental Checker	3105 8537	2891 0305
24-hour Emerg	ency Hotline	2988 1259/ 6025 5655	-		

# **Construction Programme and Synopsis of Work**

2.4 The construction programme is presented in Appendix A.

#### 3. ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

# **Monitoring Parameters and Monitoring Locations**

3.1 The EM&A Manual designates locations for the ET to monitor environmental impacts in terms of air quality, noise and water quality due to the Project. The Project area and monitoring locations are depicted in Figures 3. Appendix B gives details of monitoring requirements.

# **Monitoring Methodology and Calibration Details**

3.2 Monitoring works/equipments were conducted/calibrated regularly in accordance with the EM&A Manual. Copies of calibration certificates are attached in the appendices of the Monthly Reports.

### **Environmental Quality Performance Limits (Action and Limit Levels)**

3.3 The environmental quality performance limits, i.e. Action and Limit Levels were derived from the baseline monitoring results. Should the measured environmental quality parameters exceed the Action/Limit Levels, the respective action plans would be implemented. The Action/Limit Levels for each environmental parameter are given in Appendix C.

# **Environmental Mitigation Measures**

3.4 Relevant mitigation measures as recommended in the project EIA report have been stipulated in the EM&A Manual for the Contractor to implement. A list of mitigation measures is given in Appendix G.

#### 4. MONITORING RESULTS

#### **Weather Conditions**

4.1 The weather during monitoring sessions was generally sunny and cloudy. The weather conditions for each individual monitoring session were presented in the field record sheets.

# **Air Quality**

- 4.2 24-hr TSP monitoring at 3 monitoring stations, AM1, AM2 and AM4, were conducted as scheduled in the reporting quarter.
- 4.3 No Action Level / Limit Level exceedance was recorded in the reporting quarter.
- 4.4 The graphical presentations of the air quality monitoring results are shown in Appendix D.

#### **Construction Noise**

- Noise monitoring was conducted as scheduled at the seven designated stations NM1, NM2, NM3, NM4, NM5, NM6 and NM8, in this reporting month.
- 4.6 No Action/Limit Level exceedance was recorded in the reporting quarter.
- 4.7 The graphical presentations of the noise monitoring results are shown in Appendix E.

# **Water Quality**

- 4.8 Water quality monitoring was conducted as schedule, at designated monitoring stations (Streams 15, 18, 21, 23, 26, 27, 40, Cheung Sha Stream, Tung Chung Stream and Tung Chung Bay) which are under the influence of the works in the reporting period. Streams 2, 3, 4, 19, 30, 31, 33, 34, 36, 37 and 43 were observed to be dry throughout the reporting month. Therefore, no water monitoring was conducted at those streams. As the water depth of Tung Chung Bay was less than 3m, only the middepth level was monitored.
- 4.9 Exceedances of suspended solids (SS) were recorded in water samples in the reporting quarter. The summary of exceedances for each water quality parameters are provided in Table 4.1.

Table 4.1 Summary of Water Quality Exceedances in the Reporting Quarter

Station	D	0	pН	Turb	oidity	SS		
No.	Action	Limit	Limit	Action	Limit	Action	Limit	
15_I	0	0	0	0	0	0	0	
18_I	0	0	0	0	0	0	0	
19_I*	0	0	0	0	0	0	0	
21_I	0 0		0	0	0	0	0	
23_I	0	0	0	0	0	0	0	
25_I*	<b>25_I*</b> 0 0		0	0	0	0	0	
26_I	0	0	0	0	0	0	0	
27_I	' <b>I</b> 0 0		0	0	0	39	0	
32_I*	0	0	0	0	0	0	0	
35_I*	0	0	0	0	0	0	0	
40_I	0	0	0	0	0	0	0	
CSS_I	0	0	0	0	0	0	0	
TCB_I	0	0	0	0	0	0	0	
TCS_I	0	0	0	0	0	0	0	

Remarks: \* indicates the stream was not sampled in the reporting quarter.

- 4.10 As reported in monthly report, all exceedances for water quality parameters recorded in the reporting quarter were not due to the Project based on the following observations:
  - ♦ No construction activity was observed in the vicinity of the sampling locations.
  - ♦ No pollution discharge from construction activity was observed.
  - ♦ Measured value at the reference station was higher than at the impact monitoring stations.
  - ♦ Natural humus materials were observed in the streams during monitoring.
- 4.11 According to the ET's investigation, no direct evidence demonstrated the exceedances of Action/ Limit level for water monitoring parameters were caused by the Project.
- 4.12 The graphical presentations of the water quality monitoring results are shown in Appendix F.

#### 5. ENVIRONMENTAL AUDIT

# **Implementation Status of Environmental Mitigation Measures**

5.1 The implementation status of environmental mitigation measures (EMIS) is given in Appendix G.

# **Site Audit Summary**

- 5.2 No non-compliance was issued during site inspections in the reporting period.
- 5.3 The observations and recommendations made during the reporting period are summarized in Appendix H.
- 5.4 The major deficiencies identified in the reporting quarter are summarized as follow:

Water Quality

- Exposed slope near Streams without properly cover was observed. The Contractor was
  recommended to cover exposed slope near Streams with tarpaulin sheet and
  hydroseeding.
- Oil spillage was observed from plant equipment on the haul road. The Contractor was recommended to clear the oil and prevent spillage.
- Silt, debris and rubbish were observed accumulate in the U-Channels, culverts and gullies. The Contractor was reminded to clear it.
- Sediment, stones and debris on the haul road and paved road was observed. The Contractor was reminded to clear them.
- Stockpile without covering was observed. The Contractor was reminded to cover it with tarpaulin properly.
- Mud trails were observed at the paved road. The Contractor was reminded to provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction areas and the paved roads.

Air Quality

- Stockpile without covering was observed. The Contractor was recommended to cover it.
- Exposed slope was observed. The Contractor was reminded to hydroseed and plant the slope as soon as practicable.
- Streams were observed without fencing. The Contractor was reminded to provide fencing for protecting the stream.
- Dusty haul road was observed. The Contractor was reminded to provide water spraying more frequently.
- Mud trails were observed at the paved road. The Contractor was reminded to provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction

areas and the paved roads.

• The Contractor was reminded to provide water spraying during the loading/unloading and dusty activities.

# Waste/ Chemical Management

- Accumulation of C&D waste and false works were observed. The Contractor was recommended to remove the C&D waste more frequently.
- Accumulation of general refuse was observed. The Contractor was reminded to remove the waste regularly.
- Abandoned cement bags were observed. The Contractor was reminded to clear it.
- Empty oil containers were observed storing improperly. The contractor was reminded to remove and store it properly.

# **Effectiveness of Mitigation Measures**

5.5 The mitigation measures recommended in the EIA report and required by the EP are considered effective in minimizing environmental impacts. The Contractor has implemented the recommended mitigation measures, it is however considered that the Contractor could put greater efforts into proper implementation of these measures to ensure their intended effects are fully achieved.

# Status of Environmental Licensing and Permitting

- 5.6 License/Permits granted to the Project include Environmental Permit (License No.: EP-170/2003/C), Registration of Chemical Waste Producer (License: WPN5214-950-C1213-01), Water Discharge License (License No.: EP890/W7/XP089, EP890/W7/XP090 and EP890/W2/XG013) and Construction Noise Permit (License GW-RW0439-08 and GW-RS0698-08).
- 5.7 The status of these licenses and permits obtained for the Project is summarized in Appendix I.

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

- 5.8 The waste management of the Project has to follow the requirements and procedures stated in the Waste Management Plan which was prepared by the Contractor.
- 5.9 The solid waste generated from the Project was mainly general refuse that was collected by a licensed collector on an as need basis.
- 5.10 The monthly summary of waste flow tables from February 2009 and April 2009 are shown in Appendix J.

# 6. NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)

# **Summary of Exceedances**

6.1 Environmental monitoring works were performed in the reporting period and all monitoring results were checked and reviewed. A summary of exceedances is attached in Appendix K. The details of each exceedance were attached in the Monthly Reports.

Air Quality

6.2 No Action/ Limit Level exceedance was recorded in the reporting quarter.

Construction Noise

6.3 No Action/ Limit Level exceedance was recorded in the reporting quarter.

Water Quality

- 6.4 Exceedances of suspended solids (SS) were recorded in water samples in the reporting quarter.
- 6.5 As reported in monthly report, all exceedances for water quality parameters recorded in the reporting quarter were not due to the Project based on the following observations:
  - ♦ No construction activity was observed in the vicinity of the sampling locations.
  - ♦ No pollution discharge from construction activity was observed.
  - Measured value at the reference station was higher than at the impact monitoring stations.
  - ♦ Natural humus materials were observed in the streams during monitoring.
- According to the ET's investigation, no direct evidence demonstrated the exceedances of Action/ Limit level for water monitoring parameters were caused by the Project.

# **Construction Impacts on Suspended Solids**

- 6.7 The measured mean levels of suspended solid for impact monitoring stations during baseline monitoring and impact monitoring (this quarter) are summarized in Table 6.1. Although the measured mean levels of SS at Impact Stations of 27 exceeded 130% of mean value of Baseline data, the finding of Table 6.1 indicates that additional mitigation measures for this stream is not required at this stage. The reasons are listed as below:
  - The mean SS values at the Impact Stations of Streams 27 are low; and
  - The mean SS levels at Reference Stations of Streams 27 in this quarter also exceeded 130% of mean SS values

Table 6.1 Summary of Measured levels of Suspended Solids

	Measured Mea	n Level of Suspen	Within 130% of mean value of Baseline data (Yes/No)			
Station No.	Baseline	Reference Station *	Impact Station*	Reference Station	Impact Station	
	Impact Station	(February 09– Apirl 09)	(February 09– Apirl 09)	(February 09– Apirl 09)	(February 09– Apirl 09)	
15	2.35	2.50	2.50	Yes	Yes	
18	4.72	2.50	2.50	Yes	Yes	
21	1.98	2.50	2.50	Yes	Yes	
23	2.60	2.50	2.50	Yes	Vac	
23	2.60	2.50	2.50	Yes	Yes	
26	2.35	2.50	2.50	Yes	Yes	
27	1.60	2.50	2.50	No	No	
40	9.10	2.50	2.50	Yes	Yes	
CSS	3.38	2.50	2.50	Yes	Yes	
TCB	9.00	2.50	2.50	Yes	Yes	
TCS	4.59	2.50	2.50	Yes	Yes	

<sup>\*</sup> The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

# Review of the Reasons for and the Implications of Non-compliance

- 6.8 No non-compliance was issued in the reporting quarter.
- 6.9 The observations and recommendations made in each individual site audit session were attached in the Monthly Reports.

# 7. ENVIRONMENTAL COMPLAINTS AND PROSECUTIONS

- 7.1 A total of 2 environmental complaints were received during the reporting quarter. The updated Complaint Log is attached in Appendix L.
- 7.2 No warning and no summons or notifications of successful prosecutions was received in the reporting period.
- 7.3 There were a total of 54 environmental complaints, 13 warnings, 3 summons and 2 successful prosecutions received since the commencement of the Project.
- 7.4 The Complaint Log is attached in Appendix L and the summary of warnings issued by the EPD and prosecution is attached in Appendix M.

#### 8. COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

8.1 The major construction activities in the coming month include:

#### Northern Section

- Installation of street furniture at Zone A to F;
- Construction of baffle wall and stepped channel; and
- Reinstatement works of the footpath.

#### Southern Section

- Reinstatement works of footpath at Zone 1 to 3; and
- Street furniture installation at Zone 1 to 3.
- 8.2 According to the environmental audit performed in the reporting quarter, the following recommendations were made:

# Dust Impact

- To implement dust suppression measures on all haul roads, stockpiles and dry surfaces in dry weather.
- To implement dust control measures for the dust generation work such as cement mixing, soil nailing, excavation, piling works and rock breaking.
- To ensure water spray being applied for the dust emissive works, such as soil nail installation, loading and unloading of soil materials, excavation works and rock dowel installation.
- To cover soil stockpiles and exposed slope surface by impervious tarpaulin sheets or other means.
- To ensure that all vehicles carrying dusty material are properly covered before leaving the site.
- To maintain the machinery and vehicles in a good working condition on site.

# Noise Impact

- To implement appropriate mitigation measures, such as cover the tip of the hammer, in order to minimize the noise emitted during rock-breaking activities.
- To review the works sequence of site activities so as to reduce the number of noisy equipment in concurrent operation.
- To follow up any exceedance caused by the construction works.
- To employ quiet powered mechanical equipment if possible.
- To ensure compliance of CNP conditions during restricted-hour works.
- To space out noisy equipment and position as far away as possible from sensitive receivers.

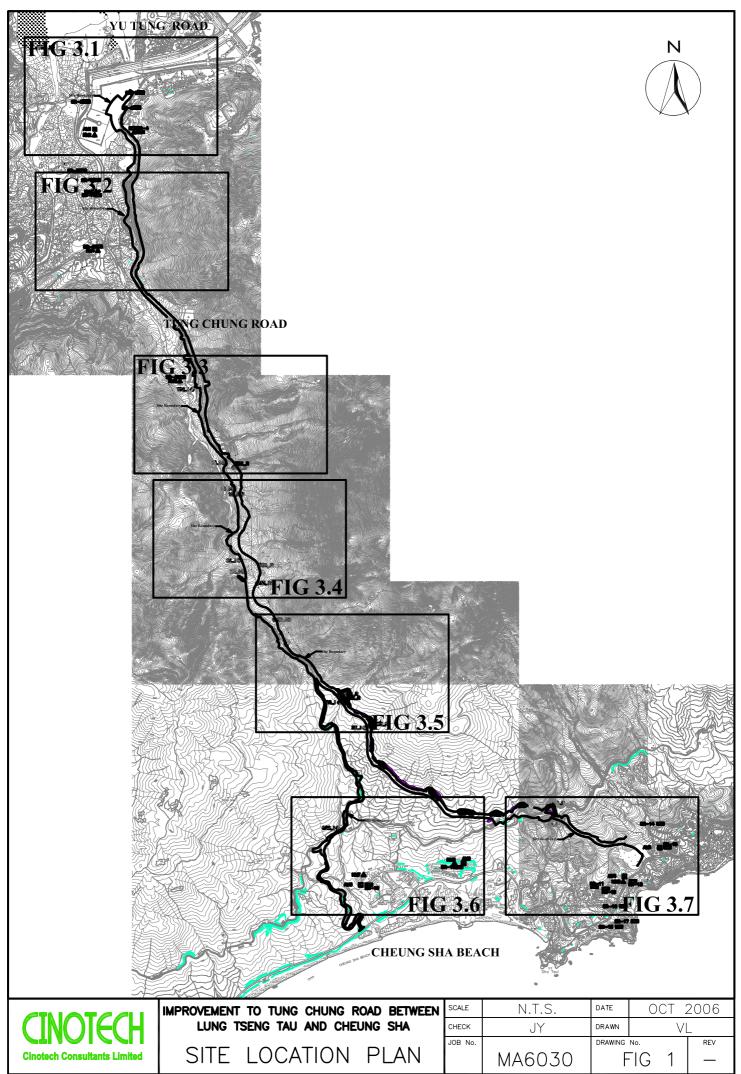
# Water Quality Impact

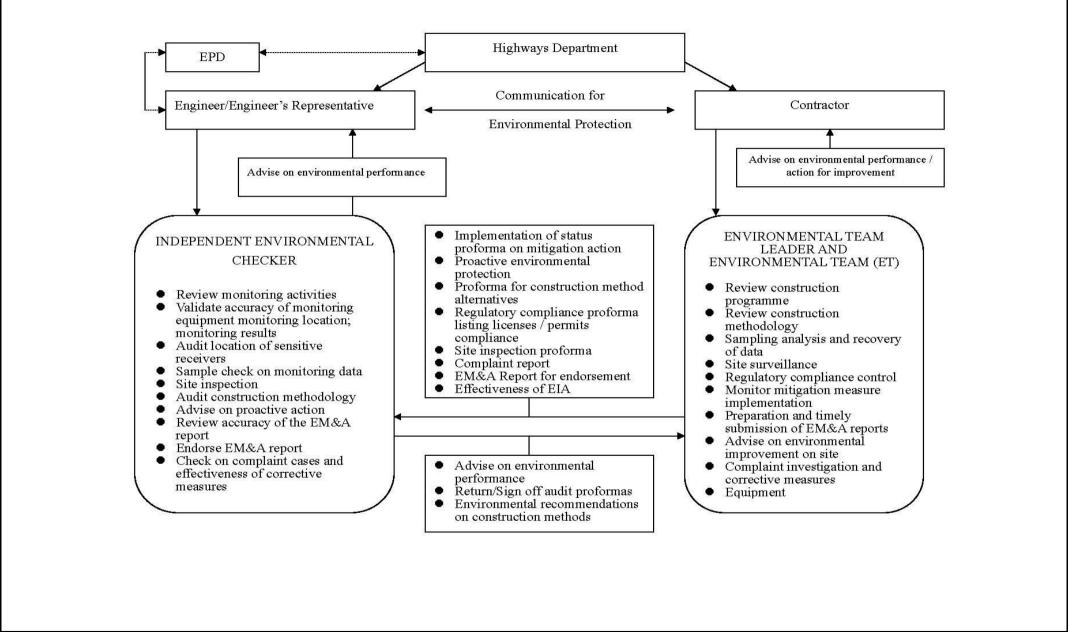
- To prevent any surface runoff discharge into any stream course.
- To avoid accumulation of stagnant and ponding water on site.
- To clear the silt and sediment in the sedimentation tanks.
- To ensure properly maintenance for de-silting facilities.
- To divert all the water generated from construction site to de-silting facilities with enough handling capacity before discharge.
- To review the capacity of de-silting facilities for discharge.
- To review and implement temporary drainage system.
- To identify any wastewater discharges from site.
- To follow up any exceedance caused by the construction works.

### Waste / Chemical Management

- To ensure no sediment and debris in the drainage system (U-Channel, culvert, gullies and underground channel) after the rainstorm.
- To avoid any discharge or accidental spillage of chemical waste directly from the site.
- To remove ponding water regularly in drip trays on site.
- To carry out inspection of dump truck at site exit to ensure inert and non-inert C&D materials are properly segregated before removing off site.
- To ensure proper collection and disposal of rubbish generated on site.
- To avoid storage of oil container within the Country Park.
- To ensure the performance of sorting of C&D materials at source (during generation).
- To avoid storage of construction materials at any stream.
- To check for any accumulation of waste materials or rubbish on site.
- To store and segregate C&D materials in designated areas properly.

# **FIGURES**

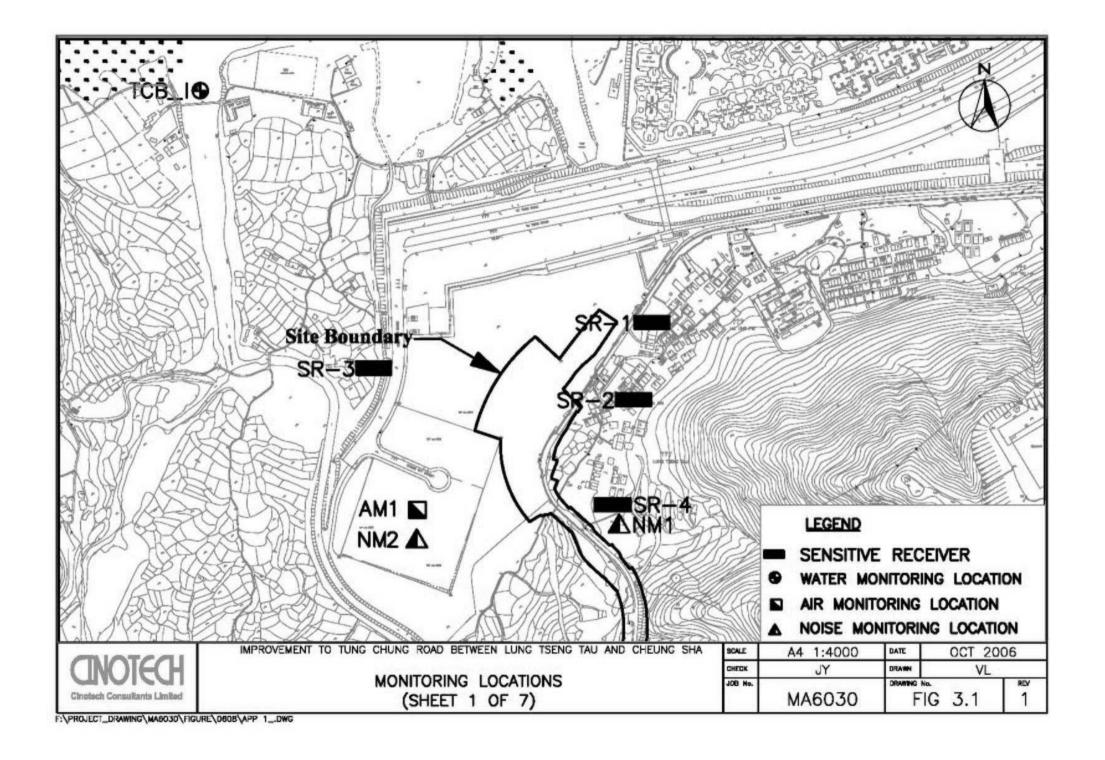


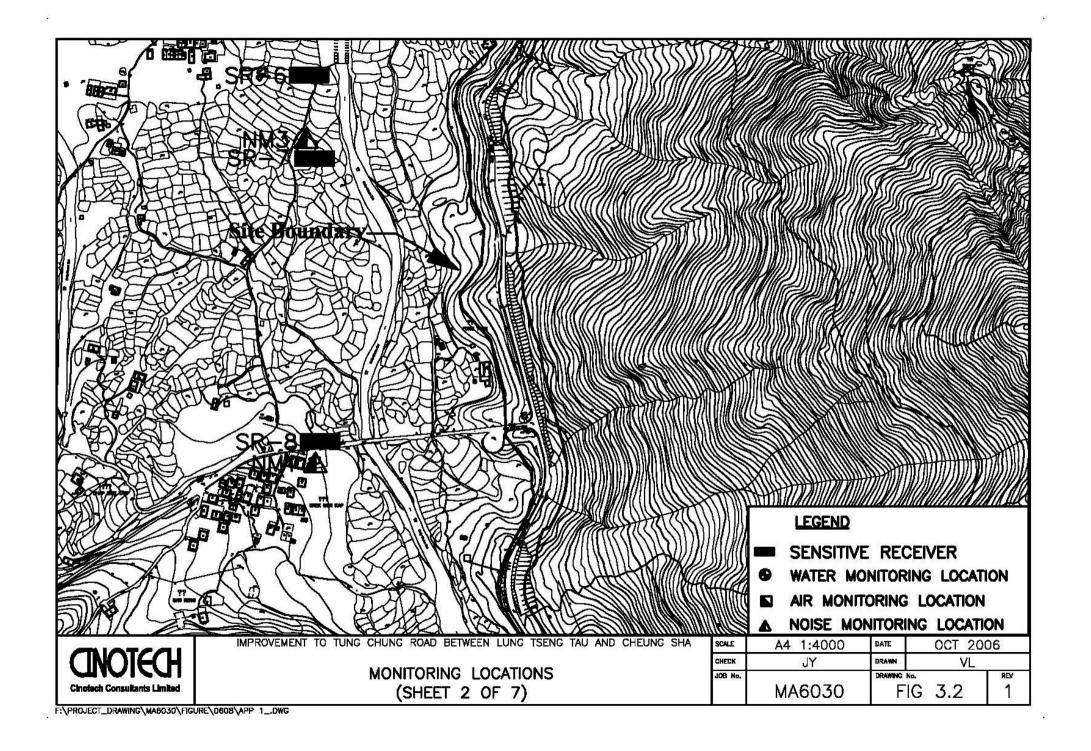


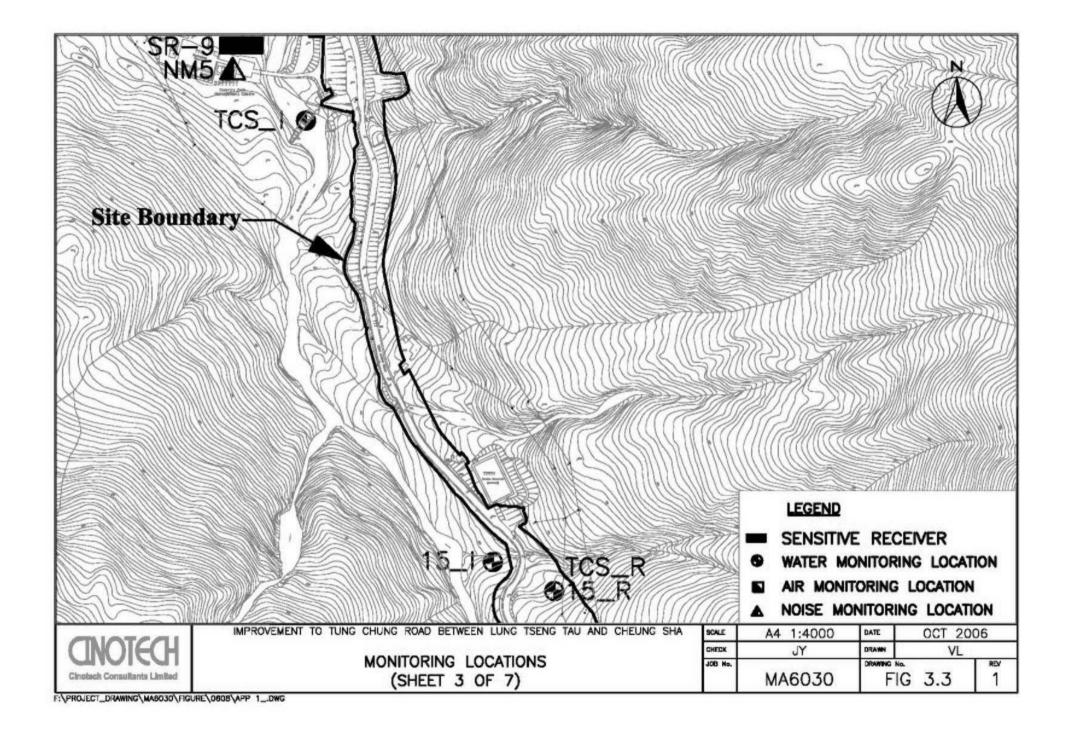
CINOTECH Cinotech Consultants Limited Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

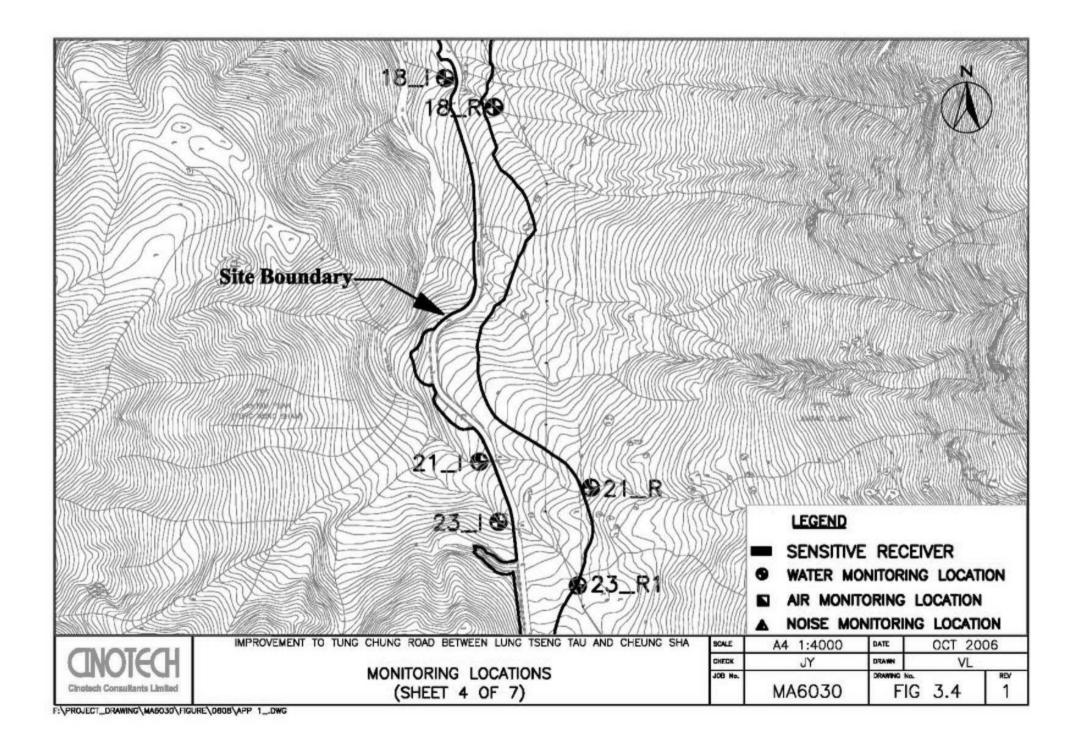
Organization Chart

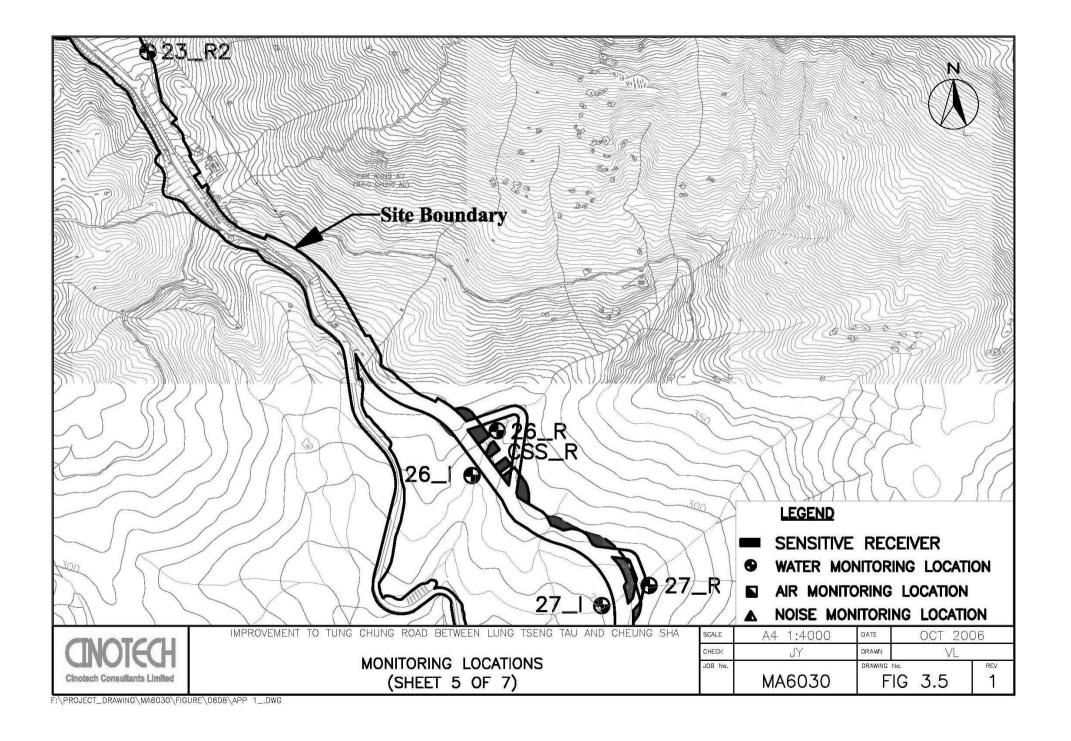
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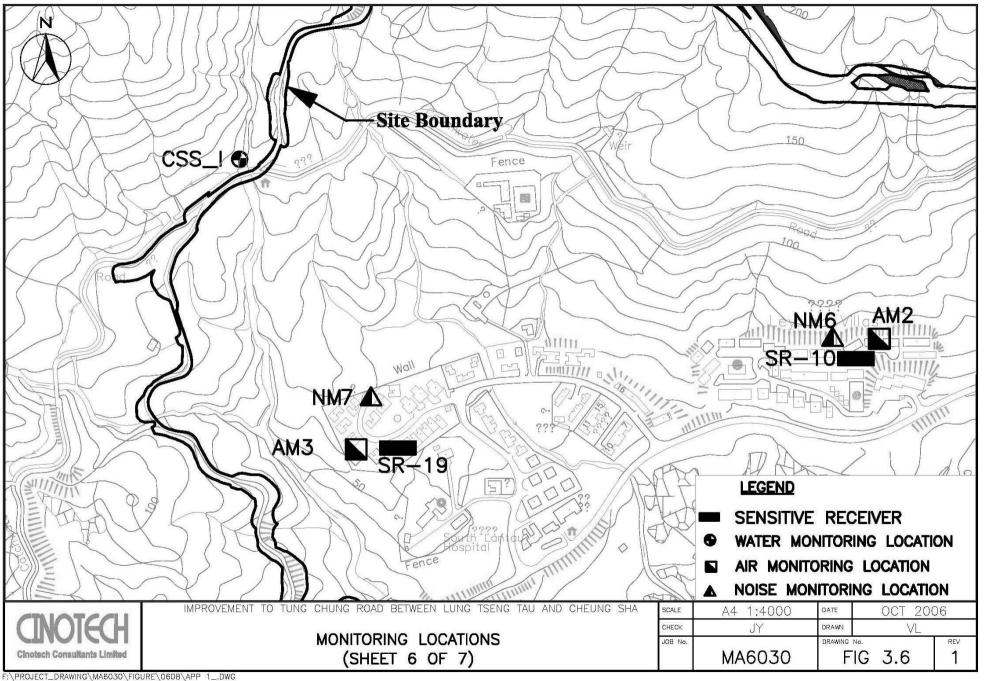


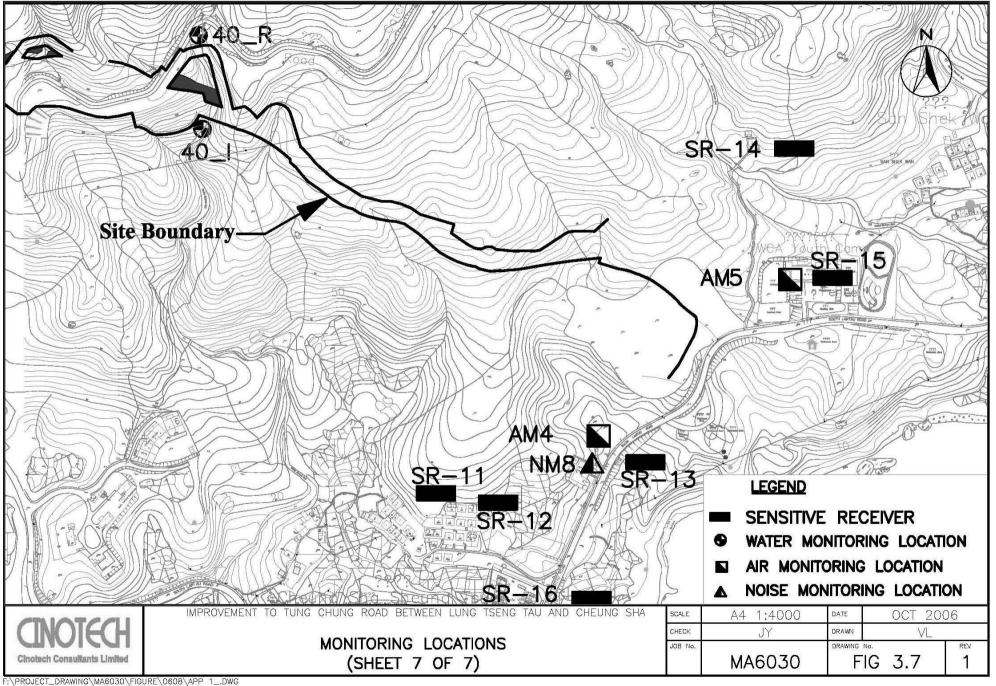












# APPENDIX A CONSTRUCTION PROGRAMME

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83-3240	Full out losis (2 rice.)	12	0	21NOV09	04DEC09		d 53-3210	\$3-3240	-	□ instal sof rail (44 nos.)
\$3-3250	Reconstruct 303/mm ij channel		. 0	C5DEC09	140EC09		33-3230	\$3-3250		DPul cut tests [2 nos.]
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\$3-3310	Remove existing rubble wall	10	0	24FEB10	COMARIO	3560	\$3-3290	\$3-3320	<b>┤</b>	ORanous syletten publica
\$3-3320	Recompact slope	14	0	OSMARIO .	23MARIO	3984	83-3310	\$3-3330	-	O Remove existing rubble wet
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Contract No. HY/2003/19
Improvement to Tung Chung Road
Works Programme Rev. 16

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# APPENDIX B MONITORING REQUIREMENTS

## Appendix B - Environmental Impact Monitoring Requirements

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
	1 hour TSP <sup>(1)</sup>	Three times / 6 days	<ul> <li>AM1 (YMCA of Hong Kong Christian College)</li> <li>AM2 (D 68 Leyburn Villas)</li> </ul>	AM1 – Rooftop     AM2 – House     AM3 – House
Air Quality	24 hour TSP	Once / 6 days	<ul> <li>AM3 (Butterfly Crest) (2)</li> <li>AM4 (No. 31 South Lantau Road)</li> <li>AM5 (YWCA) (3)</li> </ul>	<ul> <li>AM3 – House</li> <li>AM4 – House</li> <li>AM5 – To be confirmed</li> </ul>

#### Remarks:

<sup>1</sup> hour TSP monitoring will be carried out in case that an exceedance of 24 hour TSP level is identified to be due to the Project.

Monitoring at AM3 will be conducted when the Project related construction activities are being undertaken within a radius of 500 m from the monitoring location.

<sup>(3)</sup> Monitoring at AM5, YWCA, will be resumed when YWCA re-open.

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions	
	$L_{eq}$ , $L_{90}$ & $L_{10}$ at 30 minute intervals during (0700 to 1900 on normal weekdays)	Once per week	NM1 (No. 28 Lung Tseng Tau)  NM2 (VMCA of Hong	<ul><li>NM1 - Facade measurement</li><li>NM2 - Facade</li></ul>	
Noise	$L_{eq},L_{90}$ & $L_{10}$ at 5 minute intervals during $(1900 \text{ to } 2300)^{(1)}$	Once per week (include 3 consecutive 5-min measurements)	<ul> <li>NM2 (YMCA of Hong Kong Christian College)</li> <li>NM3 (No. 37 Shek Lau Po)</li> <li>NM4 (No. 1 Shek Mun</li> </ul>	measurement  NM3 - Facade measurement	
	$L_{eq},L_{90}$ & $L_{10}$ at 5 minute intervals during $(2300 \text{ to } 0700 \text{ of next day})^{(1)}$	Once per week (include 3 consecutive 5-min measurements)	<ul> <li>Kap)</li> <li>NM5 (Tung Chung Au         Country Parks Management     </li> </ul>	<ul><li>NM4 - Facade measurement</li><li>NM5 - Facade</li></ul>	
	$L_{eq},L_{90}$ & $L_{10}$ at 5 minute intervals during (0700 to 1900 on holidays) <sup>(1)</sup>	Once per week (include 3 consecutive 5-min measurements)	<ul> <li>Centre</li> <li>NM6 (D75 Leyburn Villa)</li> <li>NM7 (House in Butterfly Crest House 22) (2)</li> <li>NM8 (No. 31 South Lantau Road)</li> </ul>	<ul> <li>measurement</li> <li>NM6 - Facade measurement</li> <li>NM7 - Facade measurement</li> <li>NM8 - Facade measurement</li> </ul>	

#### Remarks:

<sup>(1) –</sup> Conduct noise monitoring only when construction work is carried out.

<sup>(2)</sup> Monitoring at NM7 will be conducted when the Project related construction activities are being undertaken within a radius of 300 m from the monitoring location.

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Water Quality	<ul> <li>Temperature (oC)</li> <li>pH (pH unit)</li> <li>Turbidity (NTU)</li> <li>Water depth (m)</li> <li>Salinity (mg/L)</li> <li>Dissolved oxygen (DO) (mg/L and % of saturation)</li> <li>Suspended solids (SS) (mg/L)</li> </ul>	Three times per week	• 15_I (811781E, 813298N) • 15_R (811853E, 813289N) • 18_I (811836E, 813138) • 18_R (811889E, 813107N) • 19_I (811858E, 812987N) • 19_R (811920E, 812927N) • 21_I (811873E, 812723N) • 21_R (811994E, 812695N) • 23_I (811894E, 812658N) • 23_R1 (811980E, 812589N) • 23_R2 (812079E, 812386N) • 23_R2 (812079E, 812386N) • 25_I (812324E, 812017N) • 25_R (812353E, 812052N0 • 26_I (812456E, 811895N) • 26_R (812525E, 811980N) • 27_I (812604E, 811747N) • 27_R (812658E, 811770N) • 32_I (812988E, 811327N) • 32_R (812980E, 811410N) • 35_I (813218E, 811218N) • 35_R (813231E, 811275N) • 40_I (813690E, 811211N) • 40_R (813686E, 811311N) • CSS_I (812447E, 811165N) • TCS_I (811601E, 813716N) • TCB_I (810787E, 815706N) • TCB_R (810679E, 816038N)	• Sub-surface

APPENDIX C ACTION AND LIMIT LEVELS FOR AIR QUALITY, NOISE AND WAER QUALITY

# **Appendix C - Action and Limit Levels**

**Table C-1** Action and Limit Levels for 1-Hour TSP

Location	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m <sup>3</sup>
AM1	312	
AM2	328	
AM3	302	500
AM4	305	
AM5	342	

**Table C-2** Action and Limit Levels for 24-Hour TSP

Location	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m <sup>3</sup>
AM1	155	
AM2	151	
AM3	141	260
AM4	145	
AM5	153	

Table C-3 Action and Limit Levels for Construction Noise

Period	Action Level (2)	Limit Level		
0700-1900 hrs on normal weekdays		75 dB(A)	70 dB(A)	
1900-2300 hrs on holidays & 0700-2300 hrs on all other days	When one documented complaint is received	_ '	(1)	
2300-0700 hrs of next day		-	(1)	

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

#### Notes:

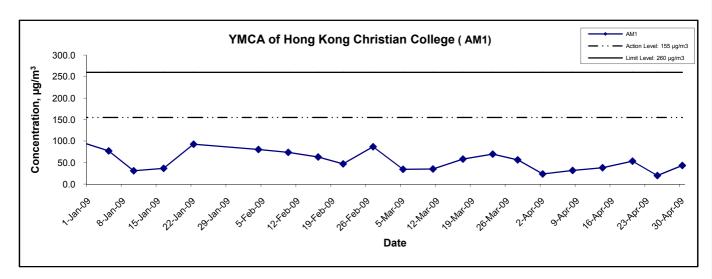
- (1) The noise limits shall be determined by EPD during the application of the construction noise permit (CNP).
- (2) Stated in the "Environmental Monitoring and Audit Guidelines for Development Projects in Hong Kong", Appendix D2, Section 2.6, Table 2.1

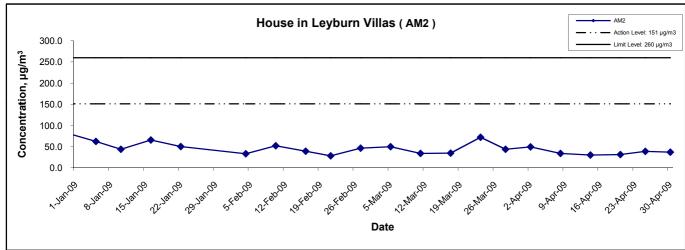
**Table C-4** Compliance Level for Water Quality

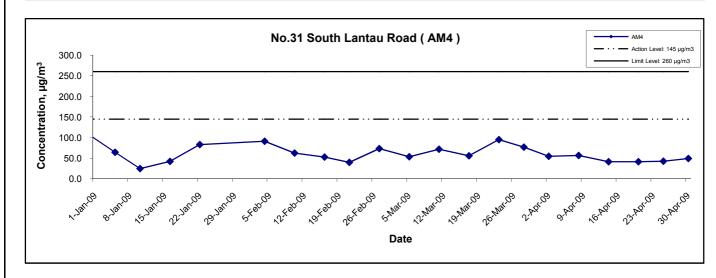
Table C-4 Comphance Devertor Water Quanty												
Monitoring	DO, 1	mg/L		pН	Turbidi		Turbidity, NTU		SS, mg/L			
Stations	Action	Limit	Action	Limit	A	Action	J	Limit	Α	ection	Ι	Limit
TCS_I	6.10	4.00	-	<6.5 or >8.5	5.95		13.30		10.30		12.00	
CSS_I	6.40	4.00	-	<6.5 or >8.5	7.91		10.50		9.90		16.00	
15_I	5.94	4.00	-	<6.5 or >8.5	11.00		16.10		6.10		8.20	
18_I	6.43	4.00	-	<6.5 or >8.5	6.84	or 120% of	11.10	or 130% of	14.00	or 120% of	16.00	or 130% of
19_I	6.55	4.00	-	<6.5 or >8.5	7.52	the upstream	9.03	the upstream	14.00	the upstream	18.00	the upstream
21_I	6.73	4.00	-	<6.5 or >8.5	7.70	control station's Tby	8.30	control station's Tby	6.60	control station's SS	20.00	control station's SS
23_I	6.55	4.00	-	<6.5 or >8.5	6.37	(at the sme	6.62	(at the sme	8.50	(at the sme	17.00	(at the sme
26_I	6.49	4.00	-	<6.5 or >8.5	7.53	tide on the same day if	8.10	tide on the same day if	6.70	tide on the same day if	15.00	tide on the same day if
27_I	5.33	4.00	-	<6.5 or >8.5	6.05	appropriate)	6.76	appropriate)	2.10	appropriate)	3.00	appropriate)
32_I	5.94	4.00	-	<6.5 or >8.5	10.30		14.20		15.00		18.00	
40_I	6.42	4.00	-	<6.5 or >8.5	9.38		10.60		14.00		15.00	
TCB_I	6.31	4.00	-	<6.5 or >8.5	17.10		41.40		19.00		20.00	

APPENDIX D GRAPHICAL PRESENTATION OF AIR QUALITY MONITORING RESULTS

#### 24-hour TSP Levels







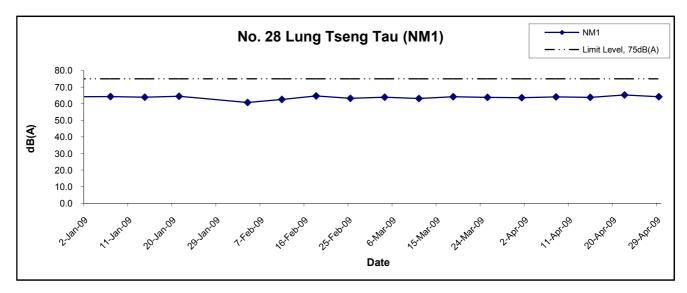
Title	Contract No. HY/2003/19
	Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha
	Graphical Presentation of 24-hour TSP Monitoring Results

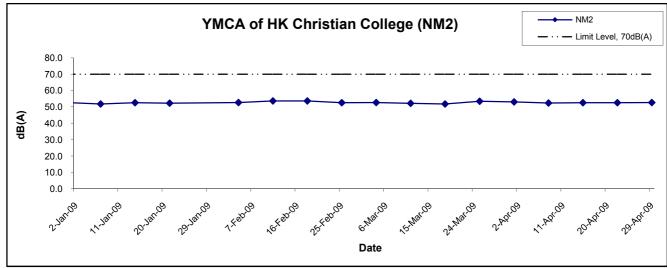
Scale		Project
	N.T.S	No. MA6030
Date	Apr 09	Appendix D

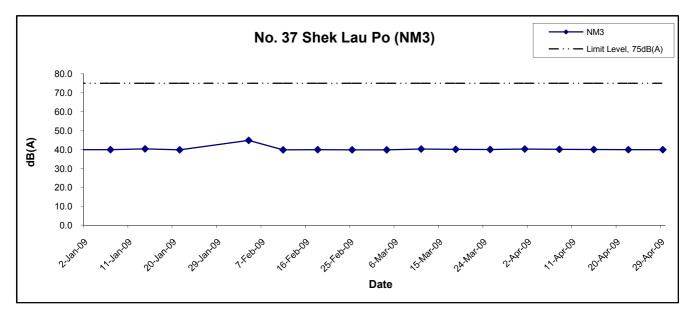


APPENDIX E GRAPHICAL PRESENTATION OF NOISE MONITORING RESULTS

#### **Noise Levels**







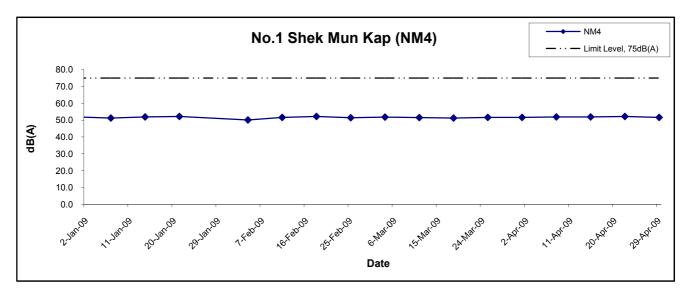
Title Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha
Graphical Presentation of Construction Noise Monitoring

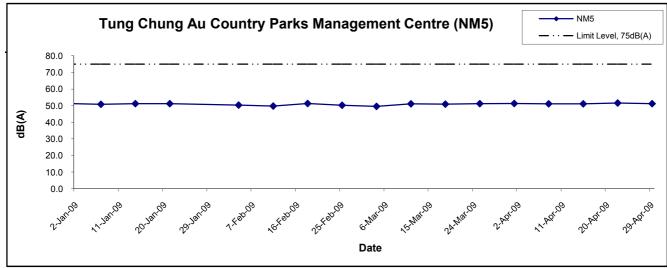
Results

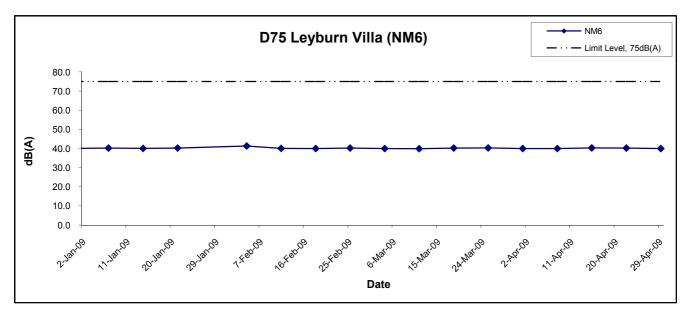
Scale Project
No. MA6030

Apr 09 Appendix

#### **Noise Levels**







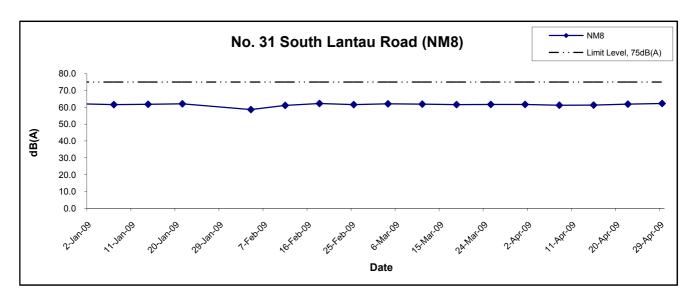
Title Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha
Graphical Presentation of Construction Noise Monitoring

Results

Scale Project
No. MA6030

Date Apr 09 E CINO

### **Noise Levels**



Title Contract No. HY/2003/19

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

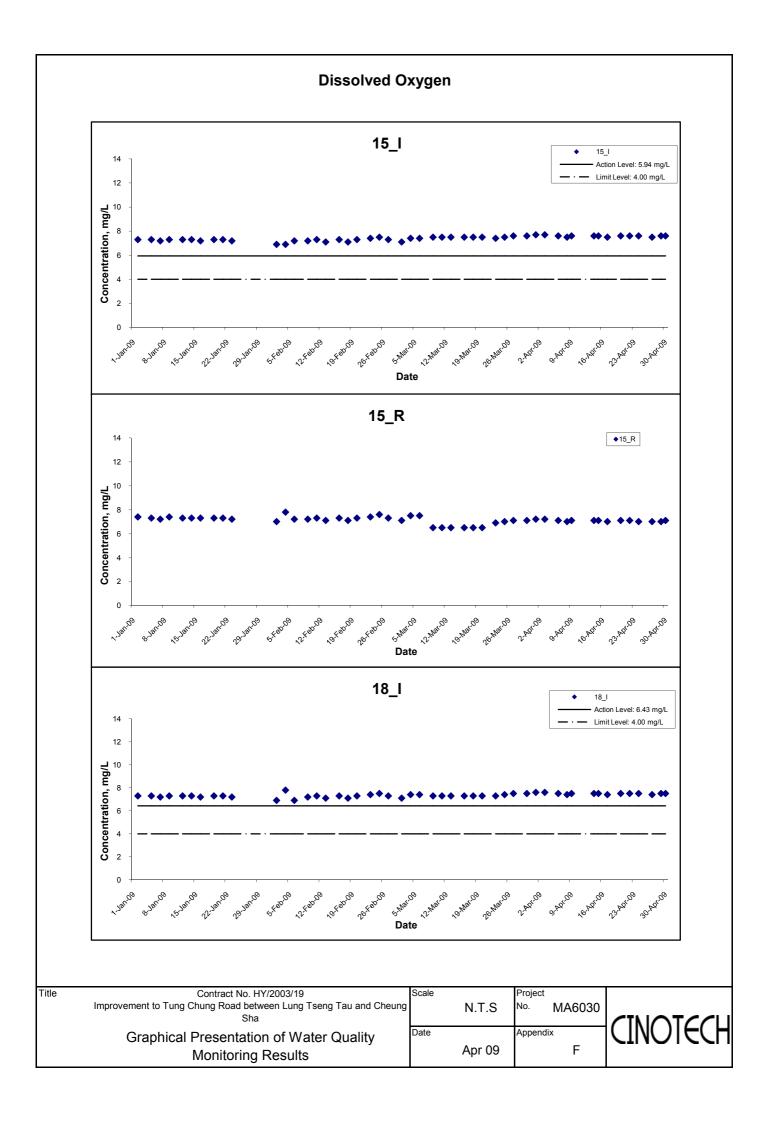
Graphical Presentation of Construction Noise Monitoring Results

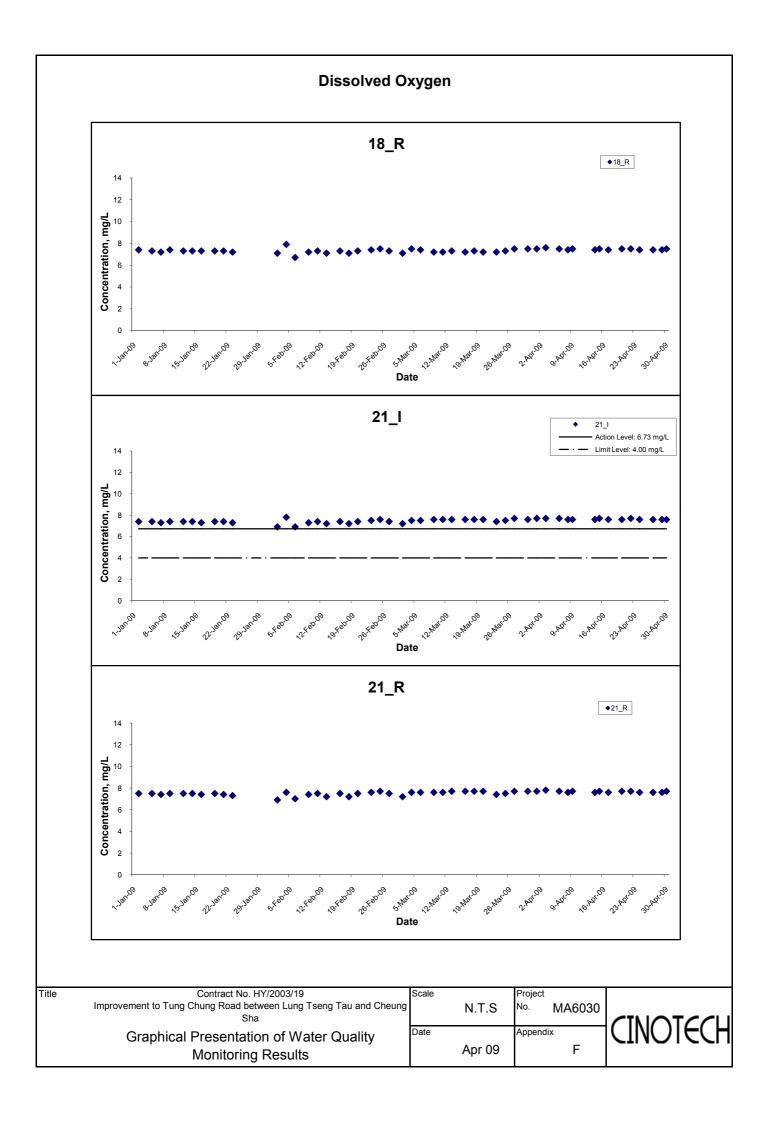
Scale Project
N.T.S NA6030

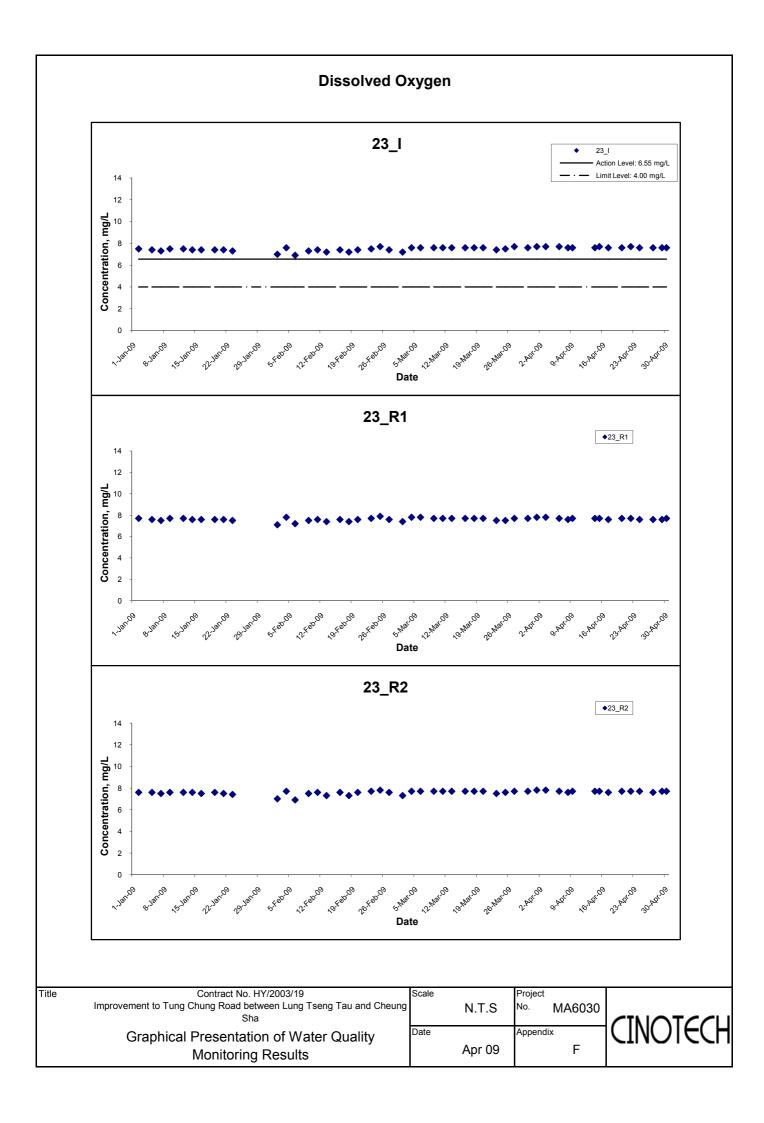
Date Appendix Apr 09 E

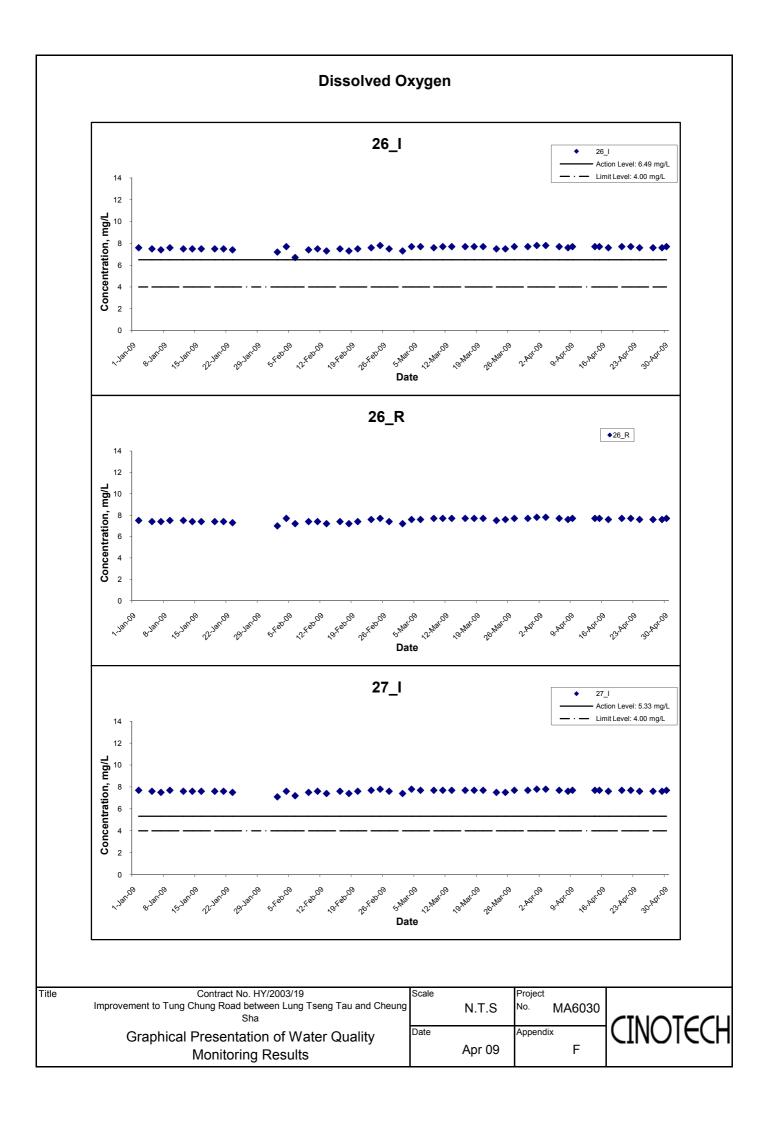


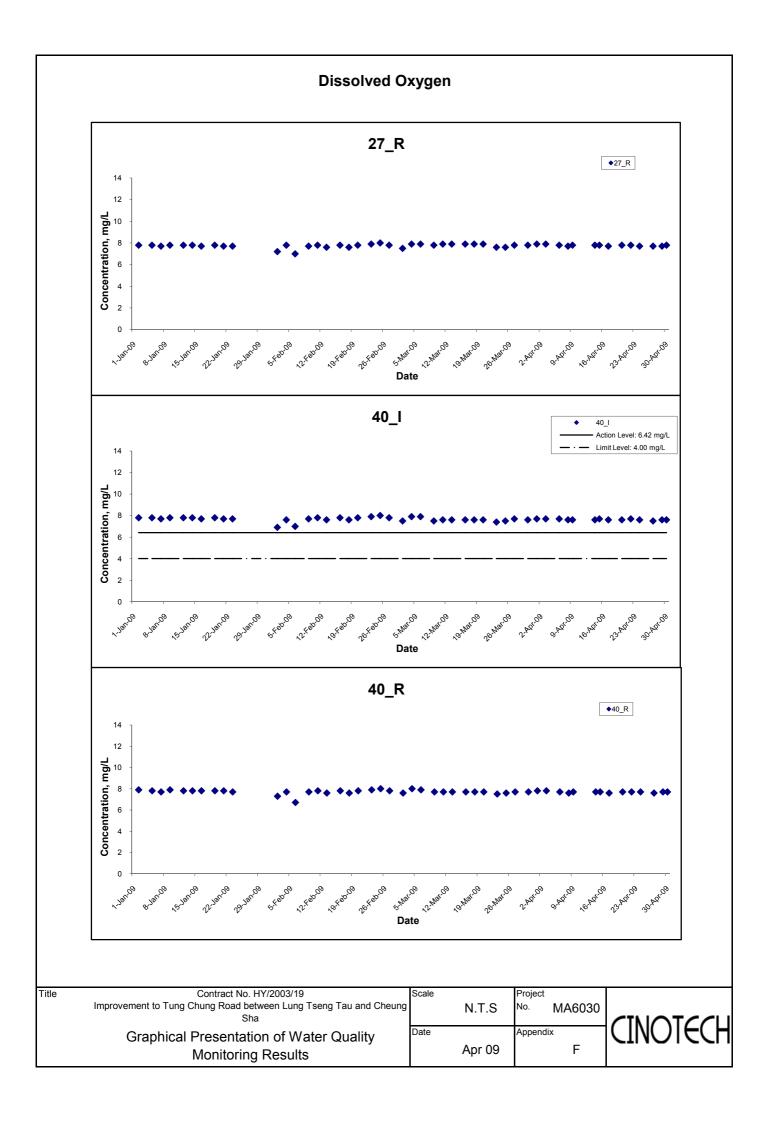
APPENDIX F GRAPHICAL PRESENTATION OF WATER QUALITY MONITORING RESULTS

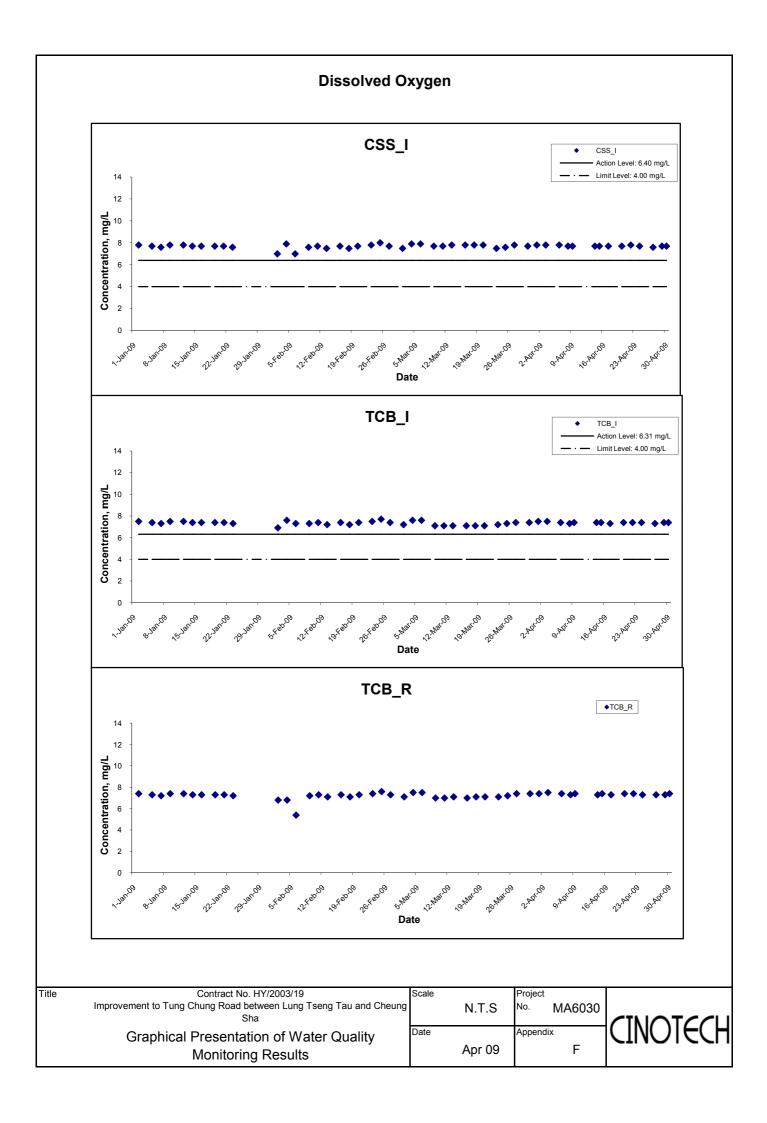




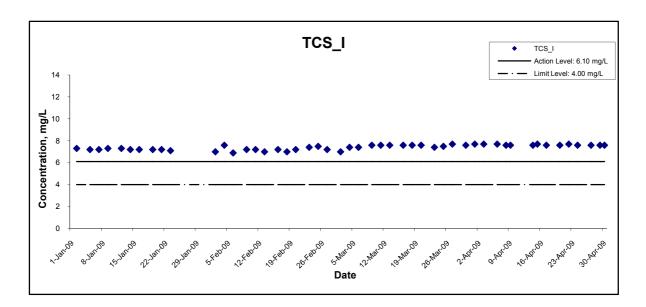








# **Dissolved Oxygen**

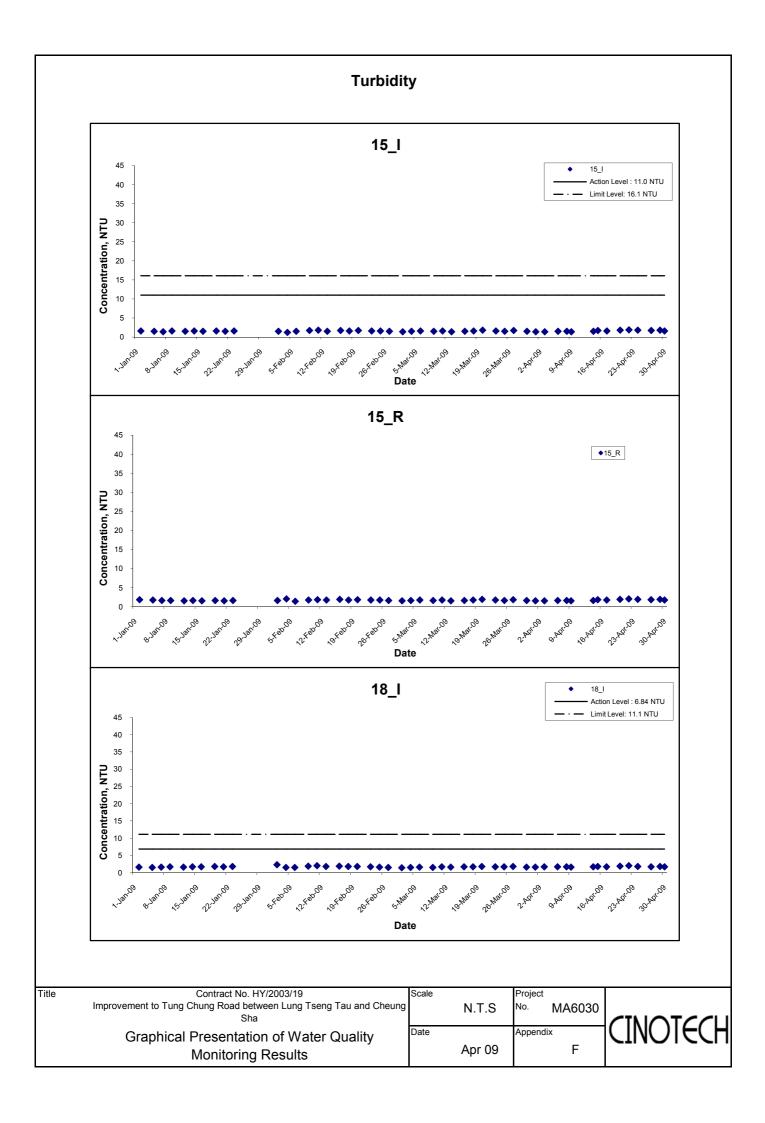


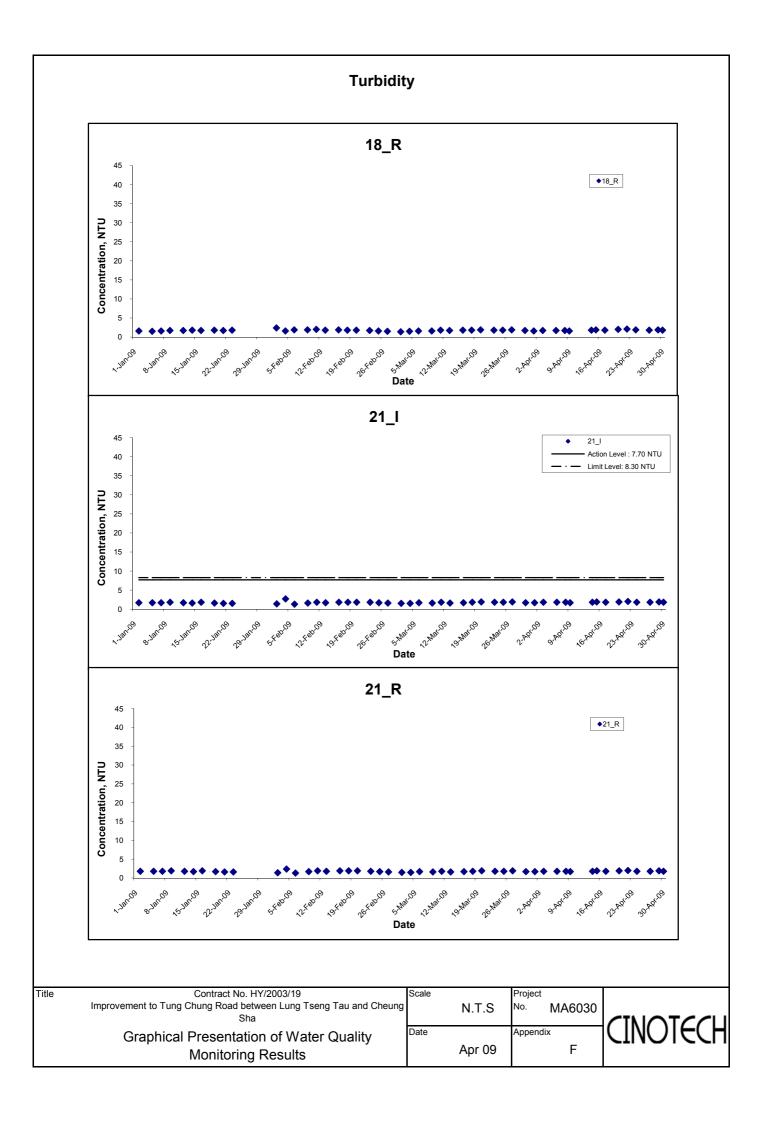
Title Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

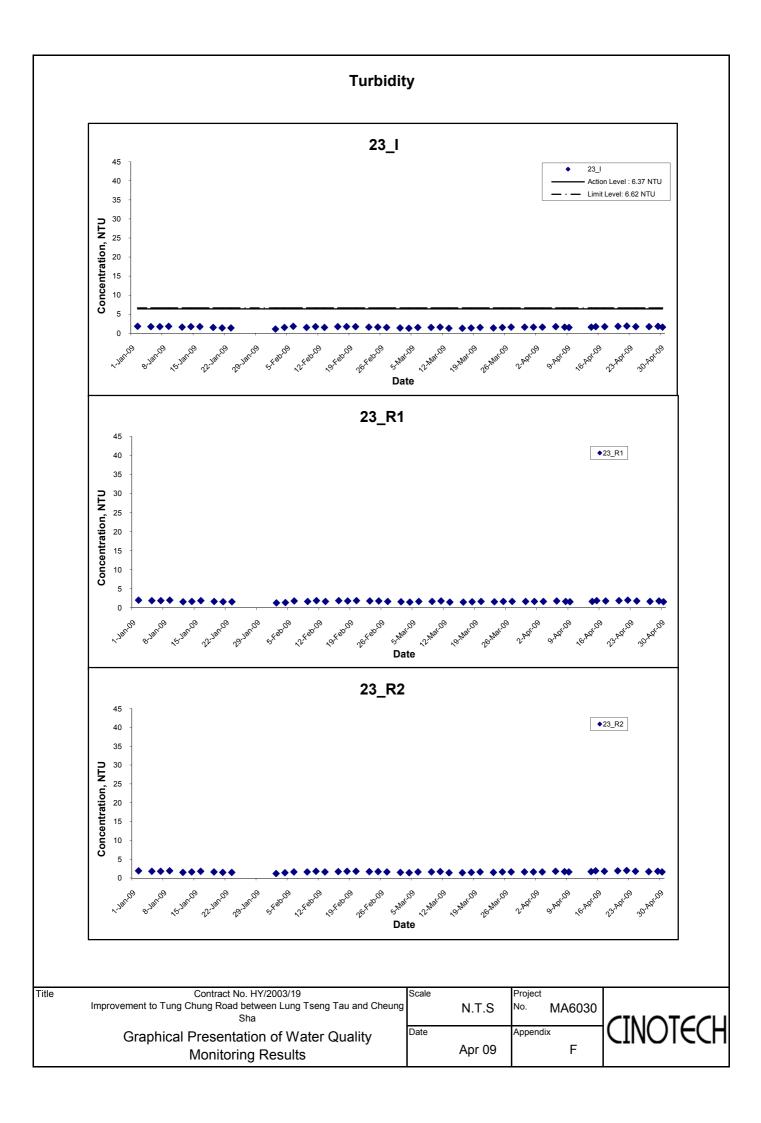
Graphical Presentation of Water Quality

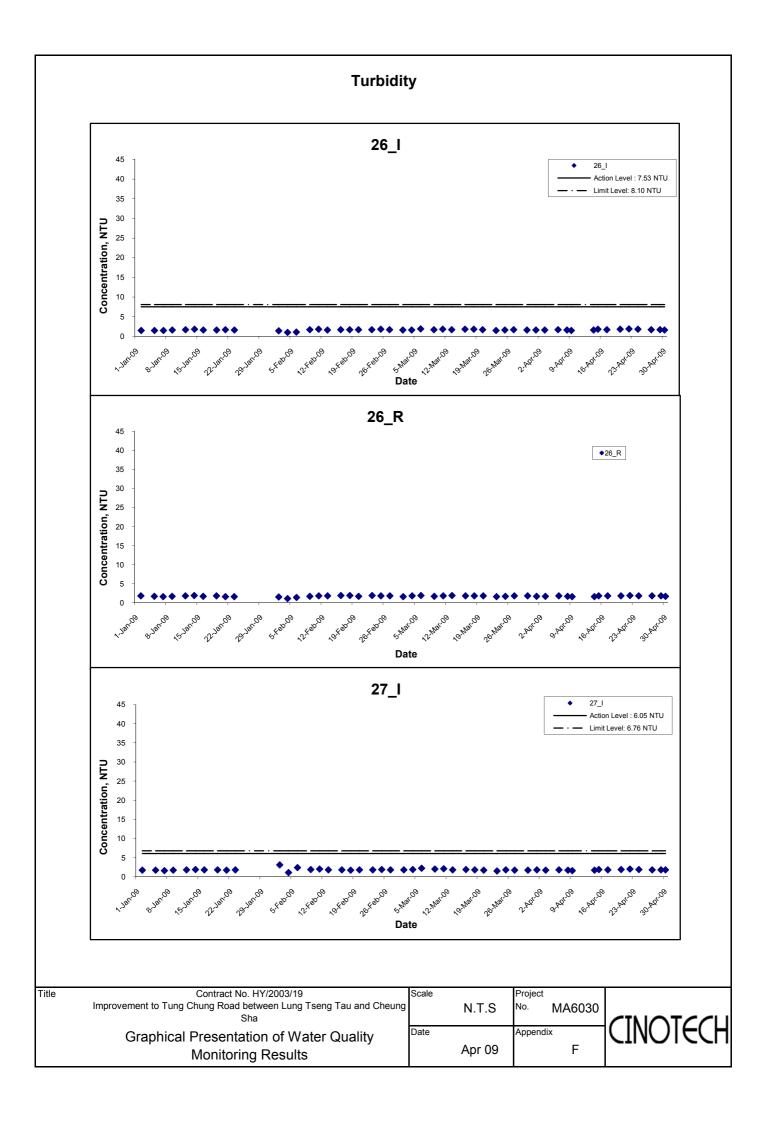
Monitoring Results

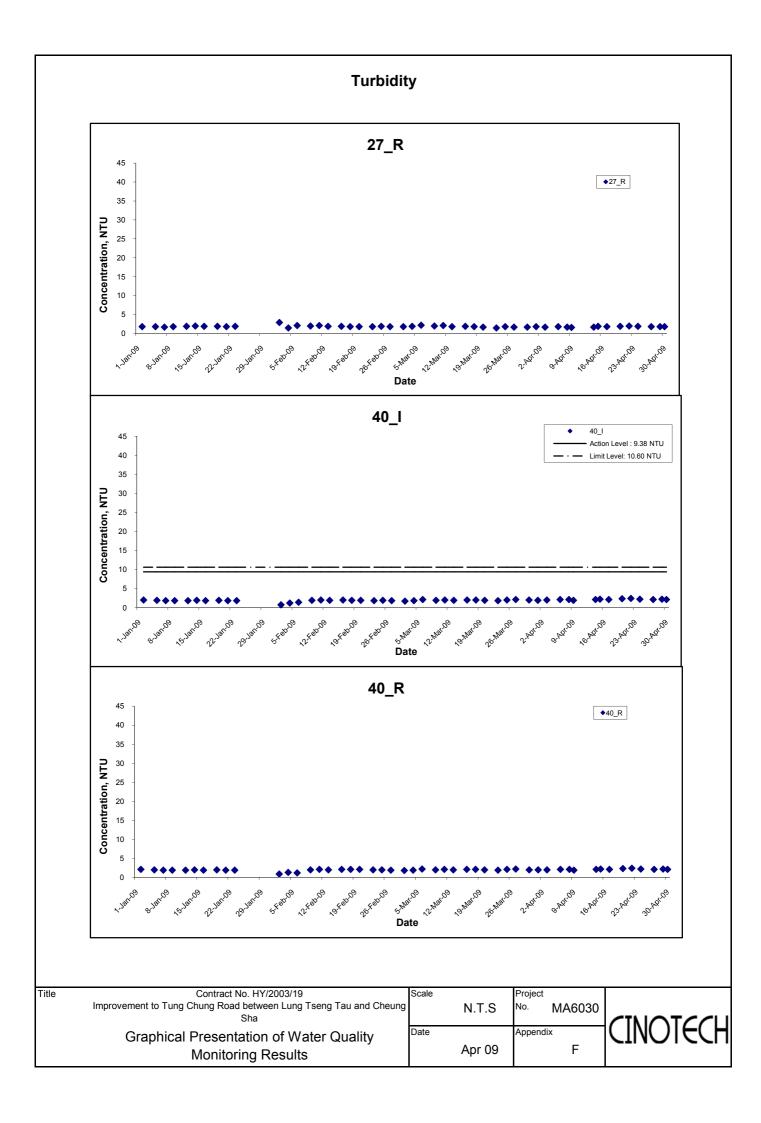


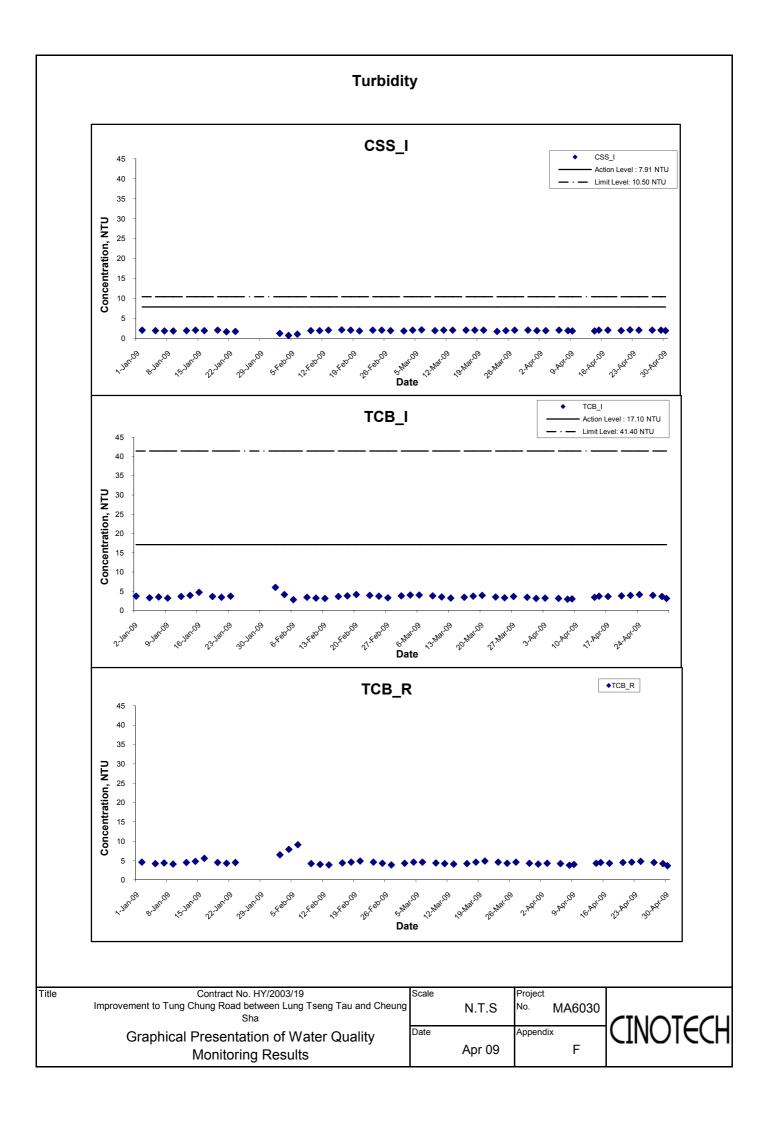




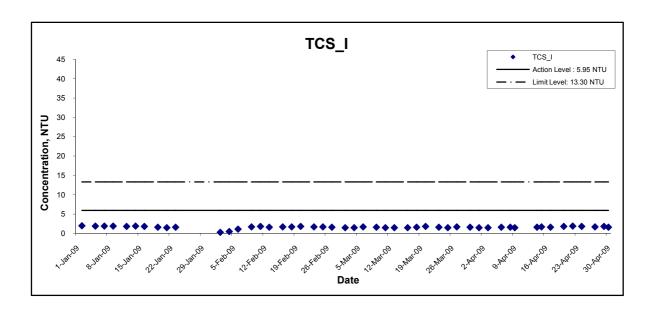








# **Turbidity**



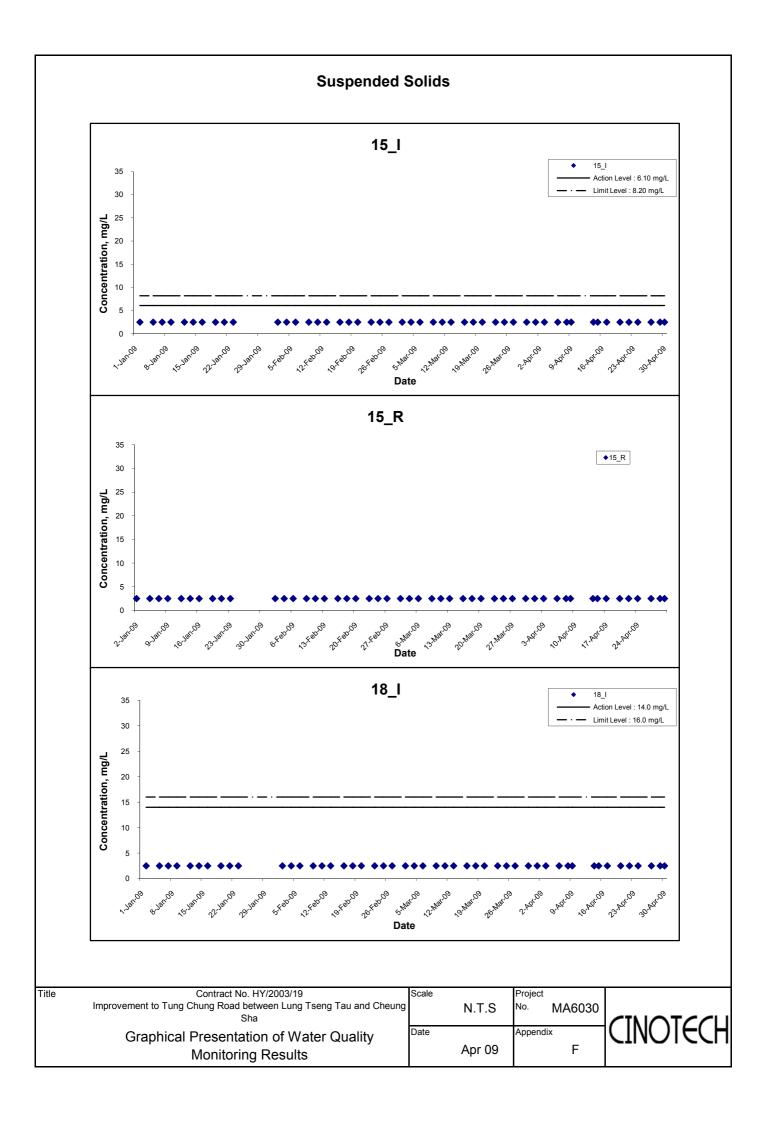
Title Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

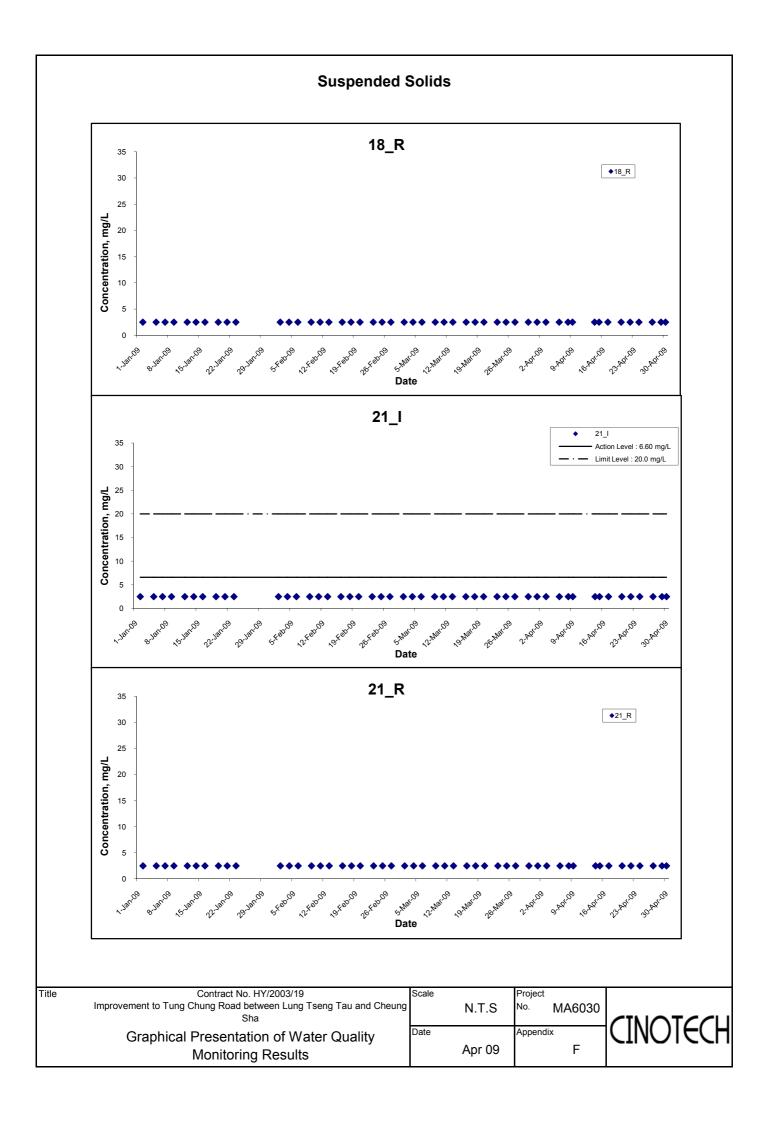
Graphical Presentation of Water Quality
Monitoring Results

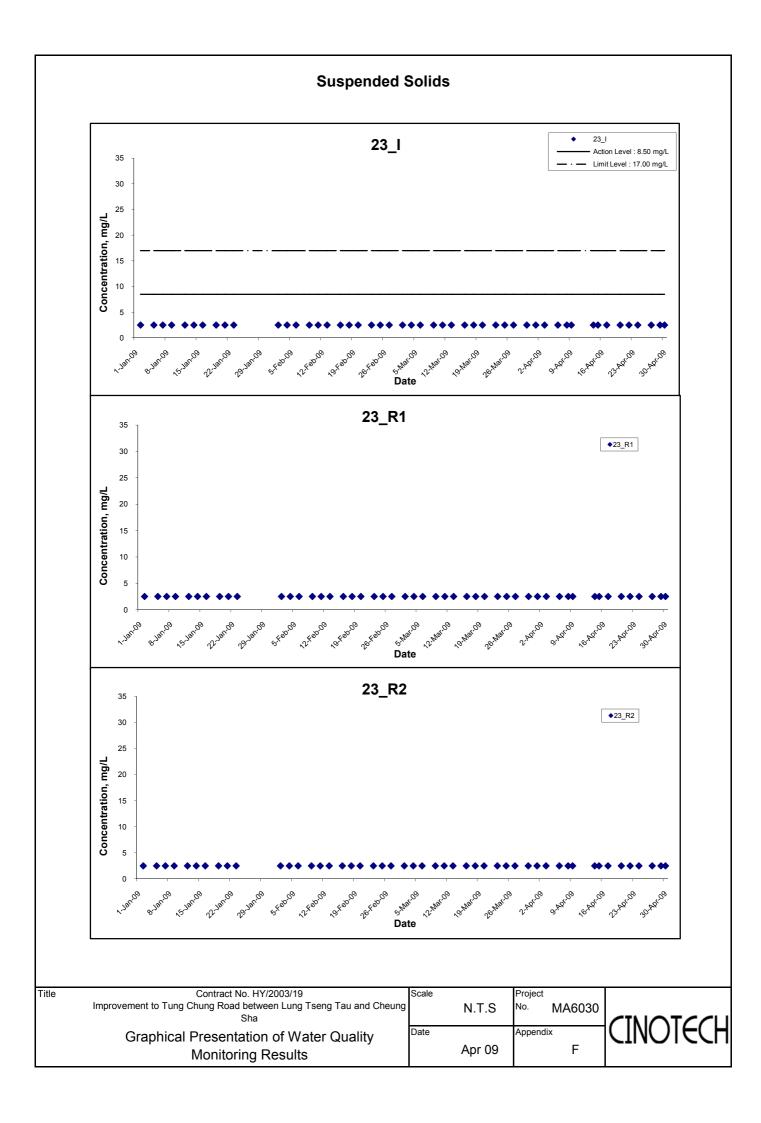
Scale
N.

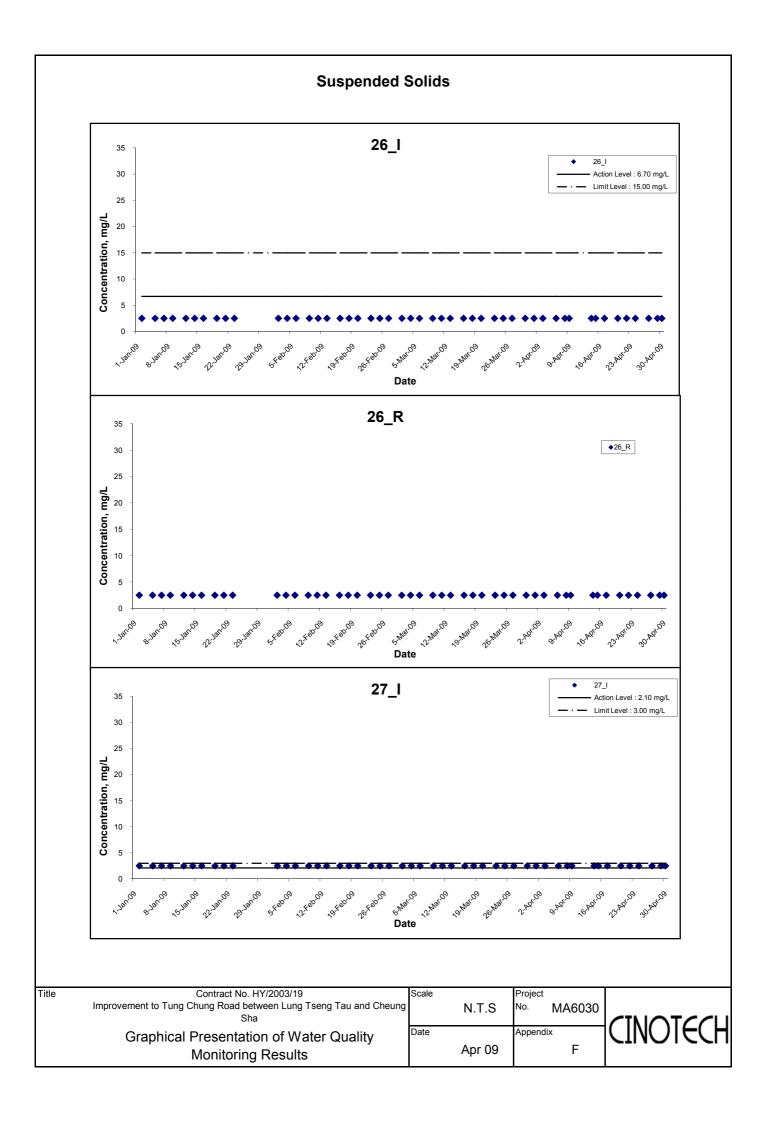
Date

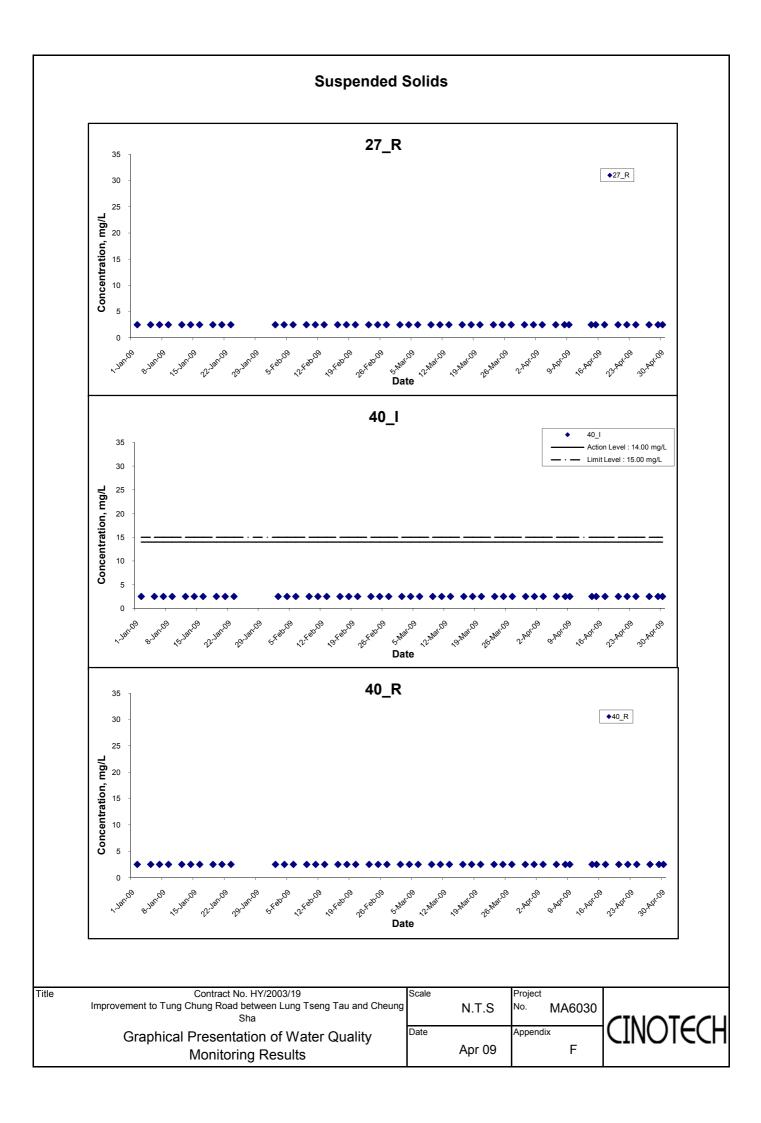


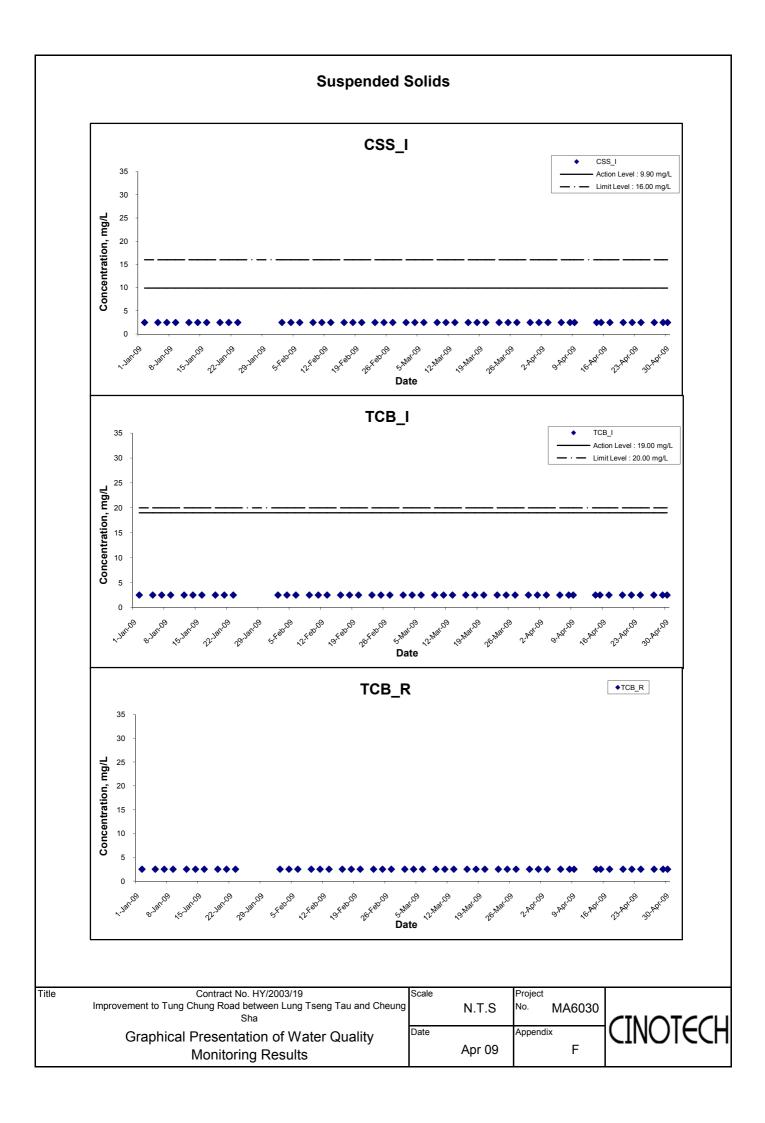




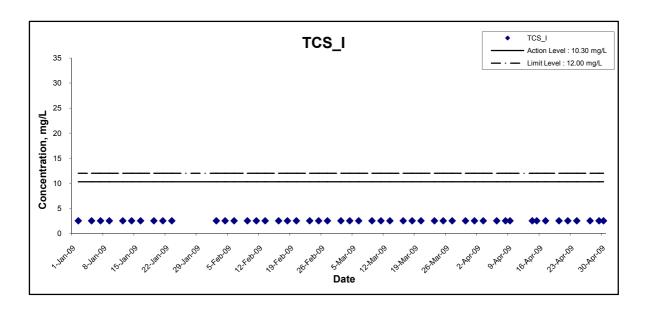








## **Suspended Solids**



Title Contract No. HY/2003/19 Scale Improvement to Tung Chung Road between Lung Tseng Tau and Cheung  $\mathsf{N.T.S}$ Date **Graphical Presentation of Water Quality** Apr 09 Monitoring Results

Project MA6030 Appendix F



APPENDIX G ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Appendix G - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures					
	<ul> <li>A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones.</li> <li>Vehicle washing facilities should be provided at every exit point.</li> </ul>	*				
	<ul> <li>The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.</li> </ul>	^				
	• Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	N/A				
	<ul> <li>Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet.</li> </ul>	*				
	• The portion of any road leading only to a construction site that is within 30m of a discernible or designated vehicle entrance or exit should be kept clear of dusty materials.	^				
Construction Dust	• Any stockpile of dusty materials should be either covered entirely be impervious sheeting, placed in an area sheltered on the top and the 3 sides or sprayed with water or a dust suppression chemical so as to maintain the entire surface wet.	*				
	<ul> <li>During cement debagging or concrete batching operation in an area sheltered on top and 3 sides.</li> </ul>	*				
	<ul> <li>All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.</li> </ul>	۸				
	<ul> <li>Every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site.</li> </ul>	^				
	• The working area of any excavation should be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet.	^				
	<ul> <li>Proper enclosures and water spraying should be implemented for the main dust-generating activities, such as soil nailing or piling works.</li> </ul>	۸				
	Proper plant maintenance should be provided to avoid black smoke emission from plants/equipment.	۸				

Types of Impacts	Mitigation Measures	Status
	<ul> <li>Only well-maintained plant should be operated on –site and plant should be serviced regularly during the construction works.</li> <li>Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.</li> </ul>	٨
	<ul> <li>Plant know to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS.</li> <li>Mobile plant should be sited as far away from NSRs as possible.</li> </ul>	^
Construction Noise	Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.	^
	Use quite plant and Working Method	^
	Reduce the number of plant operating in critical areas close NSRs.	Λ <b>Ν</b> Τ/Λ
	Construct temporary and movable noise barriers	N/A
	Construction Runoff and Drainage	
	• Discharges to natural water courses shall only take place when the effluent can be shown to comply with the standards specified in the Technical Memorandum, Standards for Effluents Discharged in to Drainage and Sewerage Systems, Inland and Coastal Waters. Discharges in the water gathering grounds should meet Group A standard for inland waters.	*
	Use of sediment traps and the adequate maintenance of drainage systems to prevent flooding and overflow.	*
	• Boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection.  Temporary ditches should be provided to facilities runoff discharge into the appropriate watercourses, via a silt retention pond.  Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates.	٨
Water Quality	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment traps should be regularly cleaned and maintained. The temporarily diverted drainage should be reinstated to its original condition when the construction works has finished or the temporary diversion is no longer required	*
	• Sand silt in the wash water from the wheel washing facilities, which ensure no earth, mud and debris is deposited on roads, should be settled out the removed before discharging into storm drains. A section of the road between the wheel washing bay and the public road should be paved with backfill to prevent wash water or other site runoff form entering public road drains.	٨
	• Oil interceptors should be provided in the drainage system and regularly emptied to prevent the release of oils and grease into the storm water drainage system after accidental spillage. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	N/A
	<ul> <li>Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks.</li> </ul>	^
	• Silt removal facilities, channels and manholes shall be suitably maintained with the deposited silt and grit being removed at least once a week, and at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	*

Types of Impacts	Mitigation Measures	Status
	<ul> <li>Earthworks final surfaces shall be well compacted and the subsequent permanent work or surface protection shall be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate intercepting channels shall be provided along the site boundary or at the locations agreed with the ET Leader. Rainwater pumped out from trenches or foundation excavations shall be discharged into silt removal facilities before discharge into storm drains.</li> </ul>	*
	<ul> <li>All generators, fuel and oil storage shall be within bunded areas. Drainage from the areas shall be connected to storm drains via a petrol interceptor.</li> </ul>	*
	Tunnelling Work	1
	<ul> <li>Temporary open storage of excavated materials should be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials form the drill and blast tunnelling work should be diverted to the drainage system via appropriate sediment traps.</li> </ul>	N/A
	<ul> <li>Ground water pumped out of tunnels should be discharged into the drainage channels which incorporated sediment traps to enhance deposition rates and to remove silt.</li> </ul>	N/A
	<ul> <li>Spend grouts used in diaphragm wall construction should be collected in a separate slurry collection system, reconditioned and reused wherever practicable. The disposal of used grouting materials will only be permitted if it is treated to the TM standards before discharge to the storm drains or disposal to landfill.</li> </ul>	N/A
	General Construction Activities	
	• Debris and rubbish on site should be collected, handled and disposed of properly to avoid entering the water column and cause water quality impacts.	*
	• All fuel tanks and storage areas will be provided with locks and be located on sealed areas (within bunds of a capacity equal to 110% of the storage capacity of the largest tank or 20% by volume of the fuel stored in that areas, whichever in the greatest).	^
	Sewage Effluent	
	• Construction work force sewage discharges form fixed toilet facilities on-site should be connected to the nearby existing trunk sewer wherever feasible. However, for areas where existing trunk sewer is not available, it is recommended that appropriate and adequate on site portable chemical toilets should be provided by a licensed contractor who will be responsible for appropriate disposal and maintenance of these facilities.	^
	<ul> <li>It is considered that sewage discharges could also be treated by on-site septic tanks and soakaway. Minimum clearance away form streams and catchments and other requirements for the proposed septic tank and soakaway should be referred to EPD's Practice Note for Professional Persons, Drainage Plans.</li> </ul>	
		N/A

Types of Impacts	Mitigation Measures				
	General	•			
	<ul> <li>Training and instruction shall be given at a site to construction staff to increase awareness and draw attention to waste management issues and the need to minimise waste generation. The training requirement shall be included in the site waste management plan.</li> </ul>	٨			
	Storage, Collection and Transportation of Waste				
	Wastes shall be handled and stored in a manner to ensure that they are held securely without loss or leakage.	٨			
	<ul> <li>Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits.</li> </ul>	٨			
	Waste shall be removed on a daily basis.	٨			
	Waste storage area shall be maintained and cleaned on a daily basis.	٨			
	<ul> <li>Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers.</li> </ul>	٨			
	Obtain necessary waste disposal permits from the appropriate authorities if they are required.	^			
	<ul> <li>Wastes shall be disposed of at licensed waste disposal facilities.</li> </ul>	^			
***	• Develop procedure such as ticketing system to facilitate tracking of loads, particularly for chemical waste, and to ensure that illegal disposal of wastes does not occur.	٨			
Waste / Chemical	Maintain records of the quantities of wastes generated, recycled and disposed.	^			
Chemicai	Surplus Excavated Materials				
	Due to the high risk of loose material being washed into the existing nullah, stockpile materials should be properly compacted and covered from water erosion and located at least 10m away from the nullah wall.	*			
	Construction and Demolition (C&D) Waste				
	<ul> <li>Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts.</li> </ul>	٨			
	<ul> <li>The handling and disposal of bentonite slurries shall be undertaken in accordance with Practice Note for Professional Persons         <ul> <li>Construction Site Drainage (ProPECC PN 1/94) on construction site drainage.</li> </ul> </li> </ul>	N/A			
	• Construction and demolition (C&D) material shall be segregated to inert and non-inert parts. The inert portion shall re-used at areas of reclamation or land formation, or to public filling area shall such allocation is deemed necessary. The non-inert portion shall be disposed of to landfill.	*			
	Chemical Waste				
	<ul> <li>Chemical waste that is produce during construction shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes.</li> </ul>	٨			

Types of Impacts	Mitigation Measures	Status
	<ul> <li>Containers used for the storage of chemical wastes should:</li> <li>a. Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;</li> <li>b. Have a capacity of less than 450 litres unless the specifications have been approved by the EPD;</li> <li>c. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste Regulations.</li> </ul>	۸
	<ul> <li>The storage area for chemical wastes should:</li> <li>a. Be clearly labelled and used solely for the storage of chemical waste;</li> <li>b. Be enclosed on at least 3 sides;</li> <li>c. Have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is largest;</li> <li>d. Have adequate ventilation;</li> </ul>	*
	<ul> <li>e. Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary);</li> <li>f. Be arranged so that incompatible materials are adequately separated.</li> </ul>	
	• Disposal of chemical waste shall be via a licensed waste collector; and to a facility licensed to receive chemical waste; or a reuser of the waste (under approval from EPD).	^
	General Refuse	
	<ul> <li>General refuse generated on-site shall be stored in enclosed bins or compaction unit separate from C&amp;D and chemical wastes.         A reputable waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&amp;D and chemical wastes, on a daily for every second day basis to minimise odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law.     </li> </ul>	۸
	Reusable rather than disposable dishware shall be used if feasible.	٨
	Oil and Fuel	
	<ul> <li>The storage area for chemical wastes should have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container;</li> </ul>	*
	<ul> <li>No storage of oil or fuel should be stored within the Country Park or the water gathering ground.</li> </ul>	*
	<ul> <li>Refinement of the route alignment and design of associated structures to minimise loss of woodland and other landscape resources;</li> </ul>	٨
Landscape	<ul> <li>Minimising working areas as far as possible;</li> </ul>	^
and Visual	<ul> <li>Protection and retention of existing vegetation where possible;.</li> </ul>	^
Impact	Transplanting of trees where appropriate	٨
	<ul> <li>Protection and retention of existing natural rocky outcrops, slope profiles, vegetation, landscape features;</li> </ul>	٨
	Advance planting and visual screening, where possible;	٨

Types of Impacts	Mitigation Measures	Status
	Compensatory planting;	^
	• Sensitively designed site hoarding, where possible (ie the sensitive design of site hoarding will be disrupted by hoarding panels showing the Highways Department logo, at regular intervals as per the approved engineering design);and	^
	Grassing and woodland planting of soil slopes and disturbed areas	^
Ecology	<ul> <li>Construction activities in the stream and other disturbances to it should be avoided.</li> </ul>	٨

Remarks:  ^ Compliance of mitigation measure; X N/A Not Applicable;  * Recommendation was made during site audit but improved/rectified by the contractor.  X  * Recommendation was made during site audit but improved/rectified by the contractor.	Non-compliance of mitigation measure; Non-compliance but rectified by the contractor; Non-compliance but rectified/improved by the contractor and awaiting IEC's further comment;
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# APPENDIX H SITE AUDIT SUMMARY

Appendix H - Summary of Observation and Recommendation Made during Site Inspection

Summary of Observation and Recommendation Made during Site Inspection in February 2009

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	04/02/09	Sediment was observed accumulate in culvert at Stream11. The Contractor was reminded to clear it up.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR9a, STR10, STR11 and SD7-13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings: <ul> <li>Rearrange stream diversion at Stream6,</li> <li>Stream7, Stream11, Stream12 and Stream19.</li> </ul>	Rectification/improvement was observed during the follow-up audit session.
	04/02/09	The Contractor was reminded of the followings:  • Clear/ pump away the stagnant water in the material skip at <b>Shek Mum Kap</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Clear/ pump away the ponding water at SD5-11, near Stream6 and near Stream21.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Clear sediment and debris at drainage system (U channels, culverts (in progress) and catchment channel (in progress)), especially the catchment channel underneath STR16 and STR17, in u-channels at SD7-13 and near Stream7, in culvert at RW44.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	<ul> <li>Sediment was observed accumulate in culvert at Stream11. The Contractor was reminded to clear it up.</li> </ul>	Rectification/improvement was observed during the follow-up audit session.
	11/02/09	The Contractor was reminded of the followings: • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR10, STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	The Contractor was reminded of the followings:  • Clear/ pump away the stagnant water in the material skip at Shek Mum Kap.	Rectification/improvement was observed during the follow-up audit session.
	11/02/09	The Contractor was reminded of the followings:  • Clear/ pump away the ponding water at near  Stream6 and near Stream21.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	The Contractor was reminded of the followings:  • Clear sediment and debris at drainage system (U channels, culverts (in progress) and catchment channel (in progress)), especially in culvert at CH7000 and in u-channel at Stream7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR10, STR11, STR12 and STR13.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  • Clear/ pump away the ponding water at near Stream6.	Rectification/improvement was observed during the follow-up audit session.

Parameters	Date	Observations and Recommendations	Follow-up
	19/02/09	The Contractor was reminded of the followings:  • Clear sediment and debris at drainage system (U channels (in progress), culverts (in progress) and catchment channel (in progress)), especially in culvert at CH7000, SD6-12, SD5-11 and in u-channel at SD7-13, Stream7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  • Remove the oil above the water in culvert at Stream13.	Rectification/improvement was observed during the follow-up audit session.
	26/02/09	The Contractor was reminded of the followings:  • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR10, STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	The Contractor was reminded of the followings:  • Clear sediment and debris at drainage system (U channels (in progress), culverts (in progress)), especially in u-channel at SD7-13, in culvert at SD6-12 and SD10-19.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Air Quality	04/02/09	• Stockpiles at <b>San Shek Wan</b> and outside the <b>site office</b> were observed dry. The contractor was reminded to provide dust suppressing measures (e.g. water spray regularly or cover the stockpile with impervious materials) to prevent dust generation.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	C&D waste and excavated stockpile were observed next to the <b>catchment channel</b> underneath <b>STR16</b> . The Contactor was reminded to remove it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings: • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR9a, STR10, STR11 and SD7-13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Properly cover the stockpile at <b>Pak Kung Au</b> , near <b>Stream19</b> and <b>SD5-11</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Water spray should be provided on dusty road, during dusty activities at near <b>Stream21</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Erect fencing for the streams near the construction works, especially for <b>Stream28</b> and <b>Stream29</b> .	Rectification/improvement was observed during the follow-up audit session.
	11/02/09	• Stockpiles at <b>San Shek Wan</b> and outside the <b>site office</b> were observed dry. The contractor was reminded to provide dust suppressing measures (e.g. water spray regularly or cover the stockpile with impervious materials) to prevent dust generation.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	The Contractor was reminded of the followings:  • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR10, STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	11/02/09	The Contractor was reminded of the followings:  • Properly cover the stockpile at <b>Pak Kung Au.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	The Contractor was reminded of the followings:  • Water spray should be provided on dusty road, during dusty activities at <b>Stream21</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	• Stockpiles at <b>San Shek Wan</b> and outside the <b>site office</b> were observed dry. The contractor was reminded to provide dust suppressing measures (e.g. spray water regularly or cover the stockpile with impervious materials) to prevent dust generation.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR10, STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  • Properly cover the stockpile at <b>Pak Kung Au.</b>	Rectification/improvement was observed during the follow-up audit session.
	19/02/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Water spraying should be provided on dusty road, during dusty activities at <b>Stream21</b>.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	• Stockpiles at <b>San Shek Wan</b> and outside the <b>site office</b> were observed dry. The contractor was reminded to provide dust suppressing measures (e.g. spray water around the site regularly or cover the stockpiles with impervious materials) to prevent dust generation.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	The Contractor was reminded of the followings:  • Properly cover/ hydroseed the exposed slope at underneath STR7, STR8, STR10, STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Water spraying should be provided on dusty road, during loading/unloading activities at near Stream21.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Waste / Chemical Management	04/02/09	• Empty oil containers were observed at RW14, STR10, near Stream21, SD6, SD5, and near the catchment channel. The contractor was reminded to remove them and sorting is necessary.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	C&D waste and excavated stockpile were observed next to the <b>catchment channel</b> underneath <b>STR16</b> . The Contactor was reminded to remove it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	04/02/09	The Contractor was reminded of the followings:  • Clear C&D waste and/or abandoned cement bags at RW14, underneath STR7, Stream28, Stream37, Stream38, SD6-12, in u-channels at near Stream20, SD6-12, SD5-11, in culverts at RW14, STR9a, Stream30, Stream19, Stream13, Stream12, Stream11, Stream7 and Stream20.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	04/02/09	The Contractor was reminded of the followings:  • Clear abandoned timbers near the construction areas, especially near <b>Streamm33</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	<ul> <li>Empty oil containers were observed at San Shek Wan and SD6-12. The contractor was reminded to remove them and sorting is necessary.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	The Contractor was reminded of the followings:  • Clear C&D waste and/or abandoned cement bags at underneath STR7, STR13, underneath STR14, SD7-13, SD6-12, SD5-11, near Stream5, Stream28, Stream33, Stream37, Stream38, in u-channels at SD7, SD6, SD5, in culverts at RW14, Stream30, STR17, Stream20, SD7-13, SD6-12, Stream7, Stream5.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	The Contractor was reminded of the followings:  • Clear/remove the abandoned timbers near the construction areas, especially near <b>Stream33</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	<ul> <li>Empty oil containers were observed at San Shek Wan and SD6-12. The contractor was reminded to remove them and sorting is necessary.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  • Clear C&D waste and/or abandoned cement bags at underneath STR7, underneath STR8, outside the site office, next to the catchment underneath STR16, SD7-13, SD6-12, Stream26, Stream28, Stream29, Stream37, Stream38, Stream40, in u-channels at Sream21, SD5-11, in culverts at STR17, SD7-13, Stream7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Clear/remove the chopped timbers near the construction areas at south side of Tung Chung Road.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  • Clear/ sweep up the general refuse in u-channel and culvert at near <b>Stream20</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	The Contractor was reminded of the followings:  Remove the oil above the water in culvert at Stream13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	<ul> <li>Empty oil containers were observed at San Shek Wan, near Stream21, near Stream19 and SD6- 12. The contractor was reminded to remove them and sorting is necessary.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	The Contractor was reminded of the followings:  • Clear C&D waste and/or abandoned cement bags at outside the <b>site office</b> , underneath <b>STR14</b> , underneath <b>STR18</b> , near <b>Stream21</b> , near <b>Stream13</b> , <b>Stream26</b> , <b>Stream28</b> , <b>Stream29</b> , <b>Stream37</b> , <b>Stream38</b> , <b>Stream40</b> , in culverts at <b>SD7-13</b> and <b>SD2-5</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	26/02/09	The Contractor was reminded of the followings:  • Clear the chopped timbers near the completed construction areas at south side of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	The Contractor was reminded of the followings:  • Clear the general refuse in u-channel and culvert at near <b>Stream20</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
General	04/02/09	<ul> <li>Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially at construction area near Stream19, SD7-13, SD6-12, Pak Kung Au, SD2-5, SD5-11, RW14, STR6, San Shek Wan and SD4-7.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/02/09	<ul> <li>Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially at construction area near Stream19, STR6, Stream21, Site office, SD7-13, SD6-12, Pak Kung Au, SD2-5, SD5-11, San Shek Wan and SD4-7.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/02/09	<ul> <li>Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially the construction areas at the entrance of Tung Chung Road near RW15, Stream19, STR6, Stream21, the site office, SD7-13, SD6-12, Pak Kung Au, SD2-5, SD5-11, San Shek Wan and SD4-7.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/02/09	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

# Summary of Observation and Recommendation Made during Site Inspection in March 2009

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality Air Quality	05/03/09	Heaps of silt were observed in culvert at Stream21, SD6-12, SD5-11 and in u-channels at near San Shek Wan, SD7-13, SD4-7. The Contractor was reminded to clear it before rainy season for avoid discharge to the streams.	the follow-up audit session. Follow-up action was needed for
	05/03/09	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slopes at STR8, underneath STR12, STR14 and SD7-13.	the follow-up audit session.
	05/03/09	Stream at and Streamo	

Parameters	Date	Observations and Recommendations	Follow-up
	05/03/09	diversion at Stream21	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	Heaps of silt and debris were observed in culvert at SD7-13, SD6-12, in u-channels/drains at near San Shek Wan, SD7-13, SD4-7. The Contractor was reminded to clear it before rainy season.	the follow-up audit session. Follow-up action was needed for
	11/03/09	Exposed slopes were observed at underneath STR7, STR8, underneath STR12, STR14, underneath STR16, underneath STR17 and SD7-13. The Contractor was reminded to properly cover those slopes with tarpaulin and provide hydroseed as soon as possible.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09		
	11/03/09	- Provide stream diversion at <b>Stream11</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Provide concrete and sand bag bund at Stream21 for filtering silting water discharge to Tung Chung Stream.</li> </ul>	the follow-up audit session.
	19/03/09	Standing water was observed at the water treatment unit at <b>Shek Mun Kap</b> . The Contractor was reminded to pump it out or spray mosquito larvicide to prevent mosquito breed.	the follow-up audit session. Follow-up action was needed for
	19/03/09	Oil leakage was observed from the generator at <b>SD6-12.</b> The Contractor was reminded well-maintained the plant equipment and clear the oil stains.	the follow-up audit session.
	19/03/09	Silty water was observed pumping out from the construction area at <b>Stream21</b> . The Contractor was reminded to provide sedimentation tank for treating the wastewater before discharging out and provide mitigation measures to prevent the silty water further discharging to Tung Chung Stream.	observed during the follow-up audit session.
	19/03/09	A pile of sediment was observed to place at the drainage channel at <b>Stream 21</b> . The Contractor was reminded to remove them as soon as possible.	observed during the follow-up
	19/03/09	The Contractor was reminded of the followings: - Properly cover the exposed slopes along Tung Chung Road (Southern & Northern Section) with tarpaulin which are not undertaken the works and provide hydroseed immediately when the works are completed.	the follow-up audit session. Follow-up action was needed for the outstanding item.
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Parameters	Date	Observations and Recommendations	Follow-up
	19/03/09	STR17, Stream 20, in the U-Channel at Shan Shek Wan, SD7-13, SD4-7, SD6-12.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/03/09	catchwater	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/03/09	The Contractor was reminded of the followings: - Provide stream diversion at <b>Stream 11</b> and well-maintained the stream diversion at <b>Stream 21</b> .	
	19/03/09	The Contractor was reminded of the followings:  - Clear the silt at between the drainage channel and exposed slopes at Southern Section of Tung Chung Road. (especially STR9A and STR12-13)	the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/03/09	Standing water was observed at the water treatment unit at <b>Shek Mun Kap</b> . The Contractor was reminded to pump it out or spray mosquito larvicide to prevent mosquito breed.	observed during the follow-up
	26/03/09	Silt and sediment was observed discharging to the catchwater from the exposed slope at STR16. The Contractor was reminded to cover the exposed surface as soos as possible.	the follow-up audit session.
	26/03/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along  Tung Chung Road (Southern & Northern  Section) with tarpaulin which are not undertaken the works and provide hydroseed immediately when the works are completed. (in-progress)	the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/03/09		the follow-up audit session.
	26/03/09	The Contractor was reminded of the followings: - Clear the sediment accumulated at the catchwater (in-progress).	
	26/03/09		_
	26/03/09	110 vide stream diversion de seredin 11.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
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Parameters	Date	Observations and Recommendations	Follow-up
	26/03/09	The Contractor was reminded of the followings:  - Clear the silt at between the drainage channel and exposed slopes at Southern Section of Tung Chung Road. (especially STR9A, STR12-13 and STR17)	the follow-up audit session. Follow-up action was needed for the outstanding item.
	05/03/09	Stockpiles at <b>San Shek Wan</b> were observed dry. The contractor was reminded to provide dust suppressing measures (e.g. spray water throughout the site regularly) to prevent dust generation.	the follow-up audit session. Follow-up action was needed for
	05/03/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Properly cover/ hydroseed the exposed slopes at STR8, underneath STR12, STR14 and SD7-13.</li> </ul>	the follow-up audit session.
	05/03/09	The Contractor was reminded of the followings:  - Water spraying should be provided on dusty road, during loading/unloading activities.	_
	11/03/09	Stockpiles at <b>San Shek Wan</b> were observed dry. The contractor was reminded to provide dust suppressing measures (e.g. spray water throughout the site regularly) to prevent dust generation.	the follow-up audit session. Follow-up action was needed for
	11/03/09	Exposed slopes were observed at underneath STR7, STR8, underneath STR12, STR14, underneath STR16, underneath STR17 and SD7-13. The Contractor was reminded to properly cover those slopes with tarpaulin and provide hydroseed as soon as possible.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	The Contractor was reminded of the followings:  - Water spraying should be provided on dusty road, during loading/unloading activities.	_
	11/03/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Properly cover the stockpiles with tarpaulin at underneath STR7, Pak Kung Au, near Stream19 and SD4-7.</li> </ul>	the follow-up audit session.
		Stockpile and unpaved area at <b>Shan Shek Wan</b> were observed dry. The Contractor was reminded to provide dust suppression measures to prevent dust generation.	observed during the follow-up
	19/03/09	The Contractor was reminded of the followings:  - Provide water spray for the dust generation activities (rock breaking, excavation) at Shan Shek Wan.	the follow-up audit session.

Parameters	Date	Observations and Recommendations	Follow-up
	19/03/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Properly cover the stockpiles with tarpaulin at underneath STR7, Pak Kung Au, near Stream 19 and SD4-7.</li> </ul>	
	26/03/09	The Contractor was reminded of the followings: - Properly cover the exposed slopes along Tung Chung Road (Southern & Northern Section) with tarpaulin which are not undertaken the works and provide hydroseed immediately when the works are completed. (in-progress)	the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/03/09	Shan Shek Wan.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/03/09	<ul><li>The Contractor was reminded of the followings:</li><li>Properly cover the stockpiles with tarpaulin at</li><li>Pak Kung Au and Site office.</li></ul>	Rectification/improvement was observed during the follow-up audit session.
Waste / Chemical Management	05/03/09	Empty oil containers were observed at San Shek Wan, near Stream21, near Stream20, SD6-12 and SD5-11. The contractor was reminded to remove them and sorting is necessary.	the follow-up audit session. Follow-up action was needed for
	05/03/09	The Contractor was reminded of the followings:  - Clear C&D waste and/or abandoned cement bags underneath STR7, underneath STR8, underneath STR11, underneath STR12, next to the catchment water (in progress), at Stream30, Stream34, Stream35, Stream37, Stream38, in culverts at STR17, SD7-13 SD4-7, in u-channels at near Stream21.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	05/03/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Clear the chopped timbers near the completed construction areas at south side of Tung Chung Road.</li> </ul>	the follow-up audit session.
	05/03/09	The Contractor was reminded of the followings: - Clear the general refuse at <b>Stream22</b> , in u-	
	05/03/09		_

Parameters	Date	Observations and Recommendations	Follow-up
	11/03/09		the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	The Contractor was reminded of the followings:  - Clear C&D waste and/or abandoned cement bags next to <b>the catchment water</b> (in progress), at <b>Stream22</b> , <b>Stream26</b> , <b>Stream30</b> , <b>Stream37</b> , <b>Stream38</b> , near <b>Stream21</b> , near <b>Stream5</b> , in culverts at <b>STR17</b> , <b>Stream20</b> , <b>SD4-7</b> , in u-channels at <b>SD6-12</b> .	the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Clear the chopped timbers near the completed construction areas at south side of Tung Chung Road.</li> </ul>	the follow-up audit session.
	11/03/09	Stream 19. SDS-11 and near Streamo.	
	19/03/09		the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/03/09		the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/03/09		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	19/03/09	19, SDS-11 and hear Stream 0, Stream 21.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/03/09	Empty oil containers were observed at San Shek Wan, SD6-12 and SD10-19. The Contractor was reminded to clear them as chemical waste.	the follow-up audit session.
	26/03/09	The Contractor was reminded of the followings: - Clear C&D waste accumulated at RW16 and	This item was not rectified during
	26/03/09	underneath STR7	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	26/03/09	Southern Section of Tung Chung Road	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	26/03/09	The Contractor was reminded of the followings: - Provide drip tray for the oil drums at SD7-13 and SD5-11.	Rectification/improvement was observed during the follow-up audit session.
	26/03/09	The Contractor was reminded of the followings: - Properly maintain the drip tray for the air compressor at <b>SD7-13</b> .	Rectification/improvement was observed during the follow-up audit session.
	19/03/09	The Contractor was reminded of the followings: - Clear the C&D waste at Stream 22, Stream 26, Stream 30, Stream 37 and 38, Stream 21 and near Stream 5.	the follow-up audit session
Ecology	26/03/09	The Contractor was reminded of the followings: - Clear the C&D waste at Stream 22, Stream 30, Stream 34, Stream 36, Stream 37 and 38.	the follow-up audit session.
	26/03/09	The Contractor was reminded of the followings: - Provide sand bag bund at the <b>downstream of</b> Stream 21 to prevent silty water discharging to Tung Chung Stream.	the follow-up audit session.
General	05/03/09		the outstanding item.
	05/03/09	Provide sand bag bund between drainage system and exposed slops/stockpiles and properly cover then with tarpaulin before rainy season, such as RW38, RW15, Pak Kung Au, near Sream19, SD4-7, SD5-11, SD6-12, SD7-13 and downhill slope at SD6-12.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between construction areas and paved roads for avoid trailing mud on public road, especially the construction areas at the entrance of Tung Chung Road near RW15, Stream19, STR6, Stream21, the site office, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and San Shek Wan.	the follow-up audit session. Follow-up action was needed for the outstanding item.
	11/03/09	Provide sand bag bund between drainage system and exposed slops/stockpiles and properly cover then with tarpaulin before rainy season, especially at the southern Tung Chung Road.	the follow-up audit session.
	19/03/09	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction areas and paved road to prevent any mud from carrying to the public road. (i.e.at the entrance of Tung Chung Road near RW15, Stream 19, STR6, Stream 21, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and Shan Shek Wan). Wheel Washing should also be provided at site office.	Follow-up action was needed for the outstanding item.

Parameters Da	ate	Observations and Recommendations	Follow-up
2	26/03/09	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction areas and paved road to prevent any mud from carrying to the public road. (i.e.at the entrance of Tung Chung Road near RW15, Stream 19, STR6, Stream 21, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and Shan Shek Wan).	the follow-up audit session. Follow-up action was needed for the outstanding item.

Summary of Observation and Recommendation Made during Site Inspection in April 2009

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	02/04/09	Silt and sediment was observed discharging to the catchwater from the exposed slope at <b>STR16 and 17.</b> The Contractor was reminded to cover the exposed surface properly especially during the rains.	during the follow-up audit
	02/04/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along <b>Tung Chung Road (Southern &amp; Northern Section)</b> with tarpaulin which are not undertaken the works and provide hydroseed immediately after the works completed. (inprogress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Clear the construction waste, silt, debris and sediment in the culvert at STR17, Shan Shek Wan, near Stream</li> <li>22, Steam 18 and 20, SD7-13, SD6-12 and SD5-11.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Clear the oil stains at <b>Shan Shek Wan.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Properly maintain the sand bag bund provided for stream water diversion at <b>Stream 21.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings: - Provide stream diversion at <b>Stream 11.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Clear the silt at between the drainage channel and exposed slopes at Southern Section of Tung Chung Road. (especially STR9A, STR12-13 and STR17)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	Silt and sediment was observed discharging to the catchwater from the exposed slope at STR17. The Contractor was reminded to cover the exposed surface/hydroseed the exposed slope immediately.	

Parameters	Date	Observations and Recommendations	Follow-up
	08/04/09	Bitumen oil was observed from leaking out to the U-Channel at Pak Kung Au. The Contractor was reminded to clean them up as soon as possible.	*
	08/04/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along <b>Tung Chung Road (Southern &amp; Northern Section)</b> with tarpaulin which are not undertaken the works and provide hydroseed immediately after the works completed. (inprogress)	session. Follow-up action was needed for the
	08/04/09	The Contractor was reminded of the followings:  - Clear the construction waste, silt, debris and sediment in the culvert and U-Channel at STR17, Shan Shek Wan, near Stream 22, Sream 20, SD7-13, SD6-12 and SD5-11(in-progress).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Properly maintain the sand bag bund provided for stream water diversion at <b>Stream 21.</b></li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Provide stream water diversion at <b>Stream 11</b> especially during the clearance works at the culvert (<b>SD5-11</b>).</li> </ul>	Rectification/improvement was observed during the follow-up audit session.
	08/04/09	The Contractor was reminded of the followings:  - Clear the silt at between the drainage channel and exposed slopes at Southern Section of Tung Chung Road. (especially STR9A, STR12-13 and STR17)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	The Contractor was reminded of the followings: - Provide wheel washing facilities at the entrance of <b>Site Office.</b>	Rectification/improvement was observed during the follow-up audit session.
	16/04/09	Silt and sediment was observed discharging to the catch water from the exposed slope at <b>STR17</b> . The Contractor was reminded to cover/hydroseed the exposed slope immediately.	during the follow-up audit
	16/04/09	Silty water was observed discharging to the public drain at <b>Shan Shek Wan</b> . The Contractor was reminded to provide mitigation measures to prevent any silty water from discharging to the culvert and then the public drain.	during the follow-up audit
	16/04/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along <b>Tung Chung Road</b> ( <b>Southern and Northern Section</b> ) with tarpaulin which are not undertaken the works and well maintain the slopes which have been hydroseeded.	session. Follow-up action was needed for the
	1	1-	

Parameters	Date	Observations and Recommendations	Follow-up
	16/04/09	The Contractor was reminded of the followings:  - Clear the construction waste, silt, debris and sediment in the culvert and U-channel at STR17, Shan Shek Wan, CH7000, near Stream 20, Pak Kung Au, SD7-13, SD6-12, SD4-7 and underneath STR7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings:  - Properly maintain the sand bag bund provoded for stream water diversion at <b>Stream 21</b> .	This item was not observed during the follow-up audit session.
	16/04/09	The Contractor was reminded of the followings:  - Clear the silt in between the drainage channel and exposed slopes at Southern Section of Tung Chung Road (especially STR 9A, STR12-13 and STR 17).	
	23/04/09	Silt and sediment was observed discharging to the catchwater from the exposed slope at <b>STR 16 and 17</b> . The Contractor was reminded to cover/hydroseed the exposed slope immediately.	during the follow-up audit
	23/04/09	Silty water was observed discharging to the public drain at <b>Shan Shek Wan</b> . The Contractor was reminded to clear the culvert and provide mitigation measures (sand bag bund) to prevent any silty water from discharging out.	during the follow-up audit
	23/04/09	Broken concrete waste was observed from blocking <b>Stream 20</b> . The Contractor was reminded to clear the waste immediately and provide stream diversion.	-
	23/04/09	<ul> <li>The Contractor was reminded of the followings:</li> <li>Clear the construction waste, silt, debris and sediment in the culvert and U-channel along Tung Chung Road (Southern and Northern Sections) especially at STR17, Shan Shek Wan, CH7000, near Stream 5, Stream 20, Pak Kung Au, SD7-13, SD6-12, SD4-7 and underneath STR7.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/04/09	The Contractor was reminded of the followings: - Properly cover/compact the exposed surface near Stream 20 and 19.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/04/09	Silt and sediment was observed discharging to the catchwater from the exposed slope at STR 16 and 17. The Contractor was reminded to cover/hydroseed the exposed slope immediately.	This item was not rectified during the follow-up audit

Parameters	Date	Observations and Recommendations	Follow-up
	30/04/09	Silty water was observed discharging to the public drain at <b>Shan Shek Wan</b> . The Contractor was reminded to clear the culvert and properly maintain the sand bag bund to prevent any silty water from discharging out.	during the follow-up audit
	30/04/09	The Contractor was reminded of the followings:  - Clear the construction waste, silt, debris and sediment in the culvert and U-channel along Tung Chung Road (Southern and Northern Sections) especially at STR17, Shan Shek Wan, CH7000, near Stream 20, Pak Kung Au, SD7-13, SD6-12, SD4-7 and underneath STR7.	
	30/04/09	The Contractor was reminded of the followings: - Properly cover/compact the exposed surface near Stream 20 and 19 and provide stream diversion at Stream 20.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/04/09	The Contractor was reminded of the followings:  - Provide sand bag bund or other mitigation measures at the culvert of <b>Stream 21</b> for stream water diversion.	Rectification/improvement was observed during the follow-up audit session.
Air Quality	02/04/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along <b>Tung Chung Road (Southern &amp; Northern Section)</b> with tarpaulin which are not undertaken the works and provide hydroseed immediately when the works are completed. (in-progress)	was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:	coordian Eallary un action
	02/04/09	The Contractor was reminded of the followings: - Properly cover the stockpile at <b>site office.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along <b>Tung Chung Road</b> ( <b>Southern &amp; Northern Section</b> ) with tarpaulin which are not undertaken the works and provide hydroseed immediately when the works are completed. (in-progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the

Parameters	Date	Observations and Recommendations	Follow-up
	08/04/09	The Contractor was reminded of the followings:  - Provide water-spray for the dust generation activities (rock breaking and excavation) and exposed surface at Shan Shek Wan.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	The Contractor was reminded of the followings: - Properly cover the stockpile at <b>site office</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings:  - Properly cover the exposed slopes along <b>Tung Chung Road</b> ( <b>Southern and Northern Section</b> ) with tarpaulin which are not undertaken the works and well maintain the slopes which have been hydroseeded.	cassion Follow up action
	16/04/09	The Contractor was reminded of the followings:  - Provide water-spray for the dust generation activities (rock breaking and excavation) and exposed surface at Shan Shek Wan.	Rectification/improvement was observed during the follow-up audit session.
	16/04/09	The Contractor was reminded of the followings: - Properly cover the stockpile of C&D waste at Shan Shek Wan.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings: - Properly cover the stockpile at <b>site office</b> .	Rectification/improvement was observed during the follow-up audit session.
	23/04/09	The Contractor was reminded of the followings: - Properly maintain the slopes which have been hydroseeded along <b>Tung Chung Road</b> ( <b>Southern and Northern Section</b> ).	was needed for the outstanding item.
	30/04/09	Dust generation was observed at <b>Shan Shek Wan</b> due to the dry unpaved site area. The Contractor was reminded to provide water spray more frequently.	Rectification/improvement was observed during the follow-up audit session.
	30/04/09	The Contractor was reminded of the followings: - Properly maintain the slopes which have been hydroseeded along <b>Tung Chung Road (Southern and Northern Section).</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Waste / Chemical Management	02/04/09	Empty oil containers were observed at <b>SD6-12 and underneath STR7.</b> The Contractor was reminded to remove them as soon as possible.	during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	Discarded water pipes were observed at <b>Shan Shek Wan.</b> The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
		underneath STR7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Clear general refuse accumulated at <b>underneath STR7.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Clear the vegetation waste along the Southern Section of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Clear the oil stains at <b>Shan Shek Wan.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09		during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	Discarded water pipes were observed at <b>Shan Shek Wan.</b> The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	The Contractor was reminded of the followings: - Clear C&D waste accumulated at RW16 and underneath STR7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	The Contractor was reminded of the followings:  - Clear general refuse accumulated at <b>underneath STR7</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	The Contractor was reminded of the followings:  - Clear the vegetation waste along the Southern Section of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
		underneath STR7.	This item was not observed during the follow-up audit session.
	16/04/09	Empty oil containers were observed underneath STR 7 and Shan Shek Wan. The Contractor was reminded to remove them and dispose as chemical waste.	

Parameters	Date	Observations and Recommendations	Follow-up
	16/04/09	Discarded water pipes were observed at <b>Shan Shek Wan</b> . The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings: - Clear C&D waste accumulated at <b>RW16</b> and underneath <b>STR7</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings:  - Clear general refuse at underneath STR7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings: - Properly clear the discarded "sheeting for hydroseed" that was hanging on the trees along <b>Southern Section</b> of <b>Tung Chung Road</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings:  - Clear the vegetation waste along Southern Section of Tung Chung Road and Pak Kung Au.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/04/09	Empty oil containers were observed underneath STR 7, Stream 21, Stream 19 and Shan Shek Wan. The Contractor was reminded to remove them and dispose as chemical waste.	during the follow-up audit
		Discarded water pipes were observed at <b>Shan Shek Wan</b> . The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/04/09		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/04/09	The Contractor was reminded of the followings: - Clear general refuse at the culvert <b>underneath STR7.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/04/09	The Contractor was reminded of the followings:  - Clear the discarded "protection material for hydroseed" that was hanging on the trees along Southern Section of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/04/09	The Contractor was reminded of the followings: - Clear vegetation waste along Southern Section of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	23/04/09	The Contractor was reminded of the followings:  - Keep clear and sort C&D waste at Shan Shek Wan.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/04/09	Empty oil containers were observed underneath STR 7and Shan Shek Wan. The Contractor was reminded to remove them and dispose as chemical waste.	
	30/04/09	Discarded water pipes were observed at <b>Shan Shek Wan</b> . The Contractor was reminded to clear them.	
		The Contractor was reminded of the followings:  - Clear C&D waste accumulated at RW16 and discarded cement bags at underneath STR7.	session. Follow-up action was needed for the outstanding item.
	30/04/09	The Contractor was reminded of the followings: - Clear general refuse at the culvert at <b>underneath</b> STR7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
		The Contractor was reminded of the followings:  - Clear the discarded "protection material for hydroseed" that was hanging on the trees along Southern Section of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/04/09	The Contractor was reminded of the followings: - Clear vegetation waste along Southern Section of Tung Chung Road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/04/09	The Contractor was reminded of the followings:  - Keep clear and sort C&D waste at Shan Shek Wan.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/04/09	The Contractor was reminded of the followings:  - Clear the C&D waste and general refuse at <b>Stream 22</b> , <b>Stream 30</b> , <b>Stream 34</b> and <b>Stream 36-38</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Ecology	08/04/09	The Contractor was reminded of the followings:  - Clear the C&D waste and general refuse at <b>Stream 22</b> , <b>Stream 30</b> , <b>Stream 34</b> and <b>Stream 36-38</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/04/09	The Contractor was reminded of the followings:  - Clear C&D waste and general refuse at <b>Stream 22</b> , <b>Stream 30</b> , <b>Stream 34</b> and <b>Stream 36-38</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	23/04/09	The Contractor was reminded of the followings: - Clear C&D waste and general refuse at <b>Stream 5, 21,</b> 22, 27, 30, 34 and 36-38.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/04/09	The Contractor was reminded of the followings: - Clear C&D waste and general refuse at <b>Stream 21, 22, 27, 30, 34 and 36-38.</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
General	02/04/09		during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/04/09	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction areas and paved road to prevent any mud from carrying to the public road. (i.e. Stream 19, STR6, Stream 21, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and Shan Shek Wan).	during the follow-up audit session. Follow-up action
	16/04/09	Provide mitigation measures (sand bag bund / cover with tarpaulin) in between the construction areas and paved road to prevent any mud from carrying to the public road. (i.e. Stream 19, STR6, Stream21, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and Shan Shek Wan).	during the follow-up audit session. Follow-up action
	23/04/09	Provide mitigation measures (sand bag bund / cover with tarpaulin) in between the construction areas and paved road to prevent any mud from carrying to the public road. (i.e. Stream 19, STR6, Stream 21, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and Shan Shek Wan).	during the follow-up audit session. Follow-up action
	30/04/09	Provide mitigation measures (sand bag bund / cover with tarpaulin) in between the construction areas and paved road to prevent any mud from carrying to the public road. (i.e. Stream 19, STR6, Stream 21, SD7-13, SD6-12, SD5-11, SD4-7, Pak Kung Au and Shan Shek Wan).	during the follow-up audit session. Follow-up action

APPENDIX I SUMMARY STATUS OF ENVIRONMENTAL LICENCES AND PERMITS

Appendix I - Summary of Environmental Licensing and Permit Status

Permit No.	Valid	Period	D-4-21-	C4 - 4	
Permit No.	From	To	Details	Status	
Environmental Per	mit (EP)				
EP-170/2003/C	31/7/07	N/A	Construction of  (a) Widening and realignment of an approximate 3.6 kilometre long section of Tung Chung Road between Lung Tseng Tau and Pak Kung Au from a single-lane road for two-way traffic to a single two-lane road with footpath; (b) Construction of an approximate 2.6 kilometre long single two-lane road between Pak Kung Au and Cheung Sha with footpath and elevated highway structures; and © Provision of passing bays/bus lay-bys along Tung Chung Road.	Valid	
Registration of Che	mical Waste	Producer			
WPN5214 – 950- C1213-01		N/A	Chemical waste types: spent Indication oil, surplus paint, spent diesel, spent thinner, mixing residue containing pesticides, spent mineral oil	Valid	
Water Discharge Li	cense				
EP890/W7/XP089		N/A	Discharge from Sewage Treatment System (Northern Section)	Valid	
EP890/W7/XP090		N/A	Industrial discharge (Northern Section)	Valid	
EP890/W2/XG013		N/A	Industrial discharge (Southern Section)	Valid	
<b>Construction Noise</b>	Permit (CN	<b>P</b> )			
GW-RW0439-08 20/09/08 19/03/09.		19/03/09.	Construction Noise Permit for Cheung Tung Road near Sunny Bay Station, Lantau Island, H.K.	Valid	
		9/04/09	Construction Noise Permit for Construction Site for Roadworks between Pak Kung Au and Cheung Sha Sheung Tsuen	Valid	

# APPENDIX J WASTE GENERATED QUANTITY

# Contract No. HY/2003/19 - Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

Name of Department: Highways Department Project Commencement Date: June 2004

**Construction Completion Date: December 2009** 

**Approved Project Cost: \$688.5 Million** 

# Monthly Summary Waste Flow Table for Year 2009

Year	Ac	Actual Quantities of inert C&D Materials (in 10 <sup>3</sup> m <sup>3</sup> )						Actual Quantities of C&D Wastes (in 10 <sup>3</sup> Kg)							
	Total Quantity Generated	Broken Concrete <sup>(1</sup>	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	М	etals	Paper/ca	ardboard aging	Plas	tic <sup>(2)</sup>	Chemical Waste	Site clearance waste <sup>(3)</sup>	Others, e.g. g (in 10	eneral refuse <sup>3</sup> m <sup>3</sup> )
	(a)	(b)	(c)	(d)	(e)	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal	Timber Waste
Jan	2.130	0	2.130	0	0	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	0	0	0
Feb	3.158	0	1.954	0	1.652	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	128.21	2.738	0.389
Mar	3.408	0	1.267	0	2.564	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	96.57	2.546	0.234
Apr	7.562	0	1.874	0	5.638	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	135.66	4.388	0.504
May															
Jun															
Sub-Total	16.258	0	7.225	0	9.854	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	360.44	9.672	1.127
July															
Aug															
Sept															
Oct															
Nov															
Dec															
Total	16.258	0	7.225	0	9.854	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	360.44	9.672	1.127

Note:

- \* Very small quantity of aluminum can, cardboard package and plastic bottle generated from site office were collected by the local resident.
- (1) Broken concrete for recycling into aggregates
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from package material.
- (3) Site clearance waste refers to vegetation and construction debris.
- (4) Please note that the total quality generated is not equivalent to the summation of the items in column (b) to (e) as part of the quality of the reused material (column c) had been counted already.

# APPENDIX K SUMMARY OF EXCEEDANCES

# Appendix K - Summary of Exceedances Recorded in the Reporting Quarter

#### a) Exceedance Report for 24-hr TSP

• No Action/Limit Level exceedance was recorded in the reporting quarter.

### b) Exceedance Report for Construction Noise

• No Action/Limit Level exceedance was recorded in the reporting quarter.

#### c) Exceedance Report for Water Quality

• Exceedances of Suspended Solid (SS) were recorded in the reporting quarter. The exceedances are summarized as below:

Station	D	0	pН	Turb	oidity	SS		
No.	Action	Limit	Limit	Action	Limit	Action	Limit	
15_I	0	0	0	0	0	0	0	
18_I	0	0	0	0	0	0	0	
19_I*	0	0	0	0	0	0	0	
21_I	0	0	0	0	0	0	0	
23_I	0	0	0	0	0	0	0	
25_I*	0	0	0	0	0	0	0	
26_I	0	0	0	0	0	0	0	
27_I	0	0	0	0	0	39	0	
32_I*	0	0	0	0	0	0	0	
35_I*	0	0	0	0	0	0	0	
40_I	0	0	0	0	0	0	0	
CSS_I	0	0	0	0	0	0	0	
TCB_I	0	0	0	0	0	0	0	
TCS_I	0	0	0	0	0	0	0	

Remarks: \* indicates the stream was not sampled in the reporting quarter.

# APPENDIX L COMPLAINT LOGS

Appendix L - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S63	Tung Chung Road and Cheung Sha Stream	14 Sep 06	The complaint, which was lodged by Green Lantau Association on 13th September 2006, accused the failure of the site drainage system to check the discharge of silt-laden surface water from the site on that day.	ETL is of the view that the complaint is justifiable but the accusation is not substantiated by scientific data in that the rainstorm event was 1 in 25 years. It is therefore beyond the Contractor's terms of contract to design, operate and maintain the carrier pipe and the sedimentation tank to cater for this rainstorm. The Contractor has a defendable case under this increment weather condition.	Closed
S65-S69	Tung Chung Road Southern Section; Cheung Sha Stream;	19 Sep 06	Five complaints, which were lodged by Green Lantau Association on 15th September 2006, accused the failure of the drainage system for the Project on 13th September 2006. The subject of complaints are listed as below:  (i) Failed Filtration System  (ii) Contaminated Stream  (iii) Polluted Cheung Sha Stream  (iv) Polluted Cheung Sha Stream  (v) Site Debris on Road	ETL is of the view that the complaints are justifiable but the accusation is not substantiated by scientific data in that the rainstorm event was 1 in 25 years. It is therefore beyond the Contractor's terms of contract to design, operate and maintain the carrier pipe and the sedimentation tank to cater for this rainstorm. The Contractor has a defendable case under this increment weather condition.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S71	Northern Section, Tung Chung Road	3 Nov 06	The complaint, which was referred by Resident Site Staff (RSS) to ET on 3 <sup>rd</sup> November 2006, was raised by a resident living Lantau Island on 17 <sup>th</sup> October 2006 concerning the Tung Chung Road condition on 16 <sup>th</sup> October 2006.	Based on the meteorological data extracted from HKO, the total rainfall between 0:45 and 6:45 hours in Lantau was 196 mm with an average intensity of 32.67 mm/hr on 16 <sup>th</sup> October.  Based on the results derived from Table 2 "the Intensity-Duration-Frequency (IDF) for various return periods" and Table 4 "Depth-Duration-Frequency (DDF) for durations of than 4 hours" of the "Stormwater Drainage Manual", the return period should be less than 1 in 10 years.  Therefore, the complaint was considered justifiable since the EIA report has recommended the provision of site drainage system shall be 1 in 10 years. The Contractor has implemented remedial measures and preventive measures.	Closed
S72	Lung Tseng Tau Village, Tung Chung	3 Nov 06	The public complaint, which was referred by RSS to ET on 3 <sup>rd</sup> November 2006, was received by the Integrated Complaint Centre (ICC) on 26 <sup>th</sup> October 2006 regarding dust nuisance generated from the Project.	Based on the information collected and the monitoring results, the complaint was considered not justifiable due to the following since no exceedance of the air quality monitoring results was recorded in October 2006.  During site inspections in the month, dust mitigation measures have been implemented by the Contractor; and no observation was recorded during the site inspections.  According to the information provided by the Contractor and the RSS, the Contractor has implemented additional mitigation measures, including increased water spraying on the public road to more than once a day and covered the stockpiling materials.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S73	Southern Section of the Project	3 Nov 06	The complaint, which was referred by RSS to ET on 3 <sup>rd</sup> November 2006, was raised by a resident living at Cheung Sha on 24 <sup>th</sup> October 2006 concerning noise generated from rock breaking in Southern Section of the Project.	According to the EM&A records, no exceedance of noise level and no non-compliance were recorded in the month.  As advised by the Contractor and RSS, silent rock breaking equipment has been used and noise insulation materials have been used to minimize the noise impact generated from the rock breaking activity.  Based on the provided information and the monitoring results, the complaints are considered not justifiable. The Contractor has implemented the mitigation measures to minimize the noise generation from construction activities and was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.	Closed
S74	Tung Chung Stream	24 Nov 06	Highways Department (HyD) of HKSAR received a complaint for Agriculture, Fisheries and Conservation (AFCD) regarding untreated site runoff discharged to Tung Chung Stream during the site visit on 21 <sup>st</sup> November 2006. The Resident Site Staff (RSS) subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 24 <sup>th</sup> November 2006.	The investigation revealed that, based on the meteorological data extracted from HKO, the highest rainfall recorded was between 13:45 and 15:45, with a total of 93mm in two hours. With the above rainfall intensities extracted from HKO, together with the Intensity-Duration-Frequency (IDF) for various return periods derived from Table 2 of the "Stormwater Drainage Manual", the return period should be less than 10 years. Therefore, the complaint was considered justifiable and the Contractor has implemented remedial measures and preventive measures.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S75	West of the new Tung Chung Road Southern Section Discharge Point	21 Nov 06	Both Environmental Protection Department (EPD) and China Civil Engineering Construction Corporation and China Railway Wuju Joint Venture (the Contractor) received the same public complaint, regarding muddy water discharged to Chueng Sha on 21st November 2006. The Contractor subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on the same day.	The complainant considered that this stream was muddy and discharging muddy water into the sea. As stated in the above paragraph, the investigation revealed that the return period for the rainfall between 13:45 and 15:45 was 41 years. As the complaint was lodged at 14:58 on 21 <sup>st</sup> November 2006, it is reasonable to consider the rainfall recorded in the hour between 13:45 to 14:45 which was 57mm. According to "Stormwater Drainage Manual", the return period should be less than 10 years. Therefore, the complaint was considered justifiable and the Contractor has implemented remedial measures and preventive measures.	Closed
\$76	Pui O Wan	27 Nov 06	China Civil Engineering Construction Corporation and China Railway Wuju Joint Venture (the Contractor) received the same public complaint, regarding muddy water discharged into Pui O Wan on 23 <sup>rd</sup> November 2006.  According to the complainant, muddy water was discharged into Pui O Wan from the new Tung Chung Road Southern Section Discharge Point (near proposed round about on South Lantau Road) in the morning of 23 <sup>rd</sup> November 2006. The complainant suspected that the muddy water was being pumped off site through failed filtration systems into the sea as there had been no recent rainfall on that day.	The investigation revealed that the complaint was considered not justifiable since (1) no muddy water was generated due to the construction activities in the vicinity of the discharged point; and (2) no surface runoff as no rainfall was recorded on 23 <sup>rd</sup> November 2006.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S77	Sheung Ling Pei, Ha Ling Pei, Wong Ka Wai & Lung Tseng Tau Villages	18 Dec 06	Highways Department (HyD) and the Resident Engineer received a complaint against Water Quality Supply (Muddy Water) at Sheung Ling Pei, Ha Ling Pei, Wong Ka Wai & Lung Tseng Tau Villages via District Office (Islands) on 29 <sup>th</sup> November 2006.  The complainants claimed that subject villages were suffering from muddy water supplied from the water main on the past few days before 29 <sup>th</sup> November 2006.	Upon receipt of the complaint, the Contractor inspected all streams (above AFCD entrance) in the Northern Section. Muddy water was observed at Stream 13 which was believed the source of muddy water. However, no water flow was found at the stream. The muddy water was considered probably due to the seepage of underground water mixed with excavated soil to Stream 13. Furthermore, an ad-hoc meeting between DO/WSD/AFCD/MOTT/CCJV/IEC/ET was held on 14 December 2006 to discuss this issue.  The complaint was considered due to the construction activities of the Project. Emergency remedial works had been taken by the Contractor to rectify the situation and preventive measures had also been implemented.	Closed
S80	Tung Chung Road near Lung Tseng Tau Village	3 Jan 07	The complaint was lodged by a resident at Lung Tseng Tau Village regarding dust nuisance at Tung Chung Road near Lung Tseng Tau Village. According to the complainant, the dust was generated by vehicle movements (about 5 to 7 per day). The complainant noticed that there was only once per day for water spraying on the road. She suggested that the frequency of water spraying should be increased to 1 to 2 per hour. In addition, she requested to provide more water-spraying practice for the concerned area.	According to the Contractor and the RSS, the main dust emission in the vicinity of Lung Tseng Tau Village was due to the vehicle movements on Tung Chung Road.  Base on the information collected and the monitoring results, the complaint was considered not justifiable since (1) no exceedance of the air quality monitoring results was recorded in December 2006; (2) dust mitigation measures have been implemented by the Contractor; and (3) no observation was recorded during the site inspections.  In response to the complaint, the Contractor had stepped up the dust suppression control immediately. A water truck was mobilized to spray water at Tung Chung Road within particular in the vicinity of the complainant's house from once per day to at least 3 times per day.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S81	Lung Tseng Tau	20 Dec 06	The Contractor, CCECC and CRWJ Joint Venture (CCJV) and Highways Department (HyD) of HKSAR received a complaint regarding dust control at Lung Tseng Tau from the Office of Islands District Councilor, Wong Fukkan on 6 <sup>th</sup> December 2006.  According to the complainant, he had received a number of complaints from residents in South Lantau regarding the dust nuisance when their vehicles passing through Tung Chung Road near Lung Tseng Tau. The residents said their vehicles were full of dust whenever they had passed through Tung Chung Road.	Base on the site inspection records and information collected from the RSS and the Contractor, the complaint was considered due to due to the vehicle movements on Tung Chung Road. In response to the complaint, the RSS has conducted site inspection in the afternoon on 18 <sup>th</sup> December 2006. The Contractor had immediately mobilized labors to clear the mud trail on Tung Chung Road between ch.3700-4000 using sweepers. In order to maintain the condition of Tung Chung Road, the Contractor has mobilized more staff to clear the mud deposits on the whole Northern Section of Tung Chung Road on 23 <sup>rd</sup> December 2006.  The Contractor has provision wheel washing facilities at each site exit/entrance. In order to maintain Tung Chung Road condition, the Contractor has mobilized a water truck solely for wheel washing purpose at the site entrance near RW37 between ch.3700-4000 since 23 <sup>rd</sup> December 2006. The location is the most busy site exit/entrance for soil removal as wheel washing facilities. Wheels of each vehicle shall be washed before leaving the site. The wastewater after wheel washing at each site exit/entrance shall be collected and treated before discharge at designated location. also mobilized water trucks	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
\$82	The nullah near the Yat Tung Estate	15 Jan 07	The complaint was lodged by the Legislative Councillor Hon. Albert W.Y. Chan regarding frequent discharge of muddy water from the Tung Chung Road improvement project on 15 <sup>th</sup> December 2006. According to Mr. Chan's letter, the complainant was a resident living in Tung Chung. The DSD letter pointed out that muddy water was being frequently discharged to the nullah near the Yat Tung Estate, and confirmed that the site of Tung Chung Road improvement project was the source of such discharge.	After investigation, the discharge of muddy water was largely due to the deposited silts caused by previous heavy rainstorms in November.  The contractor has responded promptly in deploying a number of actions to remedy the matter. These include de-silting operation at Wong Lung Hang nullah on 23 <sup>rd</sup> December 2006 to remove the accumulated soil and silt materials washed down by the discharges, of which photographs are provided.  In addition, several intermediate sedimentation ponds along the temporary drainage system south of Shek Mun Kap to improve de-silting capacity have been installed, and that the site condition will be closely monitored so that advice on any practical measures in improving the quality of water discharge to Wong Lung Hang nullah can be given.  In addition, the Contractor is also undergoing continual inspections and monitoring on the conditions of the concerned discharge of the construction site, and is in close liaison with the ET to cap exceeding levels of future discharge.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
\$86	Slope opposite to the AFCD's Office at Tung Chung Road near mileage M2.5	8 Feb 07	The complaint was lodged by a resident in Lantau Island regarding the construction noise generated from the road works at the slope opposite to the AFCD's Office at Tung Chung Road near mileage M2.5.	The site of concern is most likely at the RW6 of the Project. According to the Contractor, soil nailing works was conducted at RW6 and the first stage of soil nailing works at RW6 has been completed before 8 <sup>th</sup> February 2007.  According to the noise monitoring results at monitoring station NM5, Tung Chung Au Country Parks Management Centre, which is located near the AFCD's Office, there was no exceedance recorded from 2 <sup>nd</sup> January to 14 <sup>th</sup> February 2007.  As advised by the Contractor, the following mitigation measures will be implemented as far as possible to reduce the noise nuisance to the nearby residents when soil nailing works carry out in the future:  To cover the soil nailing works area with tarpaulin;  To reduce the number of machines for soil nailing;  To orientate the machines for soil nailing works so that the major noise generating part will not directly face the Noise Sensitive Receiver; and  To scatter the plants so that the noise being generated will not be centralized in certain direction.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S90	Northern and Southern Section of Tung Chung Road	20 May 07	The complaint was lodged by the Green Lantau Association at on 20 May 2007 regarding failed drainage for the Project on that day.	According to the Contractor, the main concern in the Northern Section is that a large amount of seepage from the permanent slope near the Stream 18 and Stream 21 was observed. The permanent hinterland u-channel was not able to collect most of the hinterland water which ultimately collected by the carrier pipe and increased the loading of the treatment facilities at Shek Mun Kap.  As advised by the Contractor, the main problem in Southern Section was due to the fact that the silt is too fine to be settled within a short time, i.e. 3 minutes, as stated in the EIA Report. Due to the large catchments of the site, muddy water could not be completely settled or treated before discharged or overflowed. No bigger sedimentation tank can be constructed due to the site constraint to retain all surface water in heavy rainy days.  The complaint was considered justifiable. However, it is beyond the Contractor's capability to completely avoid muddy water discharging or overflowing to sea due to the site conditions and constraints under increment weather conditions.	The complaint investigation report was commented

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S91	Zone 4 (STR 14)	1 June 07	The complaint was lodged by a resident in Butterfly Crest, Lantau Island regarding the construction noise generated from the Project on Sunday, which is likely to be 27 <sup>th</sup> May 2007.	According to the Contractor, construction works were undertaken near STR 14 in the morning of 27 <sup>th</sup> May 2007 and the Powered Mechanical Equipment (PME) used on that day included 2 excavators and 1 dump truck at STR 14. The concerned site was covered under the construction noise permit (CNP) no. GW-RS0281-07.  As advised by the Contractor, the 2 excavators and 1 dump truck, which categorized separately as Group A and Group E of the abovementioned CNP, were utilized alternatively during the operation in order to comply with the conditions stipulated in the CNP.  Base on the information collected, the complaint was considered not justifiable as the equipment used comply with the CNP conditions.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S93	Western Section of Pui O Bay	22 May 07	The complaint was lodged by the Green Lantau Association at on 22 May 2007 regarding muddy water was observed at 50m west of the Tung Chung Road southern section around 11am on 22 May 2007.	As advised by the Contractor, the main problem in Southern Section was due to the fact that the silt is too fine to be settled within a short time, i.e. 3 minutes, as stated in the EIA Report. Due to the large catchments of the site, muddy water could not be completely settled or treated before discharged or overflowed. No bigger sedimentation tank can be constructed due to the site constraint to retain all surface water in heavy rainy days.  In the site near Pui O Wan, the Contractor has exhausted their efforts including to pump the water from sedimentation tanks back to the stockpile area. Unfortunately, one of the pumps was out of order in the early days of that rainy period. However, the pump has been rectified on 22 May 2007.  The complaint was considered justifiable. However, it is beyond the Contractor's capability to completely avoid muddy water discharging or overflowing to sea due to the site conditions and constraints under increment weather conditions.	The complaint investigation report was commented

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S100	Stream water behind WSD's weir	27 July 07	The complaint was lodged by a resident living at Lung Tseng Tau area during the meeting between RSS and the representatives from the villages at Lung Tseng Tau area on 17 <sup>th</sup> July 2007 regarding turbid water supply from DO main to the village houses at Lung Tseng Tau area.	The RSS and the Contractor had a site investigation with the complainant at his household water supply, the WSD weir and a work area immediately upstream of the weir (STR02 near the Stream 12) on the same day.  It was observed that the water directly from the household supply was found with low degree of turbidity when comparing it with portable water supply.  According to the visual inspection of the RSS and the Contractor, the stream water behind the WSD's weir, which is the source of water supply to the villagers via a DO main, was found clear and there was no sign of contamination.  Inspection of the work site at STR02 upstream of the weir indicated no activities affecting the upstream water quality.  By reviewing the water quality monitoring data at Tung Chung Stream during early of July 2007, the turbidity and SS values are considered to be low and the data revealed that the Tung Chung Stream and the WSD weir were not contaminated during the above mentioned period.  Nevertheless, In order to minimize the water quality impacts, the Contractor has implemented following mitigation measures:  • To erect sand bag bund in the vicinity of STR02;  • To shotcrete the soil surface near Stream 12.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S104		6 August 07	The complaint was lodged by Mr. Ho on 6 <sup>th</sup> August 2007 regarding a suspected case of silty runoff and muddy water generated from construction site flowing on public road. Turbid water was observed behind the weir near the AFCD's office at Tung Chung Au.	No non-compliance or environmental deficiency related to or in the vicinity of the concerned area was identified during these site audits.  According to Hong Kong Observatory, Hong Kong was under the effect of the tropical storm over the central part of the South China Sea which brought heavy showers with 100.4 millimeters of total rainfall recorded on 6 August. The amber rainstorm warning was hoisted between 15:55pm to 17:30pm.	
				The Contractor has confirmed there was no construction activity in the concerned area on 6 <sup>th</sup> August 2007 due to heavy rainfall. According to the Contractor, muddy water was the silty runoff from nearby work sites due to the heavy rainfall on the day.	Closed
			<ul> <li>The Contractor has implemented following mitigation measures:</li> <li>To desilt temporary drainage channels and sedimentation tank.</li> <li>To clear the silt and mud in the surface of haul road at RW06 ad RW07.</li> <li>To cover exposed slope with tarpaulin at RW06 and RW07.</li> </ul>		
			fi fi ii	According to the RSS and the Contractor, no further report of silt and muddy water runoff from concerned area was received after implementation of the aforesaid mitigation measures.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S113	Lower Dece	Lower Cheung Sha Village  December 2007  Liu on 12 December 2007 regarding dust nuisance at Upper and Lower Cheung Sha Village.  Village	According to the Contractor, the main dust emission in the vicinity of Cheung Sha Village was due to the road works and associated vehicle movements on Tung Chung Road.		
				The Contractor has implemented following mitigation measures:	
				<ul> <li>Cleared the silts on the haul road;</li> <li>Applied watering on the road by water hose at San Shek Wan;</li> <li>Increased the number of water browsers; and</li> <li>Covered the exposed slope and stockpiles with tarpaulin sheets.</li> </ul>	Closed
				By reviewing the air quality monitoring data, there was no exceedance of air quality monitoring results on 8 <sup>th</sup> and 14 <sup>th</sup> December 2007 and dust mitigation measures have been implemented by the Contractor.	
				According to the RSS and the Contractor, no further complaint regarding dust nuisance from concerned area was received after implementation of the aforesaid mitigation measures.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S147	Zone 1 Tung Chung Road	14 November 2008	The complaint was referred to ETL from EPD by Mr. Peter Tang on 14 November 2008, regarding a suspected case about land- filling of non-inert construction waste in early 2008 and potential further land-filling of non- inert construction waste stockpiled at Zone 1 Tung Chung Road.	According to the Contractor, there are two major stockpile areas within the construction premise which are located at San Shek Wan and Tung Chung Road. The location specified in the complaint was the stockpile area at San Shek Wan. This location was used for stockpiling reusable materials.  Base on the information collected, the complaint was considered not justifiable as San Shek Wan is one of the designated C&D materials sorting areas of the Project and no direct evidence shows there was land-filling activity by this project at the specified location.  However, as a follow up of the complaint, the Contractor has implemented mitigation measures as follows:  Preliminary segregation of waste was enhanced; and  Water was sprayed on the stockpiles more frequently to further suppress dust generation.  The Contractor was recommended to continue the following mitigation measures:  To provide dust suppression measures to the stockpiles at San Shek Wan, especially during dry season, to minimize dust generation;  To carry out continuous segregation of materials on site;  To avoid accumulation of stockpiles; and  To dispose of non-reusable material to designated outlets as soon as possible.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
\$63	Tung Chung Road and Cheung Sha Stream	14 Sep 06	The complaint, which was lodged by Green Lantau Association on 13th September 2006, accused the failure of the site drainage system to check the discharge of silt-laden surface water from the site on that day.	ETL is of the view that the complaint is justifiable but the accusation is not substantiated by scientific data in that the rainstorm event was 1 in 25 years. It is therefore beyond the Contractor's terms of contract to design, operate and maintain the carrier pipe and the sedimentation tank to cater for this rainstorm. The Contractor has a defendable case under this increment weather condition.	Closed
S65-S69	Tung Chung Road Southern Section; Cheung Sha Stream;	19 Sep 06	Five complaints, which were lodged by Green Lantau Association on 15th September 2006, accused the failure of the drainage system for the Project on 13th September 2006. The subject of complaints are listed as below:  (vi) Failed Filtration System  (vii) Contaminated Stream  (viii) Polluted Cheung Sha Stream  (ix) Polluted Cheung Sha Stream  (x) Site Debris on Road	ETL is of the view that the complaints are justifiable but the accusation is not substantiated by scientific data in that the rainstorm event was 1 in 25 years. It is therefore beyond the Contractor's terms of contract to design, operate and maintain the carrier pipe and the sedimentation tank to cater for this rainstorm. The Contractor has a defendable case under this increment weather condition.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S71	Northern Section, Tung Chung Road	3 Nov 06	The complaint, which was referred by Resident Site Staff (RSS) to ET on 3 <sup>rd</sup> November 2006, was raised by a resident living Lantau Island on 17 <sup>th</sup> October 2006 concerning the Tung Chung Road condition on 16 <sup>th</sup> October 2006.	Based on the meteorological data extracted from HKO, the total rainfall between 0:45 and 6:45 hours in Lantau was 196 mm with an average intensity of 32.67 mm/hr on 16 <sup>th</sup> October.  Based on the results derived from Table 2 "the Intensity-Duration-Frequency (IDF) for various return periods" and Table 4 "Depth-Duration-Frequency (DDF) for durations of than 4 hours" of the "Stormwater Drainage Manual", the return period should be less than 1 in 10 years.  Therefore, the complaint was considered justifiable since the EIA report has recommended the provision of site drainage system shall be 1 in 10 years. The Contractor has implemented remedial measures and preventive measures.	Closed
S72	Lung Tseng Tau Village, Tung Chung	3 Nov 06	The public complaint, which was referred by RSS to ET on 3 <sup>rd</sup> November 2006, was received by the Integrated Complaint Centre (ICC) on 26 <sup>th</sup> October 2006 regarding dust nuisance generated from the Project.	Based on the information collected and the monitoring results, the complaint was considered not justifiable due to the following since no exceedance of the air quality monitoring results was recorded in October 2006.  During site inspections in the month, dust mitigation measures have been implemented by the Contractor; and no observation was recorded during the site inspections.  According to the information provided by the Contractor and the RSS, the Contractor has implemented additional mitigation measures, including increased water spraying on the public road to more than once a day and covered the stockpiling materials.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S73	Southern Section of the Project	3 Nov 06	The complaint, which was referred by RSS to ET on 3 <sup>rd</sup> November 2006, was raised by a resident living at Cheung Sha on 24 <sup>th</sup> October 2006 concerning noise generated from rock breaking in Southern Section of the Project.	According to the EM&A records, no exceedance of noise level and no non-compliance were recorded in the month.  As advised by the Contractor and RSS, silent rock breaking equipment has been used and noise insulation materials have been used to minimize the noise impact generated from the rock breaking activity.  Based on the provided information and the monitoring results, the complaints are considered not justifiable. The Contractor has implemented the mitigation measures to minimize the noise generation from construction activities and was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.	Closed
S74	Tung Chung Stream	24 Nov 06	Highways Department (HyD) of HKSAR received a complaint for Agriculture, Fisheries and Conservation (AFCD) regarding untreated site runoff discharged to Tung Chung Stream during the site visit on 21 <sup>st</sup> November 2006. The Resident Site Staff (RSS) subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 24 <sup>th</sup> November 2006.	The investigation revealed that, based on the meteorological data extracted from HKO, the highest rainfall recorded was between 13:45 and 15:45, with a total of 93mm in two hours. With the above rainfall intensities extracted from HKO, together with the Intensity-Duration-Frequency (IDF) for various return periods derived from Table 2 of the "Stormwater Drainage Manual", the return period should be less than 10 years. Therefore, the complaint was considered justifiable and the Contractor has implemented remedial measures and preventive measures.	Closed

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S75	West of the new Tung Chung Road Southern Section Discharge Point	21 Nov 06	Both Environmental Protection Department (EPD) and China Civil Engineering Construction Corporation and China Railway Wuju Joint Venture (the Contractor) received the same public complaint, regarding muddy water discharged to Chueng Sha on 21st November 2006. The Contractor subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on the same day.	The complainant considered that this stream was muddy and discharging muddy water into the sea. As stated in the above paragraph, the investigation revealed that the return period for the rainfall between 13:45 and 15:45 was 41 years. As the complaint was lodged at 14:58 on 21 <sup>st</sup> November 2006, it is reasonable to consider the rainfall recorded in the hour between 13:45 to 14:45 which was 57mm. According to "Stormwater Drainage Manual", the return period should be less than 10 years. Therefore, the complaint was considered justifiable and the Contractor has implemented remedial measures and preventive measures.	Closed
\$76	Pui O Wan	27 Nov 06	China Civil Engineering Construction Corporation and China Railway Wuju Joint Venture (the Contractor) received the same public complaint, regarding muddy water discharged into Pui O Wan on 23 <sup>rd</sup> November 2006.  According to the complainant, muddy water was discharged into Pui O Wan from the new Tung Chung Road Southern Section Discharge Point (near proposed round about on South Lantau Road) in the morning of 23 <sup>rd</sup> November 2006. The complainant suspected that the muddy water was being pumped off site through failed filtration systems into the sea as there had been no recent rainfall on that day.	The investigation revealed that the complaint was considered not justifiable since (1) no muddy water was generated due to the construction activities in the vicinity of the discharged point; and (2) no surface runoff as no rainfall was recorded on 23 <sup>rd</sup> November 2006.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S77	Sheung Ling Pei, Ha Ling Pei, Wong Ka Wai & Lung Tseng Tau Villages	18 Dec 06	Highways Department (HyD) and the Resident Engineer received a complaint against Water Quality Supply (Muddy Water) at Sheung Ling Pei, Ha Ling Pei, Wong Ka Wai & Lung Tseng Tau Villages via District Office (Islands) on 29 <sup>th</sup> November 2006.  The complainants claimed that subject villages were suffering from muddy water supplied from the water main on the past few days before 29 <sup>th</sup> November 2006.	Upon receipt of the complaint, the Contractor inspected all streams (above AFCD entrance) in the Northern Section. Muddy water was observed at Stream 13 which was believed the source of muddy water. However, no water flow was found at the stream. The muddy water was considered probably due to the seepage of underground water mixed with excavated soil to Stream 13. Furthermore, an ad-hoc meeting between DO/WSD/AFCD/MOTT/CCJV/IEC/ET was held on 14 December 2006 to discuss this issue.  The complaint was considered due to the construction activities of the Project. Emergency remedial works had been taken by the Contractor to rectify the situation and preventive measures had also been implemented.	Closed
S80	Tung Chung Road near Lung Tseng Tau Village	3 Jan 07	The complaint was lodged by a resident at Lung Tseng Tau Village regarding dust nuisance at Tung Chung Road near Lung Tseng Tau Village. According to the complainant, the dust was generated by vehicle movements (about 5 to 7 per day). The complainant noticed that there was only once per day for water spraying on the road. She suggested that the frequency of water spraying should be increased to 1 to 2 per hour. In addition, she requested to provide more water-spraying practice for the concerned area.	According to the Contractor and the RSS, the main dust emission in the vicinity of Lung Tseng Tau Village was due to the vehicle movements on Tung Chung Road.  Base on the information collected and the monitoring results, the complaint was considered not justifiable since (1) no exceedance of the air quality monitoring results was recorded in December 2006; (2) dust mitigation measures have been implemented by the Contractor; and (3) no observation was recorded during the site inspections.  In response to the complaint, the Contractor had stepped up the dust suppression control immediately. A water truck was mobilized to spray water at Tung Chung Road within particular in the vicinity of the complainant's house from once per day to at least 3 times per day.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S81	Lung Tseng Tau	20 Dec 06	The Contractor, CCECC and CRWJ Joint Venture (CCJV) and Highways Department (HyD) of HKSAR received a complaint regarding dust control at Lung Tseng Tau from the Office of Islands District Councilor, Wong Fukkan on 6 <sup>th</sup> December 2006.  According to the complainant, he had received a number of complaints from residents in South Lantau regarding the dust nuisance when their vehicles passing through Tung Chung Road near Lung Tseng Tau. The residents said their vehicles were full of dust whenever they had passed through Tung Chung Road.	Base on the site inspection records and information collected from the RSS and the Contractor, the complaint was considered due to due to the vehicle movements on Tung Chung Road. In response to the complaint, the RSS has conducted site inspection in the afternoon on 18 <sup>th</sup> December 2006. The Contractor had immediately mobilized labors to clear the mud trail on Tung Chung Road between ch.3700-4000 using sweepers. In order to maintain the condition of Tung Chung Road, the Contractor has mobilized more staff to clear the mud deposits on the whole Northern Section of Tung Chung Road on 23 <sup>rd</sup> December 2006.  The Contractor has provision wheel washing facilities at each site exit/entrance. In order to maintain Tung Chung Road condition, the Contractor has mobilized a water truck solely for wheel washing purpose at the site entrance near RW37 between ch.3700-4000 since 23 <sup>rd</sup> December 2006. The location is the most busy site exit/entrance for soil removal as wheel washing facilities. Wheels of each vehicle shall be washed before leaving the site. The wastewater after wheel washing at each site exit/entrance shall be collected and treated before discharge at designated location. also mobilized water trucks	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
\$82	The nullah near the Yat Tung Estate	15 Jan 07	The complaint was lodged by the Legislative Councillor Hon. Albert W.Y. Chan regarding frequent discharge of muddy water from the Tung Chung Road improvement project on 15 <sup>th</sup> December 2006. According to Mr. Chan's letter, the complainant was a resident living in Tung Chung. The DSD letter pointed out that muddy water was being frequently discharged to the nullah near the Yat Tung Estate, and confirmed that the site of Tung Chung Road improvement project was the source of such discharge.	After investigation, the discharge of muddy water was largely due to the deposited silts caused by previous heavy rainstorms in November.  The contractor has responded promptly in deploying a number of actions to remedy the matter. These include de-silting operation at Wong Lung Hang nullah on 23 <sup>rd</sup> December 2006 to remove the accumulated soil and silt materials washed down by the discharges, of which photographs are provided.  In addition, several intermediate sedimentation ponds along the temporary drainage system south of Shek Mun Kap to improve de-silting capacity have been installed, and that the site condition will be closely monitored so that advice on any practical measures in improving the quality of water discharge to Wong Lung Hang nullah can be given.  In addition, the Contractor is also undergoing continual inspections and monitoring on the conditions of the concerned discharge of the construction site, and is in close liaison with the ET to cap exceeding levels of future discharge.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
\$86	Slope opposite to the AFCD's Office at Tung Chung Road near mileage M2.5	8 Feb 07	The complaint was lodged by a resident in Lantau Island regarding the construction noise generated from the road works at the slope opposite to the AFCD's Office at Tung Chung Road near mileage M2.5.	The site of concern is most likely at the RW6 of the Project. According to the Contractor, soil nailing works was conducted at RW6 and the first stage of soil nailing works at RW6 has been completed before 8th February 2007.  According to the noise monitoring results at monitoring station NM5, Tung Chung Au Country Parks Management Centre, which is located near the AFCD's Office, there was no exceedance recorded from 2nd January to 14th February 2007.  As advised by the Contractor, the following mitigation measures will be implemented as far as possible to reduce the noise nuisance to the nearby residents when soil nailing works carry out in the future:  To cover the soil nailing works area with tarpaulin;  To reduce the number of machines for soil nailing;  To orientate the machines for soil nailing works so that the major noise generating part will not directly face the Noise Sensitive Receiver; and  To scatter the plants so that the noise being generated will not be centralized in certain direction.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S90	Northern and Southern Section of Tung Chung Road	20 May 07	The complaint was lodged by the Green Lantau Association at on 20 May 2007 regarding failed drainage for the Project on that day.	According to the Contractor, the main concern in the Northern Section is that a large amount of seepage from the permanent slope near the Stream 18 and Stream 21 was observed. The permanent hinterland u-channel was not able to collect most of the hinterland water which ultimately collected by the carrier pipe and increased the loading of the treatment facilities at Shek Mun Kap.  As advised by the Contractor, the main problem in Southern Section was due to the fact that the silt is too fine to be settled within a short time, i.e. 3 minutes, as stated in the EIA Report. Due to the large catchments of the site, muddy water could not be completely settled or treated before discharged or overflowed. No bigger sedimentation tank can be constructed due to the site constraint to retain all surface water in heavy rainy days.  The complaint was considered justifiable. However, it is beyond the Contractor's capability to completely avoid muddy water discharging or overflowing to sea due to the site conditions and constraints under increment weather conditions.	The complaint investigation report was commented

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S91	Zone 4 (STR 14)	1 June 07	The complaint was lodged by a resident in Butterfly Crest, Lantau Island regarding the construction noise generated from the Project on Sunday, which is likely to be 27 <sup>th</sup> May 2007.	According to the Contractor, construction works were undertaken near STR 14 in the morning of 27 <sup>th</sup> May 2007 and the Powered Mechanical Equipment (PME) used on that day included 2 excavators and 1 dump truck at STR 14. The concerned site was covered under the construction noise permit (CNP) no. GW-RS0281-07.  As advised by the Contractor, the 2 excavators and 1 dump truck, which categorized separately as Group A and Group E of the abovementioned CNP, were utilized alternatively during the operation in order to comply with the conditions stipulated in the CNP.  Base on the information collected, the complaint was considered not justifiable as the equipment used comply with the CNP conditions.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S93	Western Section of Pui O Bay	22 May 07	The complaint was lodged by the Green Lantau Association at on 22 May 2007 regarding muddy water was observed at 50m west of the Tung Chung Road southern section around 11am on 22 May 2007.	As advised by the Contractor, the main problem in Southern Section was due to the fact that the silt is too fine to be settled within a short time, i.e. 3 minutes, as stated in the EIA Report. Due to the large catchments of the site, muddy water could not be completely settled or treated before discharged or overflowed. No bigger sedimentation tank can be constructed due to the site constraint to retain all surface water in heavy rainy days.  In the site near Pui O Wan, the Contractor has exhausted their efforts including to pump the water from sedimentation tanks back to the stockpile area. Unfortunately, one of the pumps was out of order in the early days of that rainy period. However, the pump has been rectified on 22 May 2007.  The complaint was considered justifiable. However, it is beyond the Contractor's capability to completely avoid muddy water discharging or overflowing to sea due to the site conditions and constraints under increment weather conditions.	The complaint investigation report was commented

Log Ref. Loc	ation Receive Date	d Details of Complaint	Investigation/Mitigation Action	Status
behind	n water WSD's eir 27 July	The complaint was lodged by a resident living at Lung Tseng Tau area during the meeting between RSS and the representatives from the villages at Lung Tseng Tau area on 17 <sup>th</sup> July 2007 regarding turbid water supply from DO main to the village houses at Lung Tseng Tau area.	The RSS and the Contractor had a site investigation with the complainant at his household water supply, the WSD weir and a work area immediately upstream of the weir (STR02 near the Stream 12) on the same day.  It was observed that the water directly from the household supply was found with low degree of turbidity when comparing it with portable water supply.  According to the visual inspection of the RSS and the Contractor, the stream water behind the WSD's weir, which is the source of water supply to the villagers via a DO main, was found clear and there was no sign of contamination.  Inspection of the work site at STR02 upstream of the weir indicated no activities affecting the upstream water quality.  By reviewing the water quality monitoring data at Tung Chung Stream during early of July 2007, the turbidity and SS values are considered to be low and the data revealed that the Tung Chung Stream and the WSD weir were not contaminated during the above mentioned period.  Nevertheless, In order to minimize the water quality impacts, the Contractor has implemented following mitigation measures:  • To erect sand bag bund in the vicinity of STR02;  • To shotcrete the soil surface near Stream 12.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S104	Da		The complaint was lodged by Mr. Ho on 6 <sup>th</sup> August 2007 regarding a suspected case of silty runoff and muddy water generated from construction site flowing on public road. Turbid water was observed behind the weir near the AFCD's office at Tung Chung Au.	No non-compliance or environmental deficiency related to or in the vicinity of the concerned area was identified during these site audits.  According to Hong Kong Observatory, Hong Kong was under the effect of the tropical storm over the central part of the South China Sea which brought heavy showers with 100.4 millimeters of total rainfall recorded on 6 August. The amber rainstorm warning was hoisted between 15:55pm to 17:30pm.  The Contractor has confirmed there was no	
				construction activity in the concerned area on 6 <sup>th</sup> August 2007 due to heavy rainfall. According to the Contractor, muddy water was the silty runoff from nearby work sites due to the heavy rainfall on the day.	Closed
				<ul> <li>The Contractor has implemented following mitigation measures:</li> <li>To desilt temporary drainage channels and sedimentation tank.</li> <li>To clear the silt and mud in the surface of haul road at RW06 ad RW07.</li> <li>To cover exposed slope with tarpaulin at RW06 and RW07.</li> </ul>	
				According to the RSS and the Contractor, no further report of silt and muddy water runoff from concerned area was received after implementation of the aforesaid mitigation measures.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S113	Upper and Lower Cheung Sha Village	12 December 2007	The complaint was lodged by Mr. Liu on 12 December 2007 regarding dust nuisance at Upper and Lower Cheung Sha Village.	According to the Contractor, the main dust emission in the vicinity of Cheung Sha Village was due to the road works and associated vehicle movements on Tung Chung Road.	
				The Contractor has implemented following mitigation measures:	
				<ul> <li>Cleared the silts on the haul road;</li> <li>Applied watering on the road by water hose at San Shek Wan;</li> <li>Increased the number of water browsers; and</li> <li>Covered the exposed slope and stockpiles with tarpaulin sheets.</li> </ul>	Closed
				By reviewing the air quality monitoring data, there was no exceedance of air quality monitoring results on 8 <sup>th</sup> and 14 <sup>th</sup> December 2007 and dust mitigation measures have been implemented by the Contractor.	
				According to the RSS and the Contractor, no further complaint regarding dust nuisance from concerned area was received after implementation of the aforesaid mitigation measures.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status	
S147	Zone 1 Tung Chung Road	14 November 2008	The complaint was referred to ETL from EPD by Mr. Peter Tang on 14 November 2008, regarding a suspected case about land-filling of non-inert construction waste in early 2008 and potential further land-filling of non-inert construction waste stockpiled at Zone 1 Tung Chung Road.	According to the Contractor, there are two major stockpile areas within the construction premise which are located at San Shek Wan and Tung Chung Road. The location specified in the complaint was the stockpile area at San Shek Wan. This location was used for stockpiling reusable materials.  Base on the information collected, the complaint was considered not justifiable as San Shek Wan is one of the designated C&D materials sorting areas of the Project and no direct evidence shows there was land-filling activity by this project at the specified location.  However, as a follow up of the complaint, the Contractor has implemented mitigation measures as follows:	Closed	
			enhanced; and  • Water was sprayed		Water was sprayed on the stockpiles more frequently to further suppress dust	
			The Contractor was recommended to continue the following mitigation measures :			
				<ul> <li>To provide dust suppression measures to the stockpiles at San Shek Wan, especially during dry season, to minimize dust generation;</li> <li>To carry out continuous segregation of</li> </ul>		
			L-30	<ul> <li>materials on site;</li> <li>To avoid accumulation of stockpiles; and</li> <li>To dispose of non-reusable material to designated outlets as soon as possible.</li> </ul>		

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S152 and S154	Zone 1 Tung Chung Road	3 <sup>rd</sup> and 8 <sup>th</sup> April 2009	EPD received a public complaint about suspected land- filling of non-inert construction waste in early 2009 at Zone 1 of Tung Chung Road for the Project and a similar verbal complaint regarding illegal land filling of construction waste on the same site (Zone 1) was received from Lands Department.	Base on the information collected, the complaint was considered not justifiable as San Shek Wan is one of the designated C&D materials sorting areas of the Project and no direct evidence shows there was land-filling activity by this project at the specified location. Sorting and disposal of C&D materials were conducted in accordance with WMP.	
				Nevertheless, the Contractor was recommended to continue the following mitigation measures in order to minimize the environmental impact on the nearby community and the amount of waste produced:	Closed
				<ul> <li>Stockpiled material shall be covered by tarpaulins and/or watered as appropriate to prevent windblown dust and/or surface run-off. Storage of material on site shall be kept to a minimum to avoid nuisance to local residents;</li> <li>excavated material in trucks shall be</li> </ul>	
				covered by tarpaulins to reduce the potential for spillage and dust generation; and  • good site practice shall be implemented to avoid waste generation and promote waste minimization.	

APPENDIX M SUMMARY OF WARNINGS/DIRECTION ISSUED BY THE EPD AND PROSECUTION

## **Appendix M - Summary of Warnings / Direction Issued by the EPD and Prosecution**

## **Summary of Warnings / Direction Issued by the EPD**

Date of Letter	Warnings/Direction
3 February 2005	The Contractor was requested to construct catch pits and perimeter channels in
	advance of site formation and earth works
17 May 2005	The Contractor was requested to immediately re-provide the on-site wastewater management systems to adequately cater the rainwater runoff and to submit the detail proposal for runoff management and treatment systems.
4 October 2005	The Contractor was requested to rectify the situation in order to comply with EP Conditions 2.4 & 2.5 regarding the provision of drainage systems, EP Condition 3.16 regarding site runoff mitigation measures and EP Condition 3.6 regarding no works of the Project shall be carried out outside the "limit of works area".
15 December 2005	The Contractor was requested to rectify the situation of Zone D where fuel oil was found spilled onto ground of the works area in contravention to Section 7.5.2.1 of the Waste Management Plan (WMP). The Section stipulates provisions against spillage of fuels to prevent contamination of the construction site.
24 March 2006	The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream.
13 April 2006	The Contractor was requested to rectify the situation of Zone E where fuel oil was stored within the Country Park in contravention to condition 3.14 of the EP.
29 June 2006	The Contractor was requested to rectify the situation that site runoff will not be discharged into Tung Chung Stream in order to comply with EP Condition 2.4.
26 September 2006	The Contractor was requested to rectify the situation that excessive dust emission occurred. Watering programme shall maintain to ensure that all exposed road surfaces and dust sources are wet in order to comply with EP Condition 1.7.
4 October 2006	<ul> <li>-The Contractor was requested to rectify the situation that site runoff will not be discharged into Tung Chung Stream in order to comply with EP Condition 2.4.</li> <li>-The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream 28</li> <li>-The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream 32.</li> <li>- The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream 33.</li> </ul>
13 February 2007	The Contractor was requested to rectify the situation that site runoff will not be discharged into Tung Chung Stream in order to comply with EP Condition 2.4.
19 February 2008	The Contractor was requested to take all necessary actions to rectify the situation that surface run-off from the construction site discharged into storm drain without treatment in order to comply with EP Condition 3.16.
14 April 2008	The Contractor was required to take all necessary actions to rectify the situation

Date of Letter	Warnings/Direction		
that a section of the site near Pak Kung Au was not provided with ve			
	washing facilities including high pressure water jet at vehicular exit points so as		
	not to contravene the statutory requirement.		

## **Summary of Notification of Summons**

Date of Summons	Details of the Summons	Status
25 January 2007	Construction works at a slope next to Stream no. 28	Withdrawn by
	along Tung Chung Road, Cheung Sha, Lantau Island	EPD
	which contrary to EP Condition 3.9 concerning works at	
	Stream 28 on 26 July 2006	
16 February 2007	Construction works near Stream no. 8 along Tung Chung	The Contractor
	Road, Cheung Sha, Lantau Island which contrary to EP	was fined \$7500
	Condition 2.4 by discharging runoff during construction	on 4 June 2007.
	into Tung Chung Stream on 16 August 2006	
17 May 2007	Construction works near Stream no. 8 along Tung Chung	The Contractor
	Road, Cheung Sha, Lantau Island which contrary to EP	was fined \$7500
	Condition 2.4 by discharging runoff during construction	on 4 June 2007.
	into Tung Chung Stream on 21 November 2006	

## **Summary of Notification of Successful Prosecution**

Date of Successful	Details of the Successful Prosecution	Status
Prosecution		
4 June 2007	Construction works near Stream no. 8 along Tung Chung	The Contractor
	Road, Cheung Sha, Lantau Island which contrary to EP	was fined \$7500
	Condition 2.4 by discharging runoff during construction	on 4 June 2007
	into Tung Chung Stream on 16 August 2006	
4 June 2007	Construction works near Stream no. 8 along Tung Chung	The Contractor
	Road, Cheung Sha, Lantau Island which contrary to EP	was fined \$7500
	Condition 2.4 by discharging runoff during construction	on 4 June 2007
	into Tung Chung Stream on 21 November 2006	