CCECC & CRWJ Joint Venture

Contract No. HY/2003/19

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

Monthly EM&A Report (Version 1.0)

August 2007

Certified By

(Environmental Team Leader)

REMARKS

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

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ABBREVIATION AND ACRONYM

AL Levels Action and Limit Levels

E / ER Engineer/Engineer's Representative

EIA Environmental Impact Assessment

EM&A Environmental Monitoring and Audit

EMIS Environmental Mitigation Implementation Schedule

EP Environmental Permit

EPD Environmental Protection Department

ET Environmental Team

HVS High Volume Sampler

HyD Highways Department

IEC Independent Environmental Checker

NOE Notification of Exceedance

QA/QC Quality Assurance / Quality Control

RE Resident Engineer

RH Relative Humidity

SLM Sound Level Meter

TSP Total Suspended Particulates

WMP Waste Management Plan

EXECUTIVE SUMMARY

Introduction

- 1. This is the 34th monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the project "Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha" (the Project). This report documents the findings of EM&A Works conducted in August 2007.
- 2. The construction activities undertaken in the reporting month included:
 - Construction of retaining wall
 - Construction of bridge
 - Construction of piles
 - Drainage works
 - Road works
 - Slope works
 - Soil Nail works
 - Construction of pump room
 - Construction of underground utilities
 - Backfilling

Environmental Monitoring Works

- 3. Environmental monitoring for the Project was performed regularly as stipulated in the Updated EM&A Manual (Revision C) 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 exceedance of noise, air and water quality monitoring for the reporting month is tabulated in Table I.

Table I Summary Table for Exceedance Recorded in the Reporting Month

Parameter		ceedances due to roject	Action Taken	Results of Action	
	Action Level	Limit Level		Taken	
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 period. Streams 19, 25, 32 and 35 were observed to be dry throughout the reporting month. Therefore, no water monitoring was conducted at these streams. 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 month. 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 No.: GW-RW0052-07, GW-RS0280-07 and GW-RS0281-07, GW-RS0526-07, GW-RS0527-07).

Key Information in the Reporting Month

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

Table II Summary Table for Key Information in the Reporting Month

	Event	Details	Action	Status	Remark
Event	Number	Nature	Taken		
Complaint received	1	Water Quality	Complaint Investigation	In progress.	
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. One environmental complaint was received in the reporting month.
- 12. No warning, summons or notifications of successful prosecution was received in the reporting month.

Future Key Issues

- 13. Key issues to be considered in the coming month include:
 - Dust generation from stockpiles of dusty materials, exposed retain wall, piling works and excavation works;
 - Noise from operation of the equipment, especially for rock-breaking activities, and machinery on-site;
 - Regular removal of mud, sand and silt along u-channels and sedimentation tanks;
 - Wastewater discharge and surface runoff from site;
 - Storage of chemicals/fuel and chemical waste/waste oil on site;
 - Proper storage of construction material near streams; and
 - Review and implementation of temporary drainage system for the surface runoff.

1. INTRODUCTION

Background

- 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. Two varied Environmental Permits (EP) (EP-170/2003/B and EP-170/2003/C) were issued in June 2006 and July 2007 respectively. 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 34th monthly EM&A report summarizing the EM&A works for the Project in August 2007.

Project Organizations

- 1.6 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
- 1.7 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.

Construction Programme

1.8 The construction activities undertaken in the reporting month were:

Northern Section

- Road and drainage works and underground utilities works at Zone A;
- Road and drainage works and underground utilities works at Zone B;
- Road and drainage works, underground utilities works and soil nail works at Zone C;
- Earth works at Zone D;
- Construction of RW010 and RW011, RW012 at Zone E; and
- Road works on CH4150 to CH4250, construction of pump room on CH4400 at Zone F.

Southern Section

- Road and drainage works at Zone 1
- Road and drainage works and Zone 2;
- Backfilling, construction of retaining wall, road and drainage works at Zone 3;
- Backfilling, soil nailing, construction of retaining wall and bridge deck at Zone 4;
- Backfilling, soil nailing, construction of retaining wall and bridge deck at Zone 5;
- Construction of RW039, RW015, RW014 and RW017, RW018, STR07 at Zone 6.

Summary of EM&A Requirements

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

2. AIR QUALITY

Monitoring Requirements

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

Monitoring Locations

- 2.2 In accordance with the updated EM&A Manual, 24-hour TSP monitoring shall only be conducted at the monitoring location when there are Project related construction activities being undertaken within a radius of 500 m from the monitoring location.
- 2.3 Five designated monitoring stations, AM1 to AM5 were selected for impact dust monitoring for the Project. Table 2.1 describes the air quality monitoring locations and Figure 3 shows their locations.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Station	Description	Location
AM1 YMCA of Hong Kong Christian College		Rooftop
AM2	D 68 Leyburn Villas	House
AM3 ⁽¹⁾	Butterfly Crest	House
AM4	No. 31 South Lantau Road	House
$AM5^{(2)}$	YWCA	To be confirmed

Remarks:

Monitoring Equipment

2.4 Table 2.2 summarizes the equipment used for the air quality monitoring. Copies of calibration certificates are attached in Appendix B.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator	GMW25; S/N: 1536	1
HVS Sampler	Graseby GMW Model GS2310 High Volume TSP Sampler and associated equipment and shelter	5

⁽¹⁾ 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.

⁽²⁾ Monitoring at AM5, YWCA, will be resumed when YWCA re-open.

Monitoring Parameters, Frequency and Duration

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

Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hr TSP ^(a)	Three times / 6 days
24-hr TSP	Once / 6 days

Note:

(a) 1-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 Methodology and QA/QC Procedure

Instrumentation

2.6 Graseby GMW Model GS2310 TSP High Volume Sampler (HVS) was employed for 1-hour & 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50). Moreover, the HVS also met all the requirements in Section 3.2 of the Updated EM&A Manual.

Operating/Analytical Procedures

- 2.7 Operating/analytical procedures for the operation of HVS were as follows:
 - A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
 - No two samplers were placed less than 2 meters apart.
 - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
 - A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
 - A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
 - No furnaces or incineration flues were nearby.
 - Airflow around the sampler was unrestricted.
 - The sampler was more than 20 meters from the drip line.
 - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- 2.8 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50. For TSP sampling, fiberglass filters (G810) were used.

- 2.9 The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- 2.10 The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.11 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- 2.12 The shelter lid was closed and secured with the aluminum strip. The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number). After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.
- 2.13 Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ± 3 °C; the relative humidity (RH) should be < 50% and not vary by more than ± 5 %. A convenient working RH is 40%.

Maintenance/Calibration

- 2.14 The following maintenance/calibration was required for the HVS:
 - The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
 - High volume samplers were calibrated at bi-monthly intervals using GMW-25 Calibration Kit throughout all stages of the air quality monitoring.

Wind Data

2.15 Wind data was required to be taken from the Hong Kong Observatory Weather Stations including HK International Airport and Cheung Chau.

Results and Observations

- 2.16 24-hr TSP monitoring at 3 monitoring stations, AM1, AM2 and AM4, were conducted as scheduled in the reporting month.
- 2.17 The monitoring data, graphical presentations and wind data for the reporting month are summarized in Appendix D. No Action/Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.

3. NOISE

Monitoring Requirements

- 3.1 Monitoring and audit of construction noise levels is required to be conducted, in accordance with the Updated EM&A Manual, to ensure that any unacceptable noise impacts could be readily detected and timely and appropriate action be undertaken to rectify the situation.
- 3.2 The construction noise levels shall be measured in terms of the A-weighted equivalent continuous sound pressure level (Leq). Leq (30min) shall be used as the monitoring parameter for the time period between 0700-1900 hours on normal weekdays. For all other time periods, Leq (5min) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. As supplementary information for data auditing, statistical results such as L₁₀ and L₉₀ shall also be obtained for reference.

Monitoring Locations

- 3.3 In accordance with the Updated EM&A Manual, noise monitoring shall only be conducted at the monitoring location when there are Project related construction activities being undertaken within a radius of 300m from the monitoring location.
- 3.4 Eight designated noise monitoring stations, NM1 to NM8 were selected for noise impact monitoring. Appendix A shows the established Action and Limit Levels for the environmental monitoring works. Table 3.1 describes the noise monitoring locations and Figure 3 shows their locations.

Table 3.1 Noise Monitoring Stations

Stations	Description	Location
NM1	No. 28 Lung Tseng Tau	Ground Floor
NM2	YMCA of Hong Kong Christian College	Rooftop
NM3	No. 37 Shek Lau Po	Ground Floor
NM4	No. 1 Shek Mun Kap	Ground Floor
NM5	Tung Chung Au Country Parks Management Centre Ground Floor	
NM6	D75 Leyburn Villa	Ground Floor
NM7 ⁽¹⁾	NM7 ⁽¹⁾ House in Butterfly Crest House 22 Rooftop	
NM8	No. 31 South Lantau Road	Ground Floor

Remarks:

⁽¹⁾ 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.

Monitoring Equipment

3.5 Table 3.2 summarizes the noise monitoring equipment model being used. Copies of calibration certificates are attached in Appendix B.

Table 3.2 Noise Monitoring Equipment

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	B&K Model 2238	2
Calibrator	B&K 4231	2
Wind Speed Anemometer	RS232 Integral Vane Digital Anemometer	1

Monitoring Parameters, Frequency and Duration

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

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Station	Parameter	Period ¹	Frequency	Measurement
NM1				Façade ⁽¹⁾
NM2				Façade ⁽¹⁾
NM3		(a) 0700-1900 hrs. on weekdays		Façade ⁽¹⁾
NM4	$\begin{array}{c} L_{10}(30 \text{ min.}) dB(A) \\ L_{90}(30 \text{ min.}) dB(A) \\ L_{eq}(30 \text{ min.}) dB(A) \end{array}$	(b) 1900-2300 hrs. on weekdays	Once every 6 working	Façade ⁽¹⁾
NM5		(c) 0700-2300 hrs. on holidays (d) 2300-0700 hrs on any days	days	Façade ⁽¹⁾
NM6		(d) 2300-0700 fils off any days		Façade ⁽¹⁾
NM7				Façade ⁽¹⁾
NM8				Façade ⁽¹⁾

Remarks:

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was generally set on a tripod at a height of 1.2 m above the ground, depending to the actual monitoring condition.
- For free field measurement (if any), the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

⁽¹⁾ Noise measurements were taken at 1m from the exterior of the building facade.

⁽b), (c) and (d) will only be conducted if construction works are undertaken during these periods.

frequency weighting : Atime weighting : Fast

time measurement : 30 minutes / 5 minutes

- Prior to and after each noise measurement, the meter was calibrated using a
 Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before
 and after measurement was more than 1.0 dB, the measurement would be
 considered invalid and repeat of noise measurement would be required after recalibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

3.7 The microphone head of the sound level meter and calibrator was cleaned with soft cloth regularly. The meters were sent to the supplier to check and calibrate on a yearly interval.

Results and Observations

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

4. WATER QUALITY

Monitoring Requirements

4.1 Water quality monitoring was conducted in accordance with the Updated EM&A Manual. Appendix A shows the established Action Limit Levels for the environmental monitoring works.

Monitoring Equipment

4.2 Table 4.1 summarizes the equipment used in the impact water quality monitoring program. All the monitoring equipment complied with the specifications stipulated in the EM&A Manual. Copies of the calibration certificates of the equipment are attached in Appendix B.

Table 4.1 Water Quality Monitoring Equipment

Equipment	Model and Make	Qty.
Multi-parameter Water Quality System	YSI 6820	1

Monitoring Parameters, Frequency and Duration

- 4.3 Table 4.2 summarizes the monitoring parameters, monitoring period and frequencies of water quality monitoring. The water quality monitoring schedule is attached in Appendix C.
- 4.4 In-situ measurements were taken at designated monitoring stations which are under the influence of the works at least three times per week during the course of the construction period. In addition, water samples for suspended solid analysis have been collected at the designated stations and delivered to Wellab for further laboratory analysis.

Table 4.2 Frequency and Parameters of Water Quality Monitoring

Parameters	Frequency	No. of Depth
DO Saturation (%), DO (mg/L), Turbidity (NTU), SS (mg/L), Temperature (°C), & pH	3 times per week	Sub-surface

Monitoring Locations

4.5 The water quality monitoring locations are shown in Figure 3 and their details are provided in Table 4.3.

Table 4.3 Water Quality Monitoring Locations

Monitoring Station (Stream No.)	Туре	Easting	Northing
Tung Chung Stream	Reference	811853	813289
Tung Chung Sueam	Impact	811601	813716
Cheung Sha Stream	Reference	812525	811980
Cheding Sha Sueam	Impact	812447	811165
Stream 15	Reference	811853	813289
Stream 13	Impact	811781	813298
Stream 18	Reference	811889	813107
Stream 18	Impact	811836	813138
Stream 19	Reference	811920	812927
Stream 19	Impact	811858	812987
Stream 21	Reference	811994	812695
Stream 21	Impact	811873	812723
	Reference1	811980	812589
Stream 23	Reference 2	812079	812386
	Impact	811894	812658
Stream 25	Reference	812353	812052
Sticani 23	Impact	812324	812017
Stream 26	Reference	812525	811980
Stream 20	Impact	812456	811895
Stream 27	Reference	812658	811770
Sticalii 27	Impact	812604	811747
Stream 32	Reference	812980	811410
Stream 32	Impact	812988	811327
Stream 35	Reference	813231	811275
Sucalli 33	Impact	813218	811218
Stream 40	Reference	813686	811311
Sucalli 40	Impact	813690	811211
Tung Chung Bay	Reference	810679	816038
Tung Chung Day	Impact	810787	815706

Monitoring Methodology, Calibration Details and QA/QC Procedures

Instrumentation

4.6 A multi-parameter meter (Model YSI 6820 CE-C-M-Y) was used to measure DO, turbidity, salinity, pH and temperature.

Operating/Analytical Procedures

- 4.7 At each monitoring location, two consecutive measurements were taken for water samples being collected on site. The probes were retrieved out of the water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.
- 4.8 For SS, measurement and grab samples of surface water were collected. Water samples of about 1,000 ml were collected and stored in polyethylene bottles. Following collection, water samples were stored in high density polythene bottles with preservative appropriately added, packed in ice and cooled to 4°C (without being frozen), delivered to the HOKLAS accredited laboratory, Wellab Limited and analyzed.

Maintenance and Calibration

4.9 Before each round of monitoring, a zero check in distilled water was performed with the turbidity probe of YSI 6820. The probe was then calibrated with a solution of known NTU.

Results and Observations

- 4.10 Water quality monitoring were conducted as scheduled at designated monitoring stations at Streams 15, 18, 21, 23, 26, 27 and 40, Cheung Sha Stream, Tung Chung Stream and Tung Chung Bay), which are under the influence of the works, in the reporting month. As Streams 19, 25, 32 and 35 were observed dry, no water monitoring at these locations was conducted in the reporting month.
- 4.11 During monitoring, the weather conditions were mainly sunny or cloudy. The monitoring data and graphical presentations of the monitoring results are shown in Appendix F and the Quality Control reports for the laboratory analysis are provided in Appendix G.
- 4.12 Exceedances of suspended solids (SS) were recorded in water samples in the reporting month. The exceedance reports are attached in Appendix H. The summary of exceedances for each water quality parameters are provided in Table 4.4.

Table 4.4 Summary of Water Quality Exceedances in the reporting month

Station DO		O	pH Turbidity			SS	
No.	Action	Limit	Limit	Action	Limit	Action	Limit
15_I	0	0	0	0	0	1	5
18_I	0	0	0	0	0	2	2
19_I*	0	0	0	0	0	0	0
21_I	0	0	0	0	0	3	3
23_I	0	0	0	0	0	4	0
25-I*	0	0	0	0	0	0	0
26_I	0	0	0	0	0	2	3
27_I	0	0	0	0	0	0	14
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	6
CSS_I	0	0	0	0	0	3	3
TCB_I	0	0	0	0	0	0	4
TCS_I	0	0	0	0	0	1	1

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

- 4.13 As shown in the exceedance reports attached in Appendix H, all exceedances for water quality parameters recorded in the reporting month 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.
- 4.14 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.

5. ENVIRONMENTAL AUDIT

Site Audits

- 5.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.2 ET site audits were conducted on 2, 8, 16, 23 and 30 August 2007 in the reporting month. IEC site inspections were conducted on 8 and 23 August 2007. The summaries of site audits are attached in Appendix I.

Review of Environmental Monitoring Procedures

5.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations were recorded for the monitoring works:

Air Quality Monitoring

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

Noise Monitoring

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

Water Quality Monitoring

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

Status of Environmental Licensing and Permitting

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

 Table 5.1
 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Details	Status	
Permit No.	From	To	Details	Status	
Environmental Permit (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 (c) 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	icense				
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	
Construction Noise	Permit (CN	P)			
GW-RW0052-07	24/2/07	23/8/07	Construction Noise Permit for Cheung Tung Road near Sunny Bay Station	Expired	
GW-RS0280-07	14/05/07	13/11/07	Construction Noise Permit for Zones B to F	Valid	
GW-RS0281-07	14/05/07	13/11/07	Construction Noise Permit for Zones 2 to 6	Valid	
GW-RS0526-07	22/08/07	19/02/08	Construction Noise Permit for operation of wastewater treatment facilities at Shek Mun Kap		
GW-RS0527-07	23/08/07	19/02/08	Construction Noise Permit operation of wastewater treatment facilities at San Shek Wan	Valid	

Status of Waste Management

- 5.5 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.
- 5.6 The solid waste generated from the Project was mainly general refuse that was collected by a licensed collector on an as need basis.
- 5.7 The monthly summary of waste flow table and the timber summary for August 2007 are provided in Appendix O, except the total quantity of waste generated and quantity of reused soil and fill will be updated in next Waste Flow Table.

Implementation Status of Environmental Mitigation Measures

5.8 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations are summarized in Table 5.2.

 Table 5.2
 Observations and Recommendations of Site Inspections

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	02/08/07	Exposed slope was observed near STR 10(Pier). The Contractor was recommended to provide shotcrete on it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Exposed slope was observed near STR 10(NA). The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Exposed slope was observed near STR 11(NA). The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Exposed slope was observed near under STR 17. The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.
	02/08/07	Exposed slope was observed near RW22. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Exposed slope was observed near RW20. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Exposed slope was observed near RW27. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Exposed slope was observed near STR17 (NA). The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.
	02/08/07	Exposed slope was observed near RW16. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Stockpile without covering was observed near RW19. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Water Quality	02/08/07	Exposed soil surface was observed on the platform of STR14. The Contractor was recommended to provide shotcrete on it.	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
	02/08/07	Insufficient temporary drainage system was observed at STR 12 (SA). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Insufficient temporary drainage system was observed at STR 5. The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Insufficient temporary drainage system was observed at STR 12 (NA). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/08/07	Soil and mud fallen on u-channel near CH6800 was observed. The Contractor was recommended to remove the fallen soil and mud.	Rectification/improvement was observed during the follow-up audit session.
	08/08/07	Exposed slope was observed near STR 9. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Exposed slope was observed near STR 10(NA). The Contractor was recommended to cover it	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Exposed slope was observed near STR 11(NA). The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.
	08/08/07	Exposed slope was observed near RW22. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Exposed slope was observed near RW20. The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.
	08/08/07	Exposed slope was observed near RW27. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Exposed slope was observed near RW16. The Contractor was recommended to cover it.	This item was considered inapplicable on the follow-up audit session because construction activity was being carried out at RW16. The Contractor was reminded to cover the slope when construction activity was not carried out there.

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	08/08/07	Accumulated silt and mud was observed at sedimentation tank near RW22. The Contractor was recommended to clear the accumulated silt and mud.	Rectification/improvement was observed during the follow-up audit session.
	08/08/07	Accumulated silt and mud was observed at sedimentation tank near Stream 30. The Contractor was recommended to clear the accumulated silt and mud.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Stockpile without covering was observed near RW19. The Contractor was recommended to cover it.	This item was considered inapplicable on the follow-up audit session because construction activity was being carried out at RW19.
	08/08/07	Exposed soil surface was observed on the platform of STR14. The Contractor was recommended to provide shotcrete on it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Insufficient temporary drainage system was observed at STR 12 (SA). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Insufficient temporary drainage system was observed at STR 5. The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Insufficient temporary drainage system was observed at STR 12 (NA). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Insufficient temporary drainage system was observed at STR 10 (Pier). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/08/07	Silt and mud on the platform near Stream 27 was observed. The Contractor was recommended to provide sorting on the source of rock to prevent the silt mixed with rock.	Rectification/improvement was observed during the follow-up audit session.
	16/08/07	Exposed slope was observed near STR 9. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Exposed slope was observed near STR 10(NA). The Contractor was recommended to cover it.	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
Water Quality	16/08/07	Exposed slope was observed near RW22. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Exposed slope was observed near RW27. The Contractor was recommended to cover it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Discharge of site runoff without treatment was observed at STR12 (SA). The Contractor was recommended to provide treatment of site runoff before discharge.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Accumulated silt and mud was observed at sedimentation tank near Stream 30. The Contractor was recommended to clear the accumulated silt and mud.	Rectification/improvement was observed during the follow-up audit session.
	16/08/07	Exposed soil surface was observed on the platform near STR14. The Contractor was recommended to provide shotcrete on it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Insufficient temporary drainage system was observed at STR 12 (SA). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Insufficient temporary drainage system was observed at STR 5. The Contractor was recommended to improve it.	Rectification/improvement was observed during the follow-up audit session.
	16/08/07	Insufficient temporary drainage system was observed at STR 12 (NA). The Contractor was recommended to improve it.	This item was considered inapplicable on the follow-up audit session.
	16/08/07	Insufficient temporary drainage system was observed at STR 10 (Pier). The Contractor was recommended to improve it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/08/07	Insufficient temporary drainage system was observed at STR 14 (NA). The Contractor was recommended to improve it.	Rectification/improvement was observed during the follow-up audit session.
	16/08/07	Poor efficiency of sedimentation tank was observed near RW15. The Contractor was recommended to add coagulant in the sedimentation tank to improve the silt removal efficiency.	Rectification/improvement was observed during the follow-up audit session.
	23/08/07	Exposed slope was observed near STR 9. The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.
Water Quality	23/08/07	Exposed slope was observed near RW02. The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.
	23/08/07	Exposed slope was observed near RW22. The Contractor was recommended to cover it.	Rectification/improvement was observed during the follow-up audit session.

Parameters	Date	Observations and Recommendations	Follow-up
	23/08/07	Exposed slope was observed near RW27. The	Rectification/improvement
		Contractor was recommended to cover it.	was observed during the
			follow-up audit session.
	23/08/07	Stockpile of soil without covering was	Rectification/improvement
		observed near RW15. The Contractor was	was observed during the
		recommended to cover it.	follow-up audit session.
	23/08/07	Oil spillage was observed on the haul road	Rectification/improvement
		near STR8. The Contractor was recommended	was observed during the
		to clear the oil.	follow-up audit session.
	23/08/07	Exposed soil surface was observed on the	Rectification/improvement
		platform near STR14. The Contractor was	was observed during the
		recommended to provide shotcrete on it	follow-up audit session.
	23/08/07	Exposed soil surface was observed on the	Rectification/improvement
		platform near STR12 (SA). The Contractor	was observed during the
		was recommended to provide shotcrete on it.	follow-up audit session.
	23/08/07	Insufficient temporary drainage system was	Rectification/improvement
		observed at STR 5. The Contractor was	was observed during the
		recommended to improve it.	follow-up audit session.
	23/08/07	Insufficient temporary drainage system was	Rectification/improvement
		observed at STR 10 (Pier). The Contractor was	was observed during the
		recommended to improve it.	follow-up audit session.
	23/08/07	Insufficient temporary drainage system was	Rectification/improvement
		observed at STR 14 (NA). The Contractor was	was observed during the
		recommended to improve it.	follow-up audit session.
	23/08/07	Poor efficiency of sedimentation tank was	Rectification/improvement
		observed near RW15. The Contractor was	was observed during the
		recommended to add coagulant in the	follow-up audit session.
		sedimentation tank to improve the silt removal	
		efficiency.	
	23/08/07	Muddy haul road was observed near STR9.	Rectification/improvement
		The Contractor was recommended to clear the	was observed during the
		mud there.	follow-up audit session.
	23/08/07	Insufficient temporary drainage system was	This item was not rectified
		observed near Wong Ka Wai. The Contractor	during the follow-up audit
		was recommended to improve it.	session. Follow-up action
			was needed for the
	20/00/07	2 20 1	outstanding item.
	30/08/07	Insufficient temporary drainage system was	This item will be followed up
		observed near Wong Ka Wai. The Contractor	in the next audit session.
	20/00/07	was recommended to improve it.	TEL: 14 1111 C.11 1
	30/08/07	Exposed slope was observed near RW16. The	This item will be followed up
	20/00/07	Contractor was recommended to cover it.	in the next audit session.
	30/08/07	Stagnant water was observed near STR20. The	This item will be followed up
	20/00/07	Contractor was recommended to clear it.	in the next audit session.
	30/08/07	Stockpile without covering was observed near STR13 (SA). The Contractor was	This item will be followed up in the next audit session.
		· ,	in the next audit session.
Ain On alite	02/09/07	Pleak grades arrited from everyters was	Doctification/i
Air Quality	02/08/07	Black smoke emitted from excavators was	Rectification/improvement
		observed. The Contractor was recommended to	was observed during the
	02/09/07	provide plant equipment maintenance.	follow-up audit session.
	02/08/07	The Contractor was reminded of the	This item was considered
		followings:	inapplicable on the follow-up
		- Provide watering for rock breaking activity	audit session
		at STR14 (NA).	

Parameters	Date	Observations and Recommendations	Follow-up
	08/08/07	The Contractor was reminded of the followings: - Provide watering for rock breaking activity at STR12 (NA).	Rectification/improvement was observed during the follow-up audit session.
	16/08/07	Fugitive dust emitted from soil nailing works was observed at RW06. The Contractor was recommended to implement more dust mitigation measure on soil nailing works.	This item was considered inapplicable on the follow-up audit session.
	16/08/07	The Contractor was reminded of the followings: - Review and provide proper maintenance for backhoe to prevent emission of black smoke.	Rectification/improvement was observed during the follow-up audit session.
	30/08/07	Rock breaking without watering was observed near CH3600 and Shek Mun Kap. The Contractor was recommended to provide watering for rock breaking activity.	This item will be followed up in the next audit session.
Waste/Chemical Management	02/08/07	The Contractor was reminded of the followings: - Remove C&D waste near STR12 (SA).	Rectification/improvement was observed during the follow-up audit session.
	08/08/07	The Contractor was reminded of the followings: - Remove general refuse on Stream 28.	Rectification/improvement was observed during the follow-up audit session.
	23/08/07	The Contractor was reminded of the followings: - Remove C&D waste on Stream 34.	Rectification/improvement was observed during the follow-up audit session.

Non-compliance Recorded during Site Inspections

5.9 No non-compliance was recorded in the reporting period.

Summary of Mitigation Measures Implemented

5.10 The Contractor has implemented the mitigation measures as recommended in the EIA and the Updated EM&A Manual. The mitigation measures implemented by the Contractor in the reporting month are summarized as follow:

Water Quality

- (1) Covered the exposed slope near STR 17.
- (2) Covered the exposed slope near STR 17(NA).
- (3) Cleared fallen soil and mud in the u-channel near CH 6800.
- (4) Covered the exposed slope near STR 11(NA).
- (5) Covered the exposed slope near RW20.
- (6) Cleared the accumulated silt and mud in the sedimentation tank near RW22.
- (7) Provided sorting on the source of rock near Stream 27
- (8) Cleared the accumulated silt and mud in the sedimentation tank near Stream 30.
- (9) Improved the temporary drainage system was near STR 5.
- (10) Improved the temporary drainage system was at STR 14(NA).
- (11) Added coagulant in the sedimentation tank was observed at near RW15.
- (12) Covered the exposed slope near STR 9

- (13) Covered the exposed slope near RW02.
- (14) Covered the exposed slope near RW22.
- (15) Covered the exposed slope near RW27.
- (16) Covered stockpile of soil was observed near RW 15
- (17) Cleared oil on the haul road near STR 8.
- (18) Covered the exposed slope near STR14.
- (19) Covered the exposed slope near STR12 (SA).
- (20) Improved the temporary drainage system was at STR 5.
- (21) Improved the temporary drainage system was at STR 10(Pier).
- (22) Cleared mud on haul road near STR 9.

Air Quality

- (23) Provided plant equipment maintenance on excavators.
- (24) Provided watering for rock breaking activity at STR 12(NA).
- (25) Reviewed and provided proper maintenance for backhoe.

Waste/Chemical Management

- (26) Removed C&D waste near STR 12 (SA)
- (27) Removed general waste on Stream 28.
- (28) Removed C&D waste on Stream 34.
- 5.11 According to the Updated EM&A Manual, mitigation measures are required to be implemented. An updated summary of the EMIS is provided in Appendix J.

Summary of Exceedances of the Environmental Quality Performance Limit

24-hr TSP Monitoring

5.12 No Action/Limit Level exceedance was recorded in the reporting month.

Construction Noise Monitoring

5.13 No Action/Limit Level exceedance was recorded in the reporting month.

Water Quality Monitoring

- 5.14 Exceedances of suspended solids (SS) were recorded in water samples in the reporting month. The summary of exceedances is provided in Table 4.4.
- 5.15 All exceedances recorded for water quality parameters in the reporting month were not considered due to the Project due to 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.
- 5.16 No direct evidence demonstrated the exceedances of Action/Limit level for water

monitoring parameters in the reporting month were caused by the Project.

Implementation Status of Event Action Plans

- 5.17 The Event Action Plans for air quality, noise and water quality are presented in Appendix K.
- 5.18 No valid exceedance of Action and Limit levels for air quality, noise and water quality monitoring due to the Project was recorded. No action was required to be carried out.

Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution

- 5.19 One environmental complaint was received in the reporting month.
- 5.20 The complaint was referred to the ETL by the Contractor on 6th September 2007. It was lodged by Mr. Ho on 6th August 2007 regarding overflow of construction site runoff.
- 5.21 The complaint is under investigation by ET, more detail will be provided after the complaint investigation is finished.
- 5.22 No warning, summons and notifications of successful prosecution was received in the reporting month.
- 5.23 There were a total of 50 environmental complaints, 10 warnings, 3 summons and 2 successful prosecutions received since the commencement of the Project.
- 5.24 The Complaint Log is attached in Appendix L and the summary of warnings issued by the EPD and prosecution is attached in Appendix M.

6. FUTURE KEY ISSUES

Key Issues for the Coming Month

- 6.1 Key issues to be considered in the coming month include:
 - Dust generation from stockpiles of dusty materials, exposed retain wall and excavation works;
 - Noise from operation of the equipment, especially for rock-breaking activities, and machinery on-site;
 - Regular removal of mud, sand and silt along u-channels and sedimentation tanks;
 - Wastewater discharge from site;
 - Storage of chemicals/fuel and chemical waste/waste oil on site;
 - Proper storage of construction material near streams; and
 - Review and implementation of temporary drainage system for the surface runoff.
 - Watering for rock breaking activity and in haul road.

Monitoring Schedule for the Next Month

6.2 The tentative monitoring schedule for the next month is given in Appendix C.

Construction Program for the Project (Construction Program for the Next Month)

6.3 The major construction activities in the coming month include:

Northern Section

- Road and drainage works and underground utilities works at Zone A;
- Road and drainage works and underground utilities works at Zone B;
- Road and drainage works, underground utilities works and soil nail works at Zone
 C;
- Construction of retaining wall at Zone D;
- Construction of RW010 and RW011 at Zone E; and
- Drainage and utilities works at CH3850 to CH4250, construction of pump room at CH4400 at Zone F.

Southern Section

Road and drainage works at Zone 1

- Road and drainage works and Zone 2;
- Construction of retaining wall, road and drainage works at Zone 3;
- Backfilling, soil nailing and construction of retaining wall at Zone 4;
- Backfilling, soil nailing and construction of retaining wall at Zone 5.
- Construction of RW039, RW015, RW014 and RW017, RW018, STR07 and soil nail works at RW039 at Zone 6.

7. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 7.1 Air quality, noise and water quality monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 7.2 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded in the reporting month.
- 7.3 Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded in the reporting month.
- 7.4 Water quality monitoring was conducted as scheduled in the reporting month. No valid Action/Limit Level exceedance for water quality was recorded in the reporting month.
- 7.5 One environmental complaint was received in the reporting month.
- 7.6 No warning, summons and notifications of successful prosecution was received in the reporting month.

Recommendations

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

Dust Impact

- To maintain the machinery and vehicles in a good working condition on site.
- To implement dust suppression measures on all haul roads, stockpiles and dry surfaces.
- To implement dust control measures for the dust generation work such as excavation and piling works.
- 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 sheets or other means
- To ensure that all vehicles carrying dusty material are properly covered before leaving the 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 employ quiet powered mechanical equipment if possible.
- To ensure compliance of CNP conditions during restricted-hour works.
- To follow up any exceedance caused by the construction works.
- To space out noisy equipment and position as far away as possible from sensitive receivers.

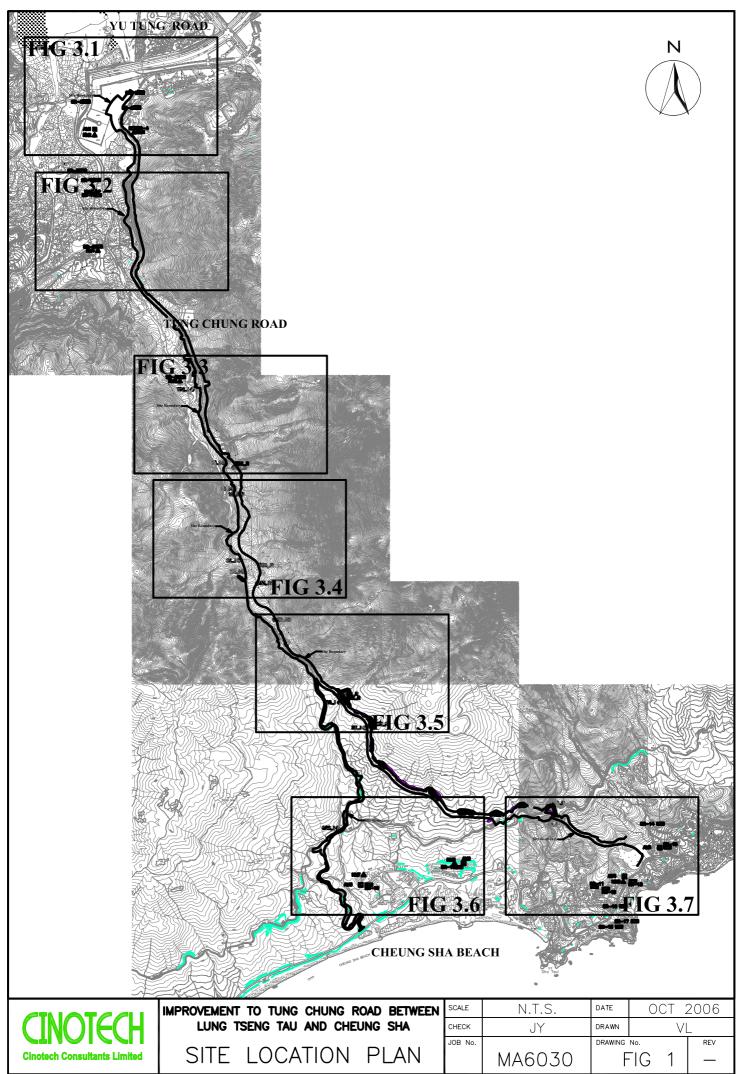
Water Quality Impact

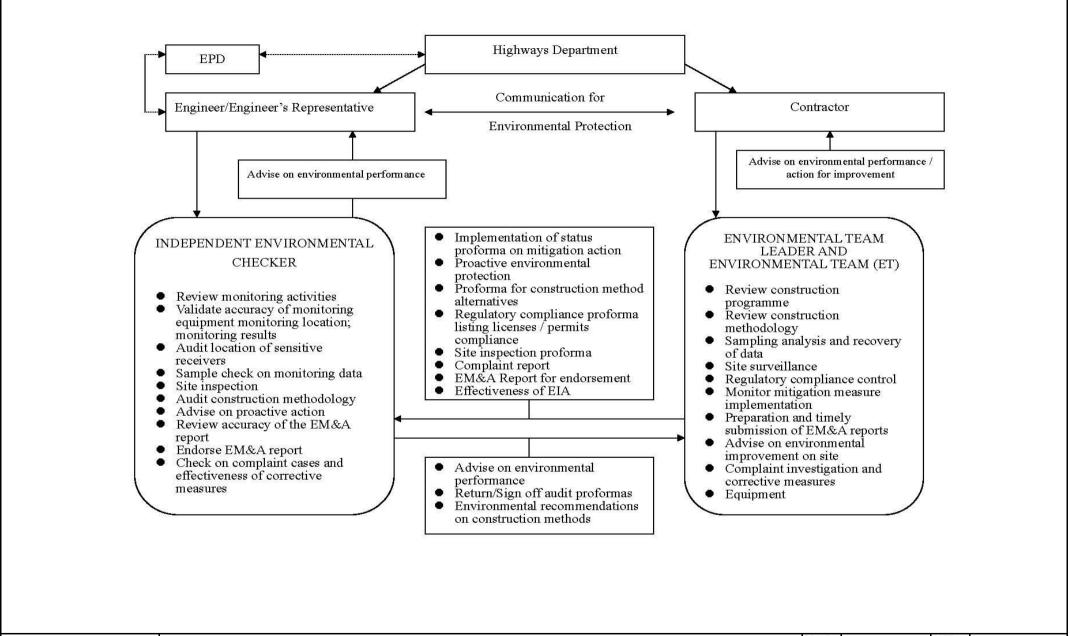
- To prevent any surface runoff discharge into any stream course.
- To ensure properly maintenance for de-silting facilities.
- To review and implement temporary drainage system for the upcoming wet season.
- To review the capacity of de-silting facilities for discharge.
- To avoid stagnant water accumulation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

Waste / Chemical Management

- To ensure the performance of sorting of C&D materials at source (during generation);
- 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 any discharge or accidental spillage of chemical waste directly from the site.
- To check for any accumulation of waste materials or rubbish on site.
- To remove ponding water regularly in drip trays on site.

FIGURES



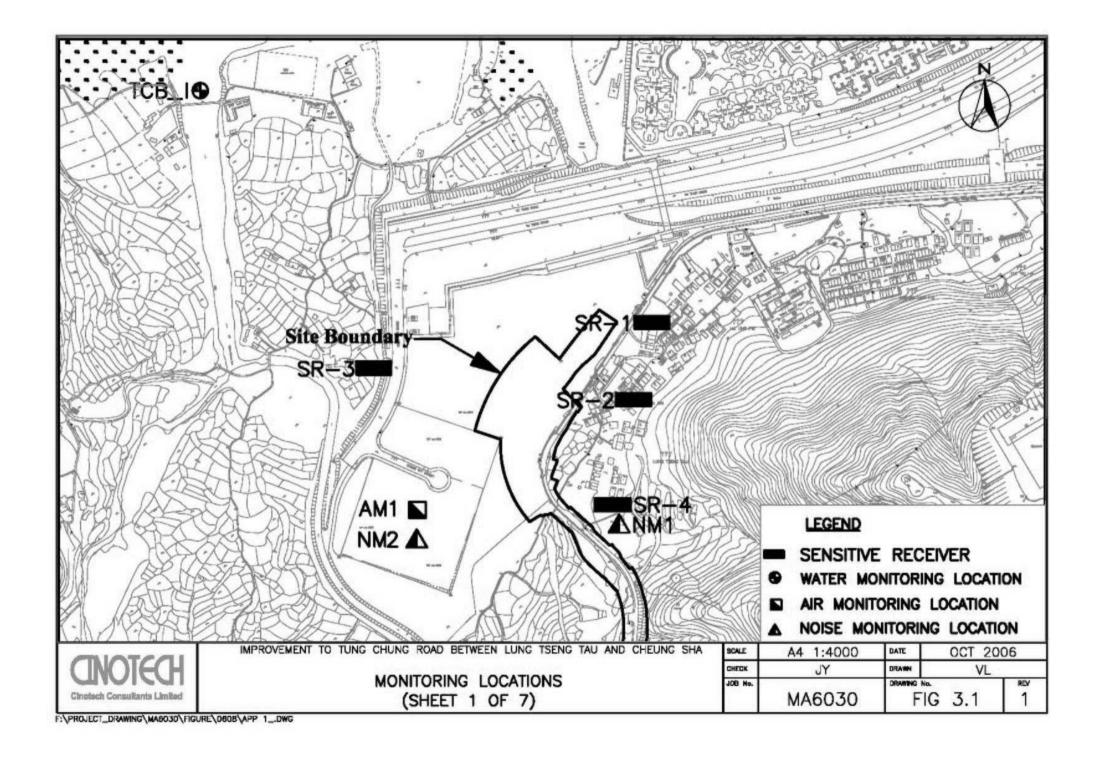


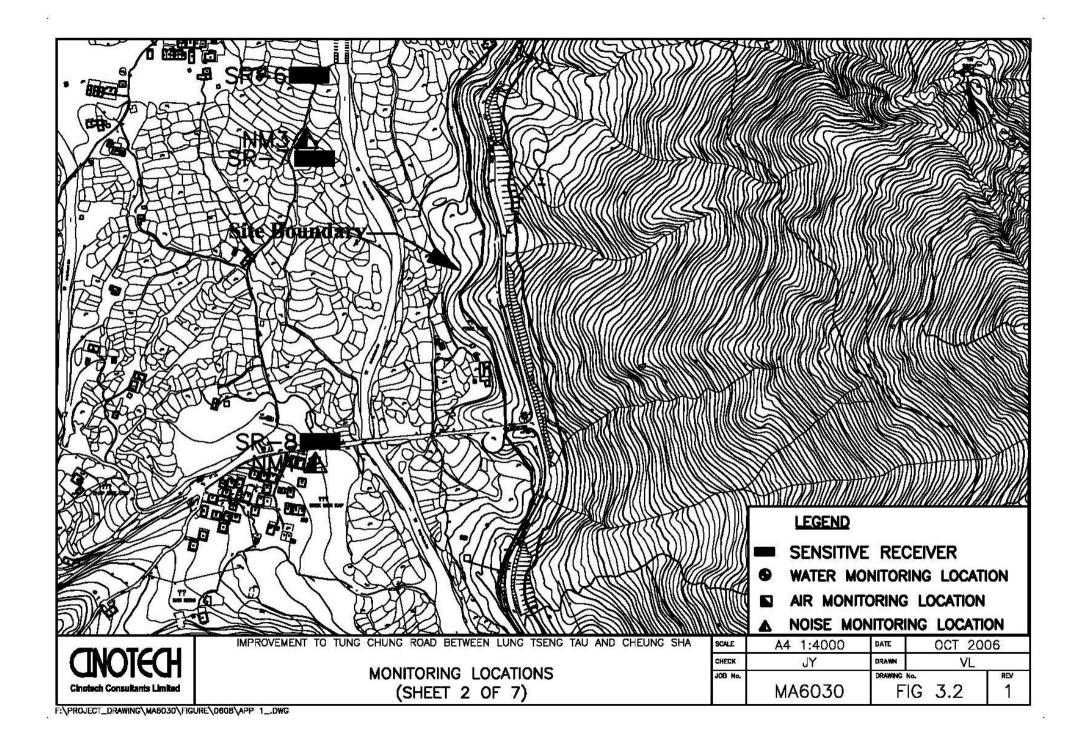


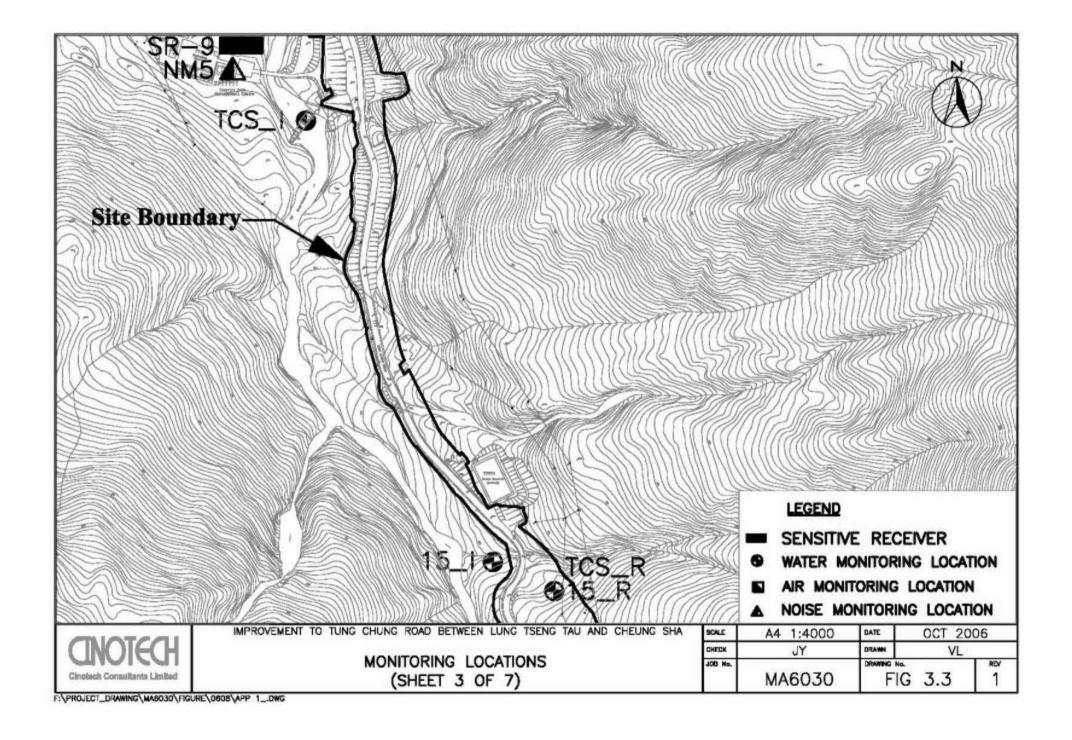
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

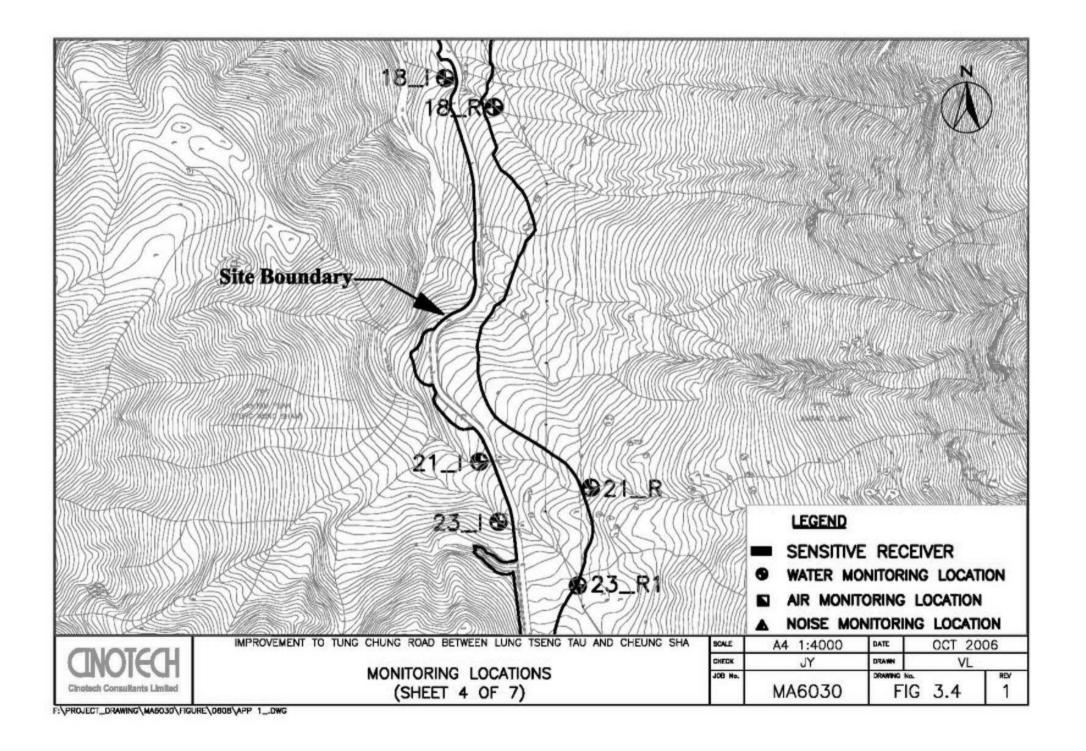
Organization Chart

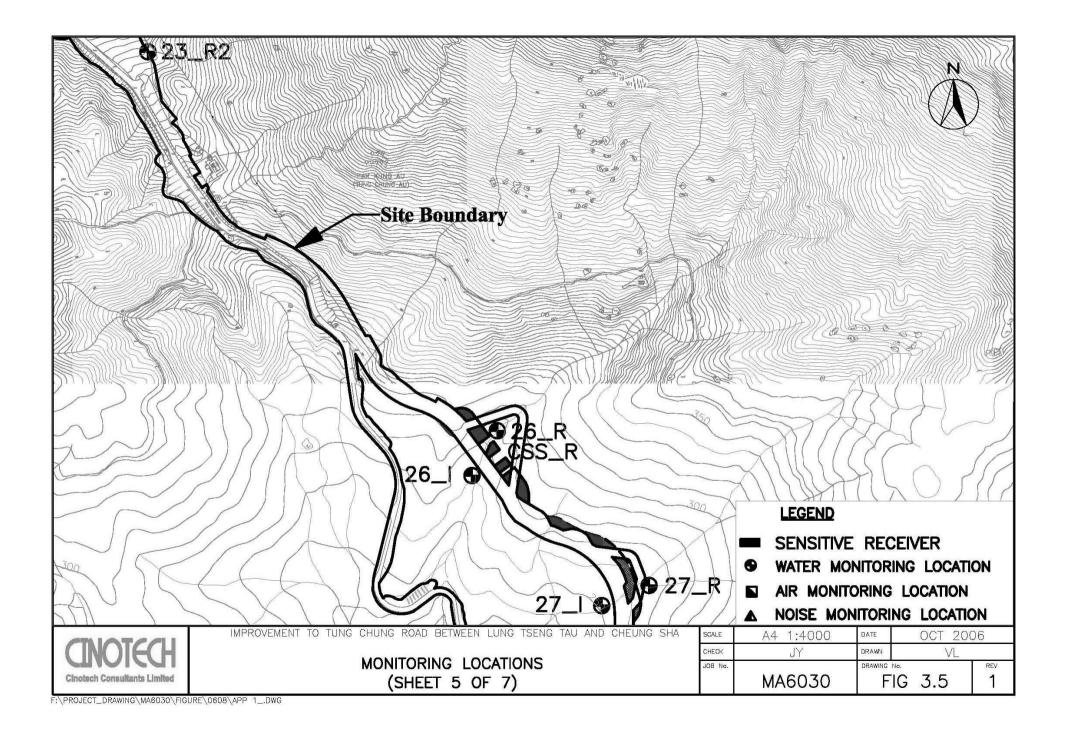
SCALE	N.T.S.	DATE	200	7
CHECK	KL	DRAWN	FL	
JOB NO.		DRAWING	No.	Rev
	MA6030		2	1

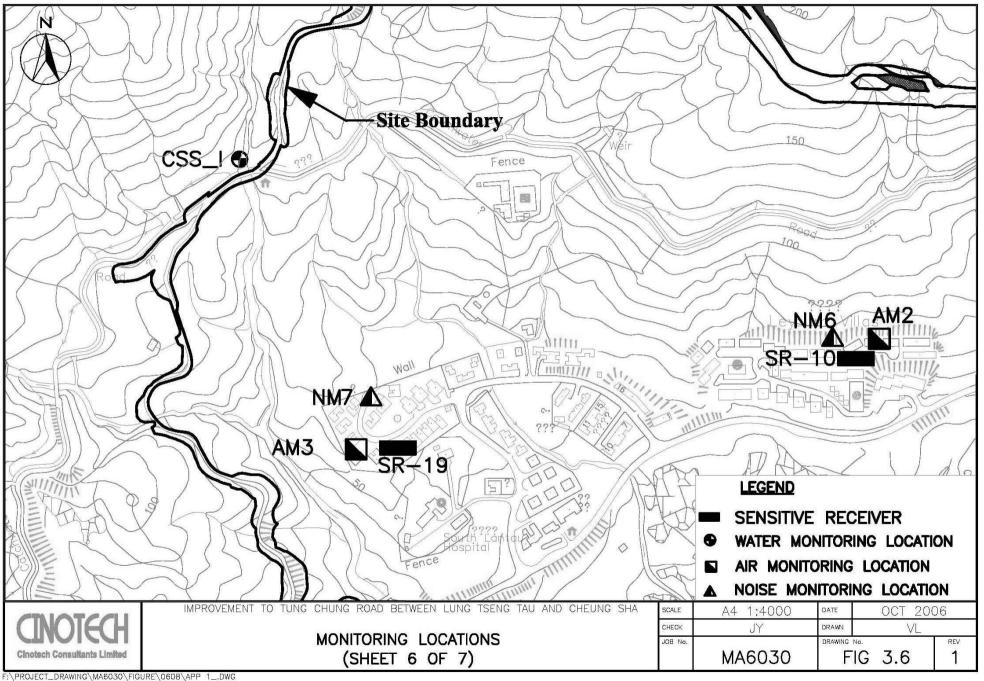


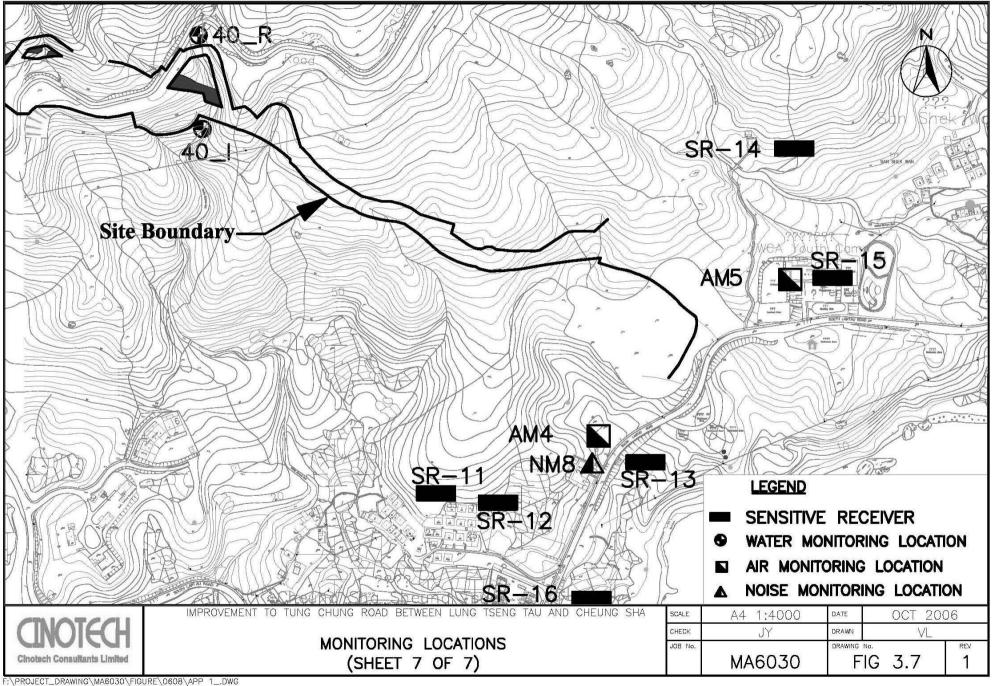












APPENDIX A
ACTION AND LIMIT LEVELS FOR AIR
QUALITY, NOISE AND WATER
QUALITY

Appendix A - Action and Limit Levels

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

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

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

Location	Action Level, μg/m ³	Limit Level, μg/m³
AM1	155	
AM2	151	
AM3	141	260
AM4	145	
AM5	153	

Table A-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)

^{*}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 A-4 Compliance Level for Water Quality

	Table 14 Compliance Level for Water Quanty											
Monitoring	DO,	mg/L		рН		Turbidit	ty, NTU			SS, 1	mg/L	
Stations	Action	Limit	Action	Limit	Α	Action	I	Limit	A	Action	I	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 control	9.03	the upstream control	14.00	the upstream control	18.00	the upstream control
21_I	6.73	4.00	-	<6.5 or >8.5	7.70	station's Tby	8.30	station's Tby	6.60	station's SS	20.00	station's SS
23_I	6.55	4.00	-	<6.5 or >8.5	6.37	(at the sme tide on the	6.62	(at the sme tide on the	8.50	(at the sme tide on the	17.00	(at the sme tide on the
26_I	6.49	4.00	-	<6.5 or >8.5	7.53	same day if	8.10	same day if	6.70	same day if	15.00	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 B COPIES OF CALIBRATION CERTIFCATES



File No. MA6030/46/0005 WK Operator: Station AM1 - YMCA of HK Christian College 15-Jun-07 Next Due Date: 14-Aug-07 Date: Serial No. 1315 Equipment No.: A-01-46 **Ambient Condition** 757.6 298.8 Pressure, Pa (mmHg) Temperature, Ta (K) Orifice Transfer Standard Information 0.0395 Intercept, bc 0.0575 A-04-05 Slope, mc Equipment No.: mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 12-Mar-07 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 11-Mar-08 Next Calibration Date: Calibration of TSP Sampler HVS Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2} \text{ Y-}$ Qstd (CFM) ΔW ΔH (orifice), [$\Delta H \times (Pa/760) \times (298/Ta)$]^{1/2} Point (HVS), in. of oil axis X - axis in. of water 2.99 9.0 60.87 12.6 3.54 1 2.56 54.15 6.6 2 10.0 3.15 4.9 2.21 7.3 2.69 46.16 3 3.0 1.73 38.09 4 2.23 30.81 1.8 1.34 5 3.3 1.81 By Linear Regression of Y on X Slope , mw = ______0.0543 Intercept, bw : -0.3354 Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = $(\text{mw x Qstd} + \text{bw})^2 \times (760 / \text{Pa}) \times (\text{Ta}/298) =$ Remarks: Date: Date:

CINOTECH

						File No.	MA6030/46/0006
Station	AM1 - YMCA o	of HK Christian C	College	Operator:	WK		
Date:	15-Aug-07			Next Due Date:	14-Oct-	-07	
Equipment No.:	A-01-46			Serial No.	1315		
		-	Ambient	Condition			
Temperatu	ire, Ta (K)	301.5	Pressure, Pa	a (mmHg)		750.2	
		Orif	ice Transfer St	andard Inform	ation		
Equipm	ent No.:	A-04-05	Slope, mc	0.0575	Intercep		0.0395
Last Calibr	ation Date:	12-Mar-07			$oc = [\Delta H \times (Pa/76)]$		
Next Calib	ration Date:	11-Mar-08		$Qstd = \{ [\Delta H :$	x (Pa/760) x (298	/Ta)] ^{1/2} -bc}	me
			ALLES MELLEN TO STATE OF THE ST	570-10-10-10-10-1			
	T			f TSP Sampler	1		
Calibration	AU (* '6)	Orfi	ce	0-41/0000		HVS	(0) (000 m v1/2
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760)) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of oil		(60) x (298/Ta)] ^{1/2} Y- axis
1	12.5	3.4	49	60.05	8.1		2.81
2	10.2	3.	15	54.18	6.4		2.50
3	7.1	2.0	63	45.09	4.8		2.16
4	5.0	2.:	21	37.72	3.1	1.74	
5	3.3	1.	79	30.52	2.0		1.40
Slope, mw =	ression of Y on X 0.0474 coefficient* =	- 0.99	79	Intercept, bw	-0.035	57	
	Coefficient < 0.99			-			
			\$50000x200x 300x				
From the TCD I	Sield Colibertion C	Sumus tales Oatd =		Calculation			
	Field Calibration C ssion Equation, th	100000000000000000000000000000000000000					
rioin the Regie	ssion Equation, th	e i value accord	ing to				
		mw x Q	$std + bw = [\Delta W]$	x (Pa/760) x (2	298/Ta)] ^{1/2}		
	200 20 20 00 00 1 0						
Therefore, S	Set Point; W = (m	w x Qstd + bw)*	x (760 / Pa) x (Ta / 298) =	4.11		
Remarks:							
			11				
Conducted by:	Wk Tana	Signature:	av.	~5		Date:	1518107
Checked by	Wk Tang	Signature:	1			Date:	15/8/07 15 Aug 2007
		-	1/		-		0



File No. MA6030/11/0005 AM2 - Leyburn Villas Operator: WK Station Next Due Date: 14-Aug-07 15-Jun-07 Date: Serial No. _____ 1805 Equipment No.: A-01-11 **Ambient Condition** 757.6 Temperature, Ta (K) 298.8 Pressure, Pa (mmHg) Orifice Transfer Standard Information 0.0575 Intercept, bc 0.0395 Equipment No.: A-04-05 Slope, mc mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 12-Mar-07 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 11-Mar-08 Calibration of TSP Sampler Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2} \text{ Y-}$ ΔH (orifice), Qstd (CFM) $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Point in. of water (HVS), in. of oil X - axis axis 12.5 60.62 9.5 3.07 1 3.53 7.9 2.80 56.83 11.0 3.31 2.27 5.2 45.52 3 7.1 2.66 3.1 1.76 4 5.0 2.23 38.09 1.9 1.37 5 3.2 1.78 30.33 By Linear Regression of Y on X Intercept, bw :_____ -0.3249 Slope , mw = _____0.0558 Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = $(\text{mw x Qstd} + \text{bw})^2 \times (760 / \text{Pa}) \times (\text{Ta}/298) =$ 4.32 Remarks: Date: Date:



File No. MA6030/11/0006 Station AM2 - Leyburn Villas Operator: WK Next Due Date: 14-Oct-07 Date: 15-Aug-07 Equipment No.: A-01-11 Serial No. 1805 **Ambient Condition** Temperature, Ta (K) 301.5 750.2 Pressure, Pa (mmHg) Orifice Transfer Standard Information 0.0575 Equipment No.: A-04-05 Slope, mc Intercept, bc 0.0395 Last Calibration Date: mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 12-Mar-07 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 11-Mar-08 Calibration of TSP Sampler Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2} \text{ Y-}$ ΔH (orifice), Ostd (CFM) ΔW Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis (HVS), in. of oil axis 1 11.2 3.31 56.80 7.0 2.61 2 10.5 3.20 54.98 6.2 2.46 73 3 2.67 45.73 4.4 2.07 4 5.1 1.74 2.23 38.11 3.1 5 3.6 1.87 31.91 2.0 1.40 By Linear Regression of Y on X Slope, mw = 0.0469 Intercept, bw : _____-0.0773 Correlation coefficient* = 0.9981 *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ Remarks: Date: Date:



Date:

MA6030/AM4/0005 File No. Station No. 31 South Lantau Road (AM4) Operator: Date: 13-Jun-07 Next Due Date: 12-Aug-07 Equipment No.: ___ A-01-06 10576 Serial No. **Ambient Condition** Temperature, Ta (K) 301.8 Pressure, Pa (mmHg) 755.6 **Orifice Transfer Standard Information** Equipment No.: A-04-05 Slope, mc 0.0575 Intercept, bc 0.0395 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 12-Mar-07 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 11-Mar-08 Calibration of TSP Sampler Orfice HVS Calibration Qstd (CFM) $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), ΔW Point $[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ in. of water X - axis (HVS), in. of oil Y-axis 11.2 8.0 3.32 56.98 2.80 9.5 2 52.42 2.45 3.05 6.1 4.4 2.08 3 7.0 2.62 44.90 3.1 4 5.1 2.24 38.23 1.74 5 3.2 1.77 30.14 1.7 1.29 By Linear Regression of Y on X Slope , mw = 0.0546 Intercept, bw : -0.3585 Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.03 Remarks: Conducted by: W. K Tang Signature:



MA6030/AM4/0006 Station No. 31 South Lantau Road (AM4) WK Operator: Next Due Date: Date: 15-Aug-07 14-Oct-07 Equipment No.: A-01-06 Serial No. 10576 **Ambient Condition** 750.2 Temperature, Ta (K) 301.5 Pressure, Pa (mmHg) Orifice Transfer Standard Information A-04-05 0.0575 0.0395 Equipment No.: Slope, mc Intercept, bc mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 12-Mar-07 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 11-Mar-08 Calibration of TSP Sampler Orfice HVS Calibration [\Delta W x (Pa/760) x (298/Ta)] 1/2 ΔH (orifice), Qstd (CFM) ΔW Point [\Delta H x (Pa/760) x (298/Ta)]^{1/2} in. of water X - axis (HVS), in. of oil Y-axis 11.6 3.36 57.82 8.4 2.86 9.2 2 3.00 51.42 6.3 2.48 3 7.3 2.67 45.73 4.9 2.19 5.0 32 1.77 4 2.21 37.72 3.3 1.79 30.52 2.0 1.40 By Linear Regression of Y on X Slope, mw = 0.0533 -0.2411 Intercept, bw : Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.31 Remarks: Conducted by: W. King Signature:

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/07/70502
Date of Issue: 2007-05-02
Date Received: 2007-05-01
Date Tested: 2007-05-01
Date Completed: 2007-05-02

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: RS232 Integral Vane Digital Anemometer

Manufacturer

: AZ Instrument

Model No.

: 451104

Serial No.

: 9020746

Equipment No.

: A-03-01

Test conditions:

Room Temperature

: 21 degree Celsius

Relative Humidity

: 65%

Pressure

: 101.3 kPa

Methodology:

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

Results:

Results.	Reference Set Point	Instrument Readings
Measuring Air Velocity, m/s	2.00	2.00
Temperature, °C	21.0	21.0

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist



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

AIR POLLUTION MONITORING EQUIPMENT

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Ma Operator		7 Rootsmeter Orifice I.I		9833640 0999	Ta (K) - Pa (mm) -	294 74676
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA	NA NA NA NA	1.00 1.00 1.00 1.00	1.3890 0.9850 0.8810 0.8410 0.6950	3.2 6.3 7.8 8.6 12.5	2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va .	(x axis) Qa	(y axis)
0.9917 0.9876 0.9854 0.9844 0.9792	0.7139 1.0026 1.1185 1.1706 1.4090	1.4113 1.9959 2.2315 2.3405 2.8227		0.9957 0.9916 0.9894 0.9884 0.9832	0.7168 1.0067 1.1231 1.1753 1.4147	0.8874 1.2549 1.4030 1.4715 1.7747
Qstd slor intercept coefficie y axis =	(b) = ent (r) =	2.03154 -0.03970 0.99999 	 [a)]	Qa slope intercept coefficie	(b) =	1.27212 -0.02496 0.99999

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)
Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]

Qa = Va/Time

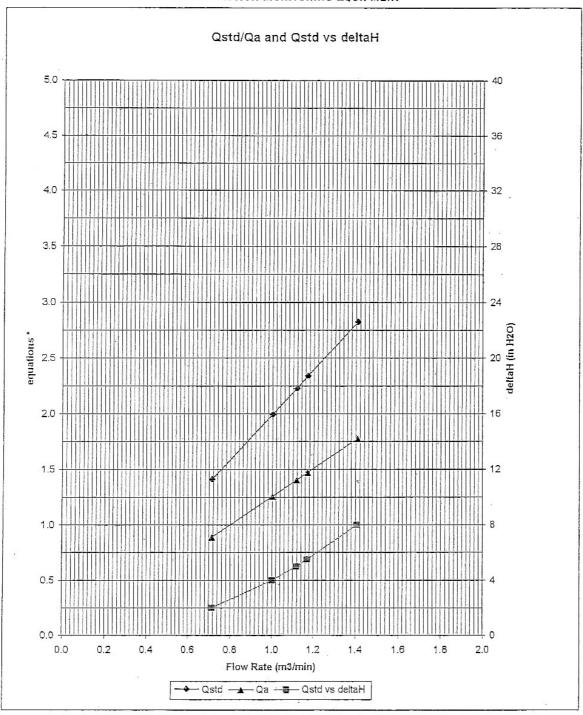
For subsequent flow rate calculations:

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



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

AIR POLLUTION MONITORING EQUIPMENT



* y-axis equations:

Qstd series:

$$\sqrt{\Delta \ H \left(\frac{P \ a}{P \ s \ t \ d}\right) \left(\frac{T \ s \ t \ d}{T \ a}\right)}$$

Qa series:

$$\sqrt{(\Delta H (Ta/Pa))}$$

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/N/61215/1
Date of Issue: 2006-12-15
Date Received: 2006-12-14
Date Tested: 2006-12-15
Date Completed: 2006-12-15
Next Due Date: 2007-12-14

ATTN: Mr. Henry Leung Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description : Integrating Sound Level Meter

Manufacturer : Brüel & Kjær Model No. : B&K 2238 Serial No. : 2337665 Microphone No. : 2289749 Equipment No. : N-01-01

Test conditions:

Room Temperatre : 20 degree Celsius

Relative Humidity : 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE
Operation Manager

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/N/61116/1
Date of Issue: 2006-11-16
Date Received: 2006-11-15
Date Tested: 2006-11-15
Date Completed: 2006-11-16
Next Due Date: 2007-11-15

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description ·

: Integrating Sound Level Meter

Manufacturer Model No.

: Brüel & Kjær : B&K 2238

Serial No.

: 2337666 : 2289750

Microphone No. Equipment No.

: N-01-02

Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 59%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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

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

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

1601-1610 Delta House,

3 On Yiu Street, Shatin, N.T.

Test Report No.: C/N/60904-1

Date of Issue: 2006-09-04

Date Received: 2006-09-02 Date Tested: 2006-09-02

Date Completed: 2006-09-04

Next Due Date:

2007-09-03

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer

: Brüel & Kjær

Model No.

: B&K 2238

Serial No.

: 2359311

Microphone No.

: 2346382

Equipment No.

: N-01-03

Test conditions:

Room Temperatre

: 23 degree Celsius

Relative Humidity

: 64%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laborary Manager

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

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

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

1602-1610 Delta House.

3 On Yiu Street, Shatin, N.T.

Test Report No.: C/N/60904-2 Date of Issue: 2006-09-04 Date Received: 2006-09-02 Date Tested: 2006-09-02

Date Completed: Next Due Date:

2006-09-04 2007-09-03

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer

: Brüel & Kjær

Model No.

: B&K 2238

Serial No.

: 2359303

Equipment No.

: N-01-04

Test conditions:

Room Temperatre

: 23 degree Celsius

Relative Humidity

: 63%

Pressure

: 1006.5hPa

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/N/61014/1
Date of Issue: 2006-10-14
Date Received: 2006-10-13
Date Tested: 2006-10-14
Date Completed: 2006-10-14
Next Due Date: 2007-10-13

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer Model No.

: Brüel & Kjær : B&K 2238 : 2394976

Serial No. Microphone No. Equipment No.

: 2407349 : N-01-05

Test conditions:

Room Temperatre

: 21 degree Celsius

Relative Humidity

: 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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

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

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/N/61116/2
Date of Issue: 2006-11-16
Date Received: 2006-11-15
Date Tested: 2006-11-15
Date Completed: 2006-11-16
Next Due Date: 2007-11-15

ATTN:

Mr. Henry Leung

Page:

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Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.

: 2326353

Project No.

: C13

Equipment No.

: N-02-01

Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 59%

Pressure

: 1015.2 hPa

Methodology:

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

Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T.

Test Report No.:	C/06/70305
Date of Issue:	2007-03-05
Date Received:	2007-03-03
Date Tested:	2007-03-03
Date Completed:	2007-03-05
Next Due Date:	2008-03-04

ATTN:

Mr. Henry Leung

Page:

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Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No. Serial No.

: 4231

Project No.

: 2343007 : C13

Equipment No.

: N-02-02

Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 65%

Pressure

: 1020.1hPa

Methodology:

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

Results:

Sound Pressure Level	Measured SPL	Tolerance	
At 94 dB SPL	94.0	94.0 ± 0.2 dB	

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

606 - 608 Cornell Centre, 50 Wing Tai Road, Chai Wan, Hong Kong. Tel: (852) 2898 7388 Fax: (852) 2898 7076

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

1601-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/N/60904-3
Date of Issue: 2006-09-04
Date Received: 2006-09-02
Date Tested: 2006-09-02
Date Completed: 2006-09-04
Next Due Date: 2007-09-03

ATTN:

Mr. Henry Leung

Page:

1 of 1

Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.

: 2412367

Equipment No.

: N-02-03

Test conditions:

Room Temperatre

: 23 degree Celsius

Relative Humidity

: 63%

Pressure

: 1020.1hPa

Methodology:

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

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/W/70512-1
Date of Issue: 2007-05-12
Date Received: 2007-05-11
Date Tested: 2007-05-11
Date Completed: 2007-05-12
Next Due Date: 2007-08-11

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No.

: 02D0126AA

Equipment No.

: W.03.01

Project No.

: C013

Test conditions:

Room Temperature

: 22 degree Celsius

Relative Humidity

: 65%

Test Specifications:

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

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

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

1. Performance check against Winkler titration Turbidity Sensor, Model: 6026, S/N: 5389

1. Calibration check with Formazin standard solution

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

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong. Tel: (852) 2898 7388

Fax: (852) 2898 7076

TEST REPORT

Test Report No.:	C/W/70512-1
Date of Issue:	2007-05-12
Date Received:	2007-05-11
Date Tested:	2007-05-11
Date Completed:	2007-05-12
Next Due Date:	2007-08-11

Page:

2 of 2

Results:

1. Conductivity performance check

in community ponter	to the same of the		
Specific (Conductivity, µS/cm	Correction, µS/cm	Acceptable range
Salinity Meter (C1) Theoretical Value (C2)		D = C1 - C2	
1422	1420	2	1420 ± 20

2. Salinity Performance check

Salin	ity, ppt	Correction, ppt	Acceptable range	
Instrument Reading	Theoretical Value			
30.1	30.0	0.1	30.0 ± 3	

3. Dissolved Oxygen check

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

4. Turbidity check

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

5. pH Meter check

5. pri victor check				
Test Parameters	Performance characteristic	Acceptable range		
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05		
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02		
Noise ΔpH_n , pH unit	0.00	Less than 0.02		

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05





TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/W/70811-1
Date of Issue: 2007-08-11
Date Received: 2007-08-10
Date Tested: 2007-08-10
Date Completed: 2007-08-11
Next Due Date: 2007-11-10

ATTN:

Mr. Henry Leung

Page:

1 of 2

Certificate of Calibration

Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No.

: 02D0126AA

Equipment No.

: W.03.01

Project No.

: C013

Test conditions:

Room Temperature

: 22 degree Celsius

Relative Humidity

: 62%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 05A1209

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

Dissolved Oxygen Sensor, Model: 6562, S/N: 04A0145

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05A1610AJ

1. Calibration check with Formazin standard solution

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

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist



TEST REPORT

Test Report No.: C/W/70811-1
Date of Issue: 2007-08-11
Date Received: 2007-08-10
Date Tested: 2007-08-10
Date Completed: 2007-08-11
Next Due Date: 2007-11-10

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Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1422	1420	2	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in	Dissolved Oxygen, mg O ₂ /L		Correction, mg	Acceptable
water at 20°C	D.O. Meter	Winkler Titration	O ₂ /L	range
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

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

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

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

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

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/W/70512-2
Date of Issue: 2007-05-12
Date Received: 2007-05-11
Date Tested: 2007-05-11
Date Completed: 2007-05-12
Next Due Date: 2007-08-11

ATTN:

Mr. Henry Leung

Page:

1 of 2

Certificate of Calibration

Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No.

: 02D0293AA

Equipment No.

: W.03.02

Project No.

: C013

Test conditions:

Room Temperature

: 22 degree Celsius

Relative Humidity

: 65%

Test Specifications:

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

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

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

1. Performance check against Winkler titration Turbidity Sensor, Model: 6026, S/N: 5390

1. Calibration check with Formazin standard solution

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

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Operation Manager

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit, Shatin, Hong Kong. Tel: (852) 2898 7388

Fax: (852) 2898 7076

TEST REPORT

Test Report No.: C/W/70512-2

Date of Issue: 2007-05-12

Date Received: 2007-05-11

Date Tested: 2007-05-11

Date Completed: 2007-05-12

Next Due Date: 2007-08-11

Page: 2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range	
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2		
1420	1419	1	1418 ± 20	

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value	40.000000	
30.1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

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

4. Turbidity check

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

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05



Unit C. 1/F., Goldlion Holdings Center. 13-15 Yuen Shun Circuit, Shatin, NT, HK. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Test Report No.: C/W/70811-2
Date of Issue: 2007-08-11
Date Received: 2007-08-10
Date Tested: 2007-08-10
Date Completed: 2007-08-11
Next Due Date: 2007-11-10

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ATTN: Mr. Henry Leung

Certificate of Calibration

Page:

Item for calibration:

Description : Sonde Environmental Monitoring System

Manufacturer : YSI

 Model No.
 : 6820-C-M

 Serial No.
 : 02D0293AA

 Equipment No.
 : W.03.02

 Project No.
 : C013

Test conditions:

Room Temperature : 22 degree Celsius

Relative Humidity : 62%

Test Specifications:

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

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

Dissolved Oxygen Sensor, Model: 6562, S/N: 0261137

1. Performance check against Winkler titration Turbidity Sensor, Model: 6136, S/N: 05F2030AQ 1. Calibration check with Formazin standard solution

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

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE Senior Chemist

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TEST REPORT

Test Report No.: C/W/70811-2
Date of Issue: 2007-08-11
Date Received: 2007-08-10
Date Tested: 2007-08-10
Date Completed: 2007-08-11
Next Due Date: 2007-11-10

Page:

2 of 2

Results:

1. Conductivity performance check

Specific (Conductivity, µS/cm	Correction, µS/cm	Acceptable range	
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2		
1420	1419	1	1418 ± 20	

2. Salinity Performance check

Salini	ty, ppt	Correction, ppt	Acceptable range		
Instrument Reading	Theoretical Value				
30.1	30.0	0.1	30.0 ± 3		

3. Dissolved Oxygen check

Oxygen level in	Dissolved O	xygen, mg O ₂ /L	Correction, mg	Acceptable		
water at 20°C	D.O. Meter	Winkler Titration	O ₂ /L	range		
Saturated	9.0	9.0	0.0	± 0.2		
Half-saturated	5.8	5.8	0.0	± 0.2		
Zero	0.0	0.0	0.0	± 0.2		

4. Turbidity check

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

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

APPENDIX C ENVIRONMENTAL MONITORING SCHEDULES

Contract No. HY/2003/19 - Improvement to Tung chung Road between Lung Tseng Tau and Cheung Sha Tentative Air, Noise and Water Quality Monitoring Schedule for August 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	3-Aug	4-Aug
			Water Quality Noise		Water Quality	24 hr TSP
5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	11-Aug
	Water Quality		Water Quality Noise		Water Quality 24 hr TSP	
12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug
	Water Quality		Water Quality Noise	24 hr TSP	Water Quality	
19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug
	Water Quality		Water Quality Noise 24 hr TSP		Water Quality	
26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep
	Water Quality	24 hr TSP	Water Quality Noise		Water Quality	

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Contract No. HY/2003/19 - Improvement to Tung chung Road between Lung Tseng Tau and Cheung Sha Tentative Air, Noise and Water Quality Monitoring Schedule for September 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep
	Water Quality 24 hr TSP		Water Quality Noise		Water Quality	24 hr TSP
9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep
	Water Quality		Water Quality Noise		Water Quality 24 hr TSP	
16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep
	Water Quality		Water Quality Noise	24 hr TSP	Water Quality	
23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep
	Water Quality	Water Quality Noise 24 hr TSP			Water Quality	24 hr TSP
30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct
		Water Quality	Water Quality Noise		Water Quality 24 hr TSP	

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

APPENDIX D 24-HOUR TSP MONITORING RESULTS ,GRAPHICAL PRESENTATION AND WIND DATA

Appendix D - 24-hour TSP Monitoring Results

Location AM1 - YMCA of Hong Kong Christian College

Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	se Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)
4-Aug-07	2.8255	2.8728	1.21	1.21	2429.7	2453.7	24.0	27.2	Sunshine	302.9	756.9	0.0473	1.21	1737.4
10-Aug-07	2.8442	2.8978	1.21	1.21	2453.7	2477.7	24.0	30.8	Cloudy	298.7	748.7	0.0536	1.21	1739.7
16-Aug-07	2.7681	2.8114	1.23	1.22	2477.7	2501.7	24.0	24.5	Cloudy	297.9	753.3	0.0433	1.23	1764.2
22-Aug-07	2.8033	2.8754	1.22	1.22	2501.7	2525.7	24.0	40.9	Cloudy	300.1	757.4	0.0721	1.22	1762.4
28-Aug-07	2.7836	2.8609	1.23	1.23	2525.7	2549.7	24.0	43.8	Cloudy	300.9	760.7	0.0773	1.23	1763.9
			-				Min	24.5						
							Max	43.8						
							Average	33.5						

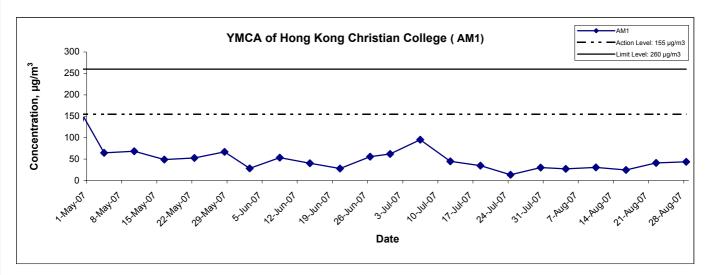
Location AM2 - House in Leyburn Villas

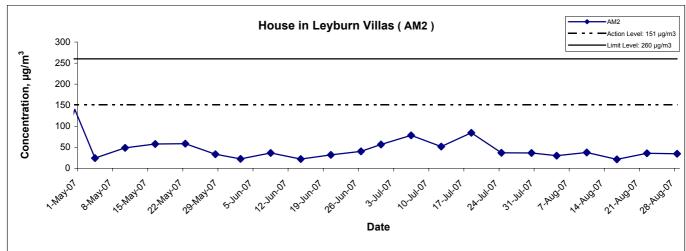
Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	Elapse Time		Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	$(\mu g/m^3)$	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)
4-Aug-07	2.8064	2.8585	1.21	1.21	7223.3	7247.3	24.0	30.0	Sunshine	302.9	756.9	0.0521	1.21	1736.3
10-Aug-07	2.7981	2.8638	1.21	1.21	7247.3	7271.3	24.0	37.8	Cloudy	298.7	748.7	0.0657	1.21	1738.6
16-Aug-07	2.7264	2.7645	1.23	1.23	7271.3	7295.3	24.0	21.5	Cloudy	297.9	753.3	0.0381	1.23	1775.8
22-Aug-07	2.7968	2.8601	1.23	1.23	7295.3	7319.3	24.0	35.7	Cloudy	300.1	757.4	0.0633	1.23	1774.1
28-Aug-07	2.8368	2.8983	1.23	1.23	7319.3	7343.3	24.0	34.6	Cloudy	300.9	4184.3	0.0615	1.23	1775.6
							Min	21.5						
							Max	37.8						
							Average	31.9						

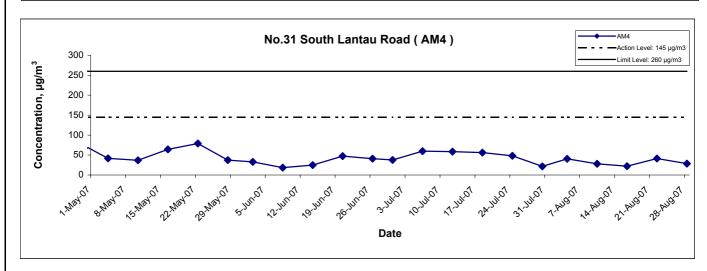
Location AM4 - No.31 South Lantau Road

Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	Elapse Time		Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)
4-Aug-07	2.7832	2.8536	1.21	1.21	7078.5	7102.5	24.0	40.3	Sunshine	302.9	756.9	0.0704	1.21	1745.1
10-Aug-07	2.8044	2.8533	1.21	1.21	7102.5	7126.5	24.0	28.0	Cloudy	298.7	748.7	0.0489	1.21	1747.4
16-Aug-07	2.7770	2.8158	1.22	1.22	7126.5	7150.5	24.0	22.0	Cloudy	297.9	753.3	0.0388	1.22	1763.1
22-Aug-07	2.7812	2.8537	1.22	1.22	7150.5	7174.5	24.0	41.2	Cloudy	300.1	757.4	0.0725	1.22	1761.5
28-Aug-07	2.7961	2.8462	1.22	1.22	7174.5	7198.5	24.0	28.4	Cloudy	300.9	760.7	0.0501	1.22	1762.9
	-		-				Min	22.0						-
							Max	41.2						
							Average	32.0						

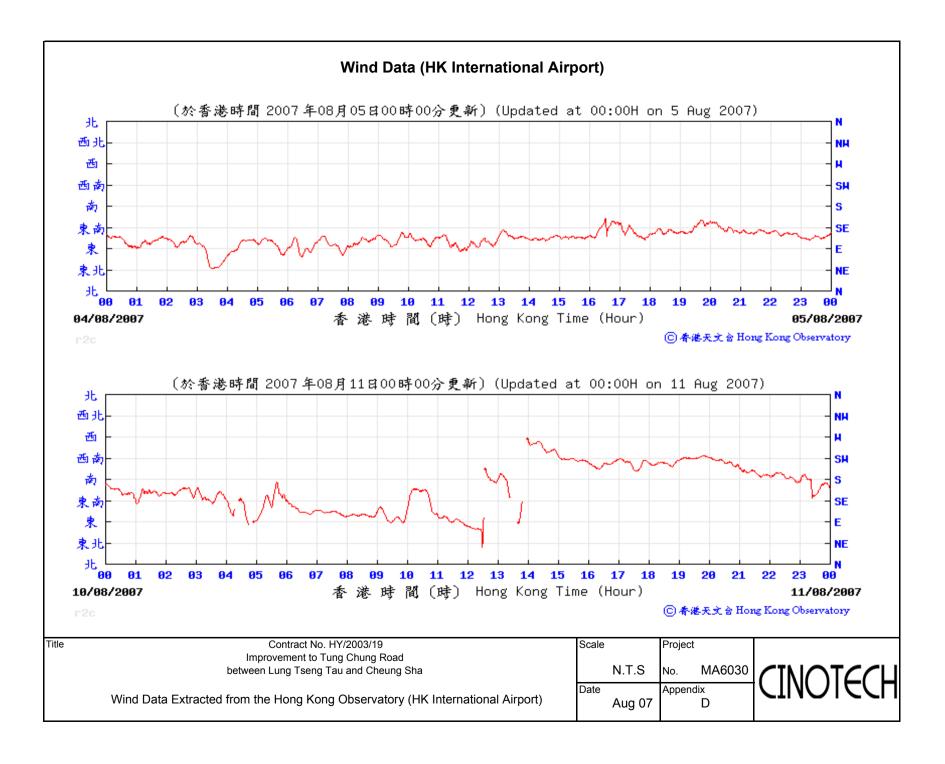
24-hour TSP Levels

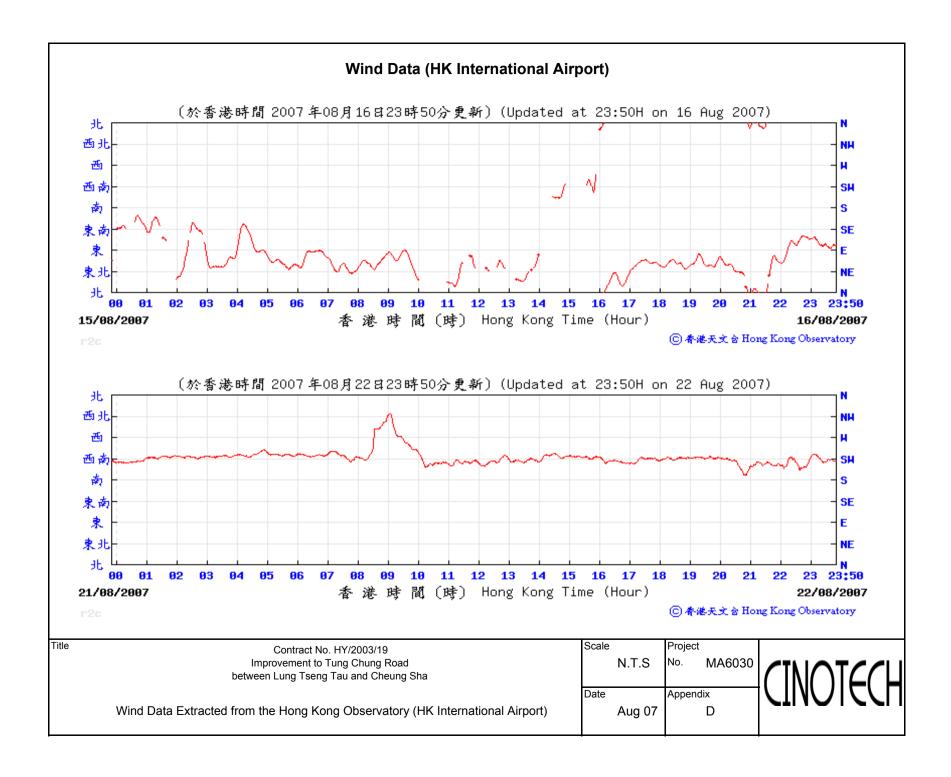






Ī	Title Contract No. HY/2003/19 Improvement to Tung Chung Road	Scale		Project		
	between Lung Tseng Tau and Cheung Sha		N.T.S	No.	MA6030	CINOTECH
	Graphical Presentation of 24-hour TSP Monitoring Results	Date	Aug 07	Append	dix D	CINOISCU





Wind Data (HK International Airport)



r2c

⑥ 香港天文台 Hong Kong Observatory

Title

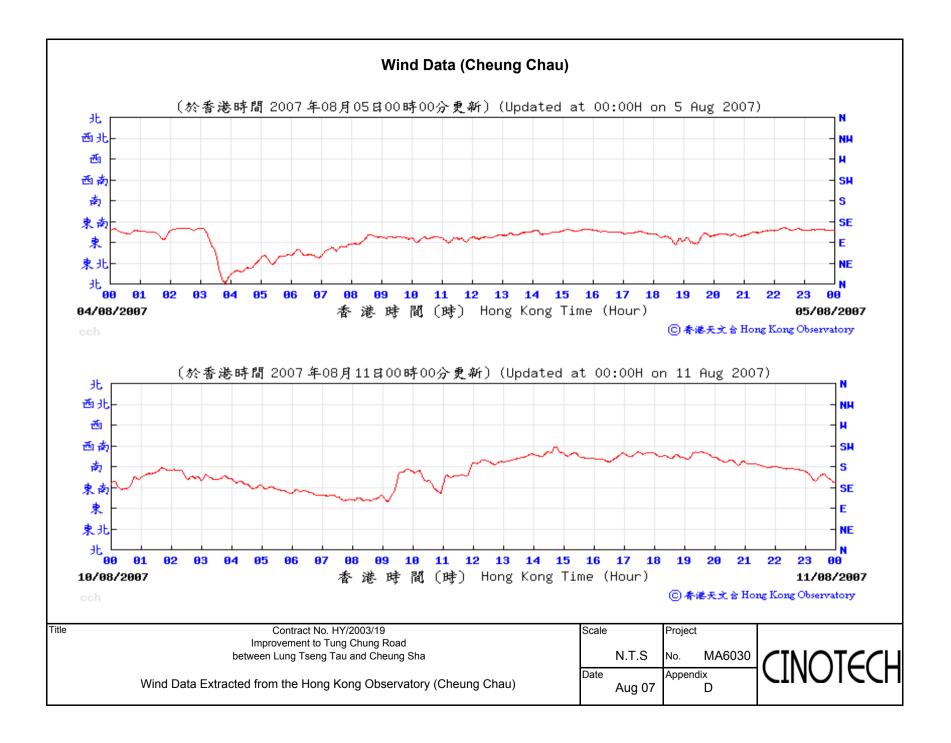
Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

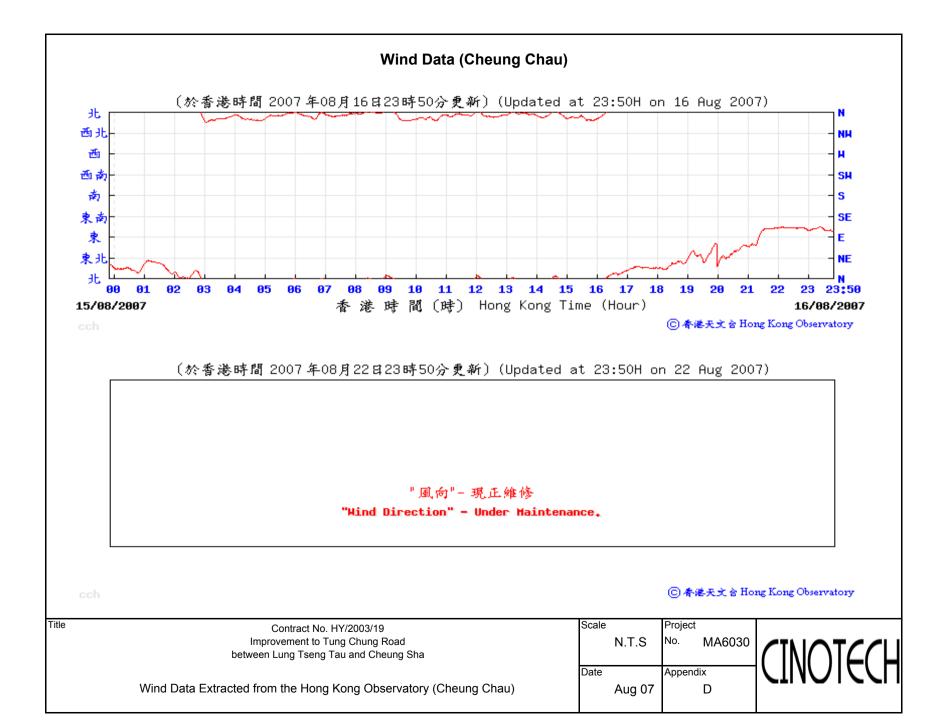
Wind Data Extracted from the Hong Kong Observatory (HK International Airport)

N.T.S No. MA6030

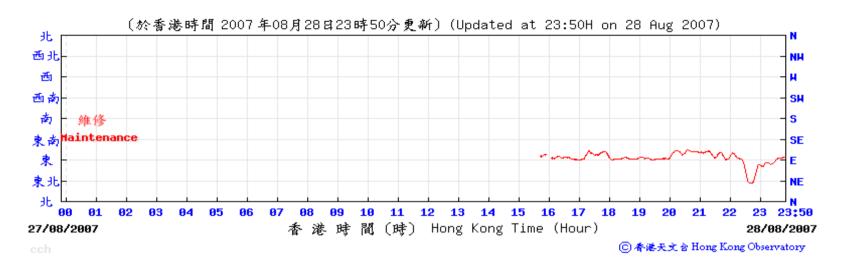
Date Aug 07 D







Wind Data (Cheung Chau)



Title

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

Wind Data Extracted from the Hong Kong Observatory (Cheung Chau)

Scale		Project	
	N.T.S	No.	MA6030
Date		Append	ix
	Aug 07		D



APPENDIX E NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - Noise Monitoring Results

Location NM1	- No. 28 Lun	ig Tseng Tau								
Data	Time	\\/oothor	dE	3 (A) (30-min))					
Date	Time	Weather	L _{eq}	L ₁₀	L ₉₀					
1-Aug-07	09:40	Sunny	62.8	64.0	59.5					
8-Aug-07	09:40	Cloudy	63.2	65.5	56.5					
15-Aug-07	09:40	Cloudy	56.7	54.5						
22-Aug-07	09:40	Cloudy	62.4	65.5	60.5					
29-Aug-07	09:40	Cloudy	59.3	63.5	57.5					
		Average	61.5	64.1	58.2					
		Minimum	56.7	60.0	54.5					
		Maximum	63.2	65.5	60.5					

Location NM2	- YMCA of H	łK Christian C	ollege						
Date	Time	Weather	dE	dB (A) (30-min)					
Date	Tille	vveatrier	L _{eq}	L ₁₀	L 90				
1-Aug-07	09:00	Sunny	61.4	62.5	57.0				
8-Aug-07	09:00	Cloudy	55.6	57.5	52.5				
15-Aug-07	09:00	Cloudy	54.3	51.0					
22-Aug-07	09:00	Cloudy	57.7	59.0	56.0				
29-Aug-07	09:00	Cloudy	55.6	57.5	52.5				
		Average	57.7	59.1	54.4				
		Minimum	54.3	56.0	51.0				
		Maximum	61.4	62.5	57.0				

Location NM3	- No. 37 She	ek Lau Po								
Data	Time	Weather	dB (A) (30-min)							
Date	Time	vveatrier	L _{eq}	L ₁₀	L 90					
1-Aug-07	10:20	Sunny	51.4	53.5	48.5					
8-Aug-07	10:20	Cloudy	45.1	47.5	41.5					
15-Aug-07	10:20	Cloudy	47.6	50.0	45.5					
22-Aug-07	10:20	Cloudy	43.2	45.0	40.5					
29-Aug-07	10:15	Cloudy	47.2	49.5	44.5					
_		Average	47.8	50.0	45.0					
		Minimum	43.2	13.2 45.0						
		Maximum	51.4	53.5	48.5					

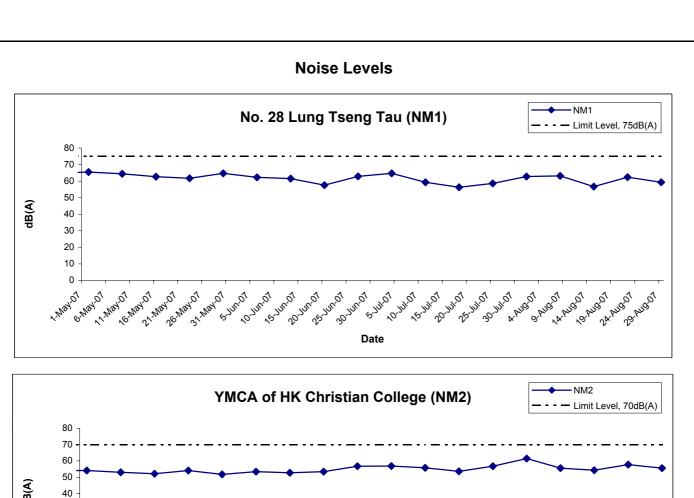
Location NM4 - No.1 Shek Mun Kap													
Dete	Time	\\/oothor	dB (A) (30-min)										
Date	Time	Weather	L _{eq}	L ₁₀	L 90								
1-Aug-07	11:05	Sunny	59.6	61.5	57.0								
8-Aug-07	11:00	Cloudy	56.3	58.5	54.0								
15-Aug-07	11:05	Cloudy	51.7	53.5	48.5								
22-Aug-07	11:05	Cloudy	52.6	54.5	51.0								
29-Aug-07	11:00	Cloudy	53.1	55.5	51.5								
		Average	55.7	57.8	53.4								
		Minimum	51.7	53.5	48.5								
		Maximum	59.6	61.5	57.0								

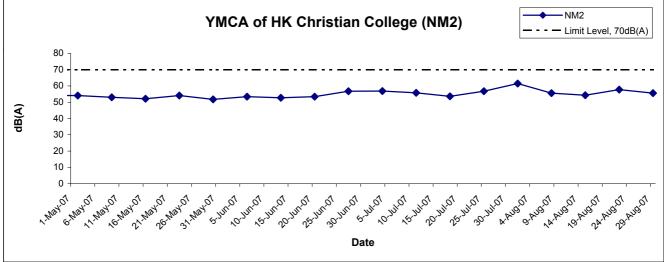
Appendix E - Noise Monitoring Results

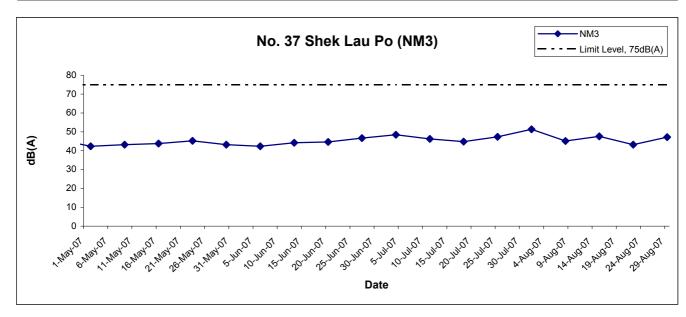
Location NM5	- Tung Chui	ng Au Country	Parks Manag	ement Centi	re					
Data	Time	Weather	dB (A) (30-min)							
Date	Time	vveatrier	L _{eq}	L ₁₀	L 90					
1-Aug-07	13:00	Sunny	58.7	60.5	55.5					
8-Aug-07	13:00	Cloudy	54.9	58.0	51.5					
15-Aug-07	13:00	Cloudy	53.4	55.0	49.5					
22-Aug-07	13:00	Cloudy	51.6	53.5	50.0					
29-Aug-07	13:00	Cloudy	53.8	56.0	51.0					
		Average	55.2	57.3	52.1					
		Minimum	51.6	53.5	49.5					
		Maximum	58.7	60.5	55.5					

Location NM6	Location NM6 - D75 Leyburn Villa													
Dete	Time	\\/aathar	dE	3 (A) (30-min))									
Date	Time	Weather	L _{eq}	L ₁₀	L 90									
1-Aug-07	13:45	Sunny	50.2	51.5	46.0									
8-Aug-07	13:45	Cloudy	46.3	50.5	42.5									
15-Aug-07	13:45	Cloudy	45.1	47.5	41.0									
22-Aug-07	13:45	Cloudy	42.6	45.5	39.5									
29-Aug-07	13:45	Cloudy	46.7	49.5	43.5									
		Average	46.9	49.4	43.1									
		Minimum	42.6	45.5	39.5									
		Maximum	50.2	51.5	46.0									

Location NM8	- No. 31 Sou	ıth Lantau Roa	ad							
Data	Time	\A/a ath ar	dB (A) (30-min)							
Date	Time	Weather	L _{eq}	L ₁₀	L 90					
1-Aug-07	14:25	Sunny	57.8	60.0	54.5					
8-Aug-07	14:25	Cloudy	58.7	61.5	56.0					
15-Aug-07	14:40	Cloudy	57.3	59.5	55.5					
22-Aug-07	14:25	Cloudy	51.7	54.0	49.0					
29-Aug-07	14:25	Cloudy	56.2	59.5	54.5					
		Average	56.9	59.5	54.5					
		Minimum	51.7	54.0	49.0					
		Maximum	58.7	61.5	56.0					





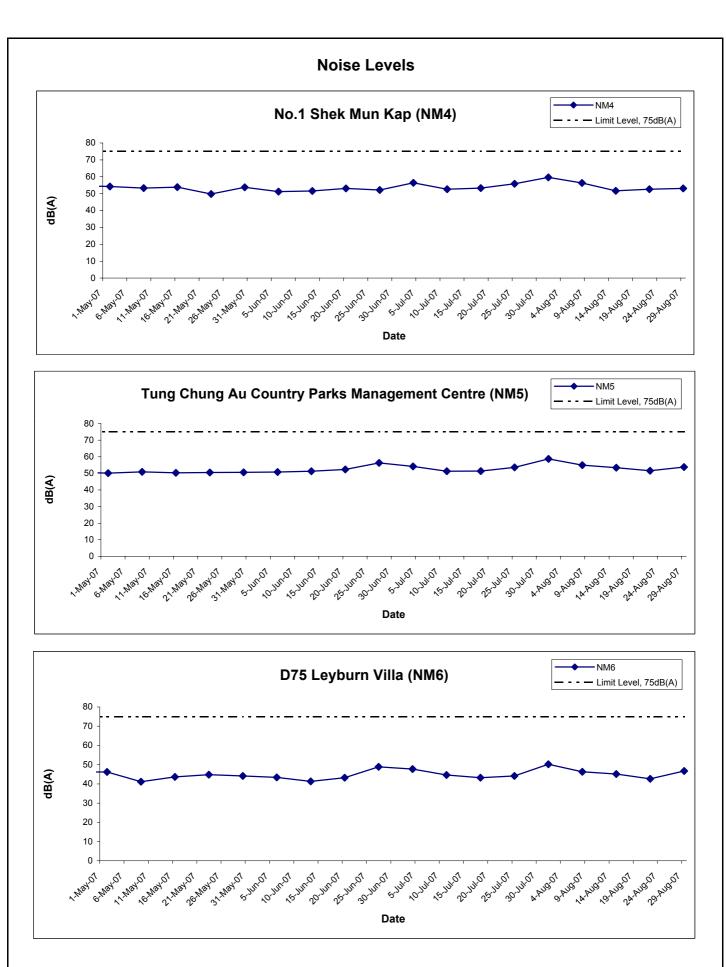


Title Contract No. HY/2003/19
Improvement to Tung Chung Road
between Lung Tseng Tau and Cheung Sha
Graphical Presentation of Construction Noise Monitoring
Results

Scale Project
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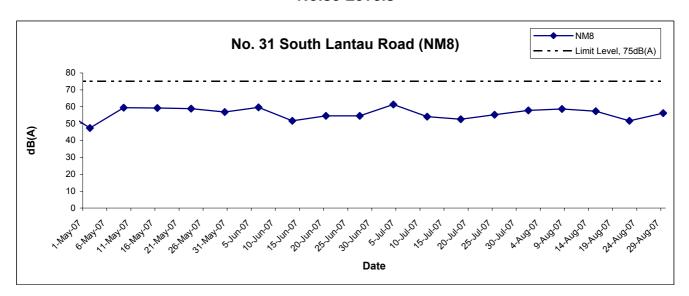
Title Contract No. HY/2003/19
Improvement to Tung Chung Road
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Graphical Presentation of Construction Noise Monitoring
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Scale Project
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Noise Levels



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

Graphical Presentation of Construction Noise Monitoring Results

Scale Project
No. MA6030

Date Aug 07 Appendix E



APPENDIX F WATER QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATION

Water Quality Monitoring Results at 15_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	12:20	Middle	0.09	28.2 28.2	28.2	7.6 7.6	7.6	0.02 0.02	0.02	95.1 95.0	95.1	8.6 8.6	8.6	1.6 1.6	1.6	9.0 8.0	8.5
3-Aug-07	Sunny	Calm	15:08	Middle	0.09	28.1 28.1	28.1	7.5 7.5	7.5	0.02 0.02	0.02	95.0 94.8	94.9	8.6 8.6	8.6	1.7 1.7	1.7	8.0 8.0	8
6-Aug-07	Fine	Calm	15:02	Middle	0.09	28.1 28.1	28.1	7.5 7.5	7.5	0.02 0.02	0.02	92.8 92.5	92.7	8.5 8.5	8.5	2.1 2.1	2.1	21.0 20.0	20.5
8-Aug-07	Rainy	Calm	12:36	Middle	0.09	28.0 28.0	28	7.5 7.5	7.5	0.02 0.02	0.02	90.7 90.4	90.6	8.4 8.3	8.4	1.8 1.8	1.8	16.0 17.0	16.5
10-Aug-07	Rainy	Calm	12:46	Middle	0.09	28.0 28.0	28	7.5 7.5	7.5	0.02 0.02	0.02	89.6 89.4	89.5	8.3 8.3	8.3	1.8 1.8	1.8	3.0 3.0	3
13-Aug-07	Cloudy	Calm	12:56	Middle	0.09	28.0 28.0	28	7.6 7.6	7.6	0.02 0.02	0.02	91.2 90.9	91.1	8.4 8.4	8.4	2.0 2.0	2	4.0 4.0	4
15-Aug-07	Cloudy	Calm	12:56	Middle	0.09	27.9 27.9	27.9	7.5 7.5	7.5	0.02 0.02	0.02	89.7 89.4	89.6	8.3 8.3	8.3	1.9 1.9	1.9	4.0 4.0	4
17-Aug-07	Rainy	Calm	12:06	Middle	0.09	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	92.1 91.6	91.9	8.3 8.3	8.3	2.4 2.3	2.4	13.0 13.0	13
20-Aug-07	Cloudy	Calm	11:30	Middle	0.09	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	84.9 84.8	84.9	7.8 7.8	7.8	1.9 1.9	1.9	3.0 3.0	3
22-Aug-07	Cloudy	Calm	13:21	Middle	0.09	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	88.5 88.2	88.4	8.1 8.0	8.1	2.0 2.0	2	4.0 4.0	4
24-Aug-07	Sunny	Calm	12:26	Middle	0.09	27.8 27.8	27.8	7.6 7.6	7.6	0.02 0.02	0.02	86.7 86.5	86.6	7.9 7.9	7.9	1.8 1.8	1.8	4.0 4.0	4
27-Aug-07	Sunny	Calm	14:11	Middle	0.09	28.1 28.1	28.1	7.6 7.6	7.6	0.02 0.02	0.02	90.6 90.3	90.5	8.3 8.2	8.3	1.7 1.7	1.7	5.0 5.0	5
29-Aug-07	Cloudy	Calm	16:17	Middle	0.09	28.1 28.1	28.1	7.5 7.5	7.5	0.02 0.02	0.02	88.6 88.4	88.5	8.1 8.1	8.1	1.9 1.9	1.9	7.0 7.0	7
31-Aug-07	Sunny	Calm	14:13	Middle	0.09	28.2 28.2	28.2	7.6 7.6	7.6	0.02 0.02	0.02	88.6 88.4	88.5	8.1 8.1	8.1	1.7 1.7	1.7	5.0 4.0	4.5

Water Quality Monitoring Results at 15_R

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	12:13	Middle	0.08	28.1 28.1	28.1	7.6 7.6	7.6	0.02 0.02	0.02	92.0 93.8	92.9	8.3 8.5	8.4	1.8 1.7	1.8	6.0 6.0	6
3-Aug-07	Sunny	Calm	15:02	Middle	0.08	28.1 28.1	28.1	7.5 7.5	7.5	0.02 0.02	0.02	92.2 93.8	93	8.4 8.5	8.5	1.8 1.8	1.8	5.0 5.0	5
6-Aug-07	Fine	Calm	14:55	Middle	0.08	28.0 28.0	28	7.5 7.5	7.5	0.02 0.02	0.02	91.8 92.2	92	8.4 8.5	8.5	2.2 2.2	2.2	16.0 16.0	16
8-Aug-07	Rainy	Calm	12:30	Middle	0.08	27.9 27.9	27.9	7.5 7.5	7.5	0.02 0.02	0.02	90.7 90.7	90.7	8.4 8.4	8.4	1.9 1.9	1.9	12.0 11.0	11.5
10-Aug-07	Rainy	Calm	12:40	Middle	0.08	27.9 27.9	27.9	7.5 7.5	7.5	0.02 0.02	0.02	90.2 89.7	90	8.3 8.3	8.3	1.9 1.9	1.9	3.0 3.0	3
13-Aug-07	Cloudy	Calm	12:49	Middle	0.08	27.9 27.9	27.9	7.6 7.6	7.6	0.02 0.02	0.02	91.0 90.9	91	8.4 8.4	8.4	2.1 2.1	2.1	6.0 5.0	5.5
15-Aug-07	Cloudy	Calm	12:49	Middle	0.08	27.8 27.8	27.8	7.5 7.5	7.5	0.02 0.02	0.02	90.1 89.6	89.9	8.3 8.3	8.3	2.0 2.0	2	7.0 6.0	6.5
17-Aug-07	Rainy	Calm	11:59	Middle	0.08	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	92.3 91.7	92	8.3 8.3	8.3	2.4 2.3	2.4	18.0 17.0	17.5
20-Aug-07	Cloudy	Calm	11:23	Middle	0.08	27.7 27.7	27.7	7.8 7.8	7.8	0.02 0.02	0.02	85.0 84.7	84.9	7.8 7.8	7.8	2.1 2.1	2.1	5.0 5.0	5
22-Aug-07	Cloudy	Calm	13:15	Middle	0.08	27.6 27.6	27.6	7.7 7.7	7.7	0.02 0.02	0.02	88.6 88.2	88.4	8.1 8.1	8.1	2.2 2.2	2.2	3.0 4.0	3.5
24-Aug-07	Sunny	Calm	12:19	Middle	0.08	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	86.8 86.4	86.6	7.9 7.9	7.9	2.0 2.0	2	6.0 5.0	5.5
27-Aug-07	Sunny	Calm	14:04	Middle	0.08	28.0 28.0	28	7.6 7.6	7.6	0.02 0.02	0.02	90.2 90.2	90.2	8.2 8.3	8.3	1.8 1.8	1.8	5.0 5.0	5
29-Aug-07	Cloudy	Calm	16:11	Middle	0.08	28.1 28.1	28.1	7.5 7.5	7.5	0.02 0.02	0.02	88.5 88.3	88.4	8.1 8.1	8.1	2.0 2.0	2	5.0 6.0	5.5
31-Aug-07	Sunny	Calm	14:07	Middle	0.08	28.1 28.1	28.1	7.6 7.6	7.6	0.02 0.02	0.02	88.5 88.3	88.4	8.1 8.1	8.1	1.8 1.8	1.8	4.0 4.0	4

Water Quality Monitoring Results at 18_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ture (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Всра	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6-Aug-07	Fine	Calm	14:44	Middle	0.1	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	89.4 89.3	89.4	8.3 8.3	8.3	2.1 2.0	2.1	21.0 21.0	21
8-Aug-07	Rainy	Calm	12:19	Middle	0.1	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	89.8 89.7	89.8	8.3 8.3	8.3	1.8 1.7	1.8	4.0 4.0	4
10-Aug-07	Rainy	Calm	12:29	Middle	0.1	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	88.7 88.7	88.7	8.2 8.2	8.2	1.9 1.9	1.9	6.0 5.0	5.5
13-Aug-07	Cloudy	Calm	12:39	Middle	0.1	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	89.0 89.0	89	8.3 8.3	8.3	2.1 2.1	2.1	6.0 6.0	6
15-Aug-07	Cloudy	Calm	12:39	Middle	0.1	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	88.5 88.5	88.5	8.2 8.2	8.2	2.0 2.0	2	6.0 6.0	6
17-Aug-07	Rainy	Calm	11:49	Middle	0.1	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	91.5 91.1	91.3	8.3 8.3	8.3	2.4 2.3	2.4	15.0 15.0	15
20-Aug-07	Cloudy	Calm	11:13	Middle	0.1	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	84.6 84.5	84.6	7.8 7.8	7.8	2.0 2.0	2	5.0 5.0	5
22-Aug-07	Cloudy	Calm	13:04	Middle	0.1	27.5 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	88.0 87.8	87.9	8.0 8.0	8	2.1 2.1	2.1	4.0 4.0	4
24-Aug-07	Sunny	Calm	12:09	Middle	0.1	27.6 27.6	27.6	7.7 7.7	7.7	0.02 0.02	0.02	86.3 86.1	86.2	7.9 7.9	7.9	1.9 1.9	1.9	5.0 5.0	5
27-Aug-07	Sunny	Calm	13:53	Middle	0.1	27.8 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	88.7 88.5	88.6	8.2 8.2	8.2	1.7 1.6	1.7	5.0 5.0	5
29-Aug-07	Cloudy	Calm	15:59	Middle	0.1	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	87.5 87.3	87.4	8.0 8.0	8	1.9 1.8	1.9	7.0 7.0	7
31-Aug-07	Sunny	Calm	13:55	Middle	0.1	27.9 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	87.5 87.3	87.4	8.0 8.0	8	1.7 1.6	1.7	4.0 4.0	4

Water Quality Monitoring Results at 18_R

Date	Weather	Sea	Sampling	Dent	h (m)	Tempera	ture (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Всра	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6-Aug-07	Fine	Calm	14:40	Middle	0.175	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	90.2 89.2	89.7	8.4 8.3	8.4	2.1 2.1	2.1	20.0 21.0	20.5
8-Aug-07	Rainy	Calm	12:16	Middle	0.175	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	90.5 89.5	90	8.4 8.3	8.4	1.8 1.8	1.8	5.0 5.0	5
10-Aug-07	Rainy	Calm	12:26	Middle	0.175	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	89.4 88.5	89	8.3 8.2	8.3	2.1 2.0	2.1	6.0 6.0	6
13-Aug-07	Cloudy	Calm	12:35	Middle	0.175	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	89.8 88.8	89.3	8.3 8.2	8.3	2.3 2.2	2.3	5.0 5.0	5
15-Aug-07	Cloudy	Calm	12:35	Middle	0.175	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	89.3 88.3	88.8	8.3 8.2	8.3	2.2 2.1	2.2	7.0 7.0	7
17-Aug-07	Rainy	Calm	11:45	Middle	0.175	27.6 27.6	27.6	7.9 7.8	7.9	0.02 0.02	0.02	93.3 91.4	92.4	8.4 8.3	8.4	2.8 2.6	2.7	18.0 18.0	18
20-Aug-07	Cloudy	Calm	11:09	Middle	0.175	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	85.5 84.6	85.1	7.9 7.8	7.9	2.2 2.1	2.2	5.0 5.0	5
22-Aug-07	Cloudy	Calm	13:01	Middle	0.175	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	89.4 88.0	88.7	8.1 8.0	8.1	2.3 2.2	2.3	5.0 5.0	5
24-Aug-07	Sunny	Calm	12:05	Middle	0.175	27.6 27.6	27.6	7.7 7.7	7.7	0.02 0.02	0.02	87.4 86.3	86.9	8.0 7.9	8	2.1 2.0	2.1	4.0 4.0	4
27-Aug-07	Sunny	Calm	13:49	Middle	0.175	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	89.8 88.6	89.2	8.3 8.2	8.3	1.7 1.7	1.7	5.0 5.0	5
29-Aug-07	Cloudy	Calm	15:55	Middle	0.175	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	88.6 87.4	88	8.1 8.0	8.1	1.9 1.9	1.9	5.0 5.0	5
31-Aug-07	Sunny	Calm	13:51	Middle	0.175	27.9 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	88.6 87.4	88	8.1 8.0	8.1	1.7 1.7	1.7	4.0 4.0	4

Water Quality Monitoring Results at 21_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:55	Middle	0.14	27.8 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	92.5 92.4	92.5	8.4 8.4	8.4	1.8 1.8	1.8	6.0 6.0	6
3-Aug-07	Sunny	Calm	14:42	Middle	0.14	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	92.8 92.9	92.9	8.5 8.5	8.5	1.9 1.9	1.9	9.0 8.0	8.5
6-Aug-07	Fine	Calm	14:36	Middle	0.14	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	91.0 91.5	91.3	8.4 8.5	8.5	2.2 2.3	2.3	18.0 18.0	18
8-Aug-07	Rainy	Calm	12:10	Middle	0.14	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	90.1 90.5	90.3	8.4 8.4	8.4	1.9 2.0	2	3.0 3.0	3
10-Aug-07	Rainy	Calm	12:21	Middle	0.14	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	88.9 89.3	89.1	8.3 8.3	8.3	2.3 2.2	2.3	6.0 6.0	6
13-Aug-07	Cloudy	Calm	12:30	Middle	0.14	27.6 27.7	27.7	7.9 7.9	7.9	0.02 0.02	0.02	89.9 90.4	90.2	8.4 8.4	8.4	2.5 2.4	2.5	5.0 5.0	5
15-Aug-07	Cloudy	Calm	12:30	Middle	0.14	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	88.8 89.3	89.1	8.3 8.3	8.3	2.2 2.1	2.2	5.0 5.0	5
17-Aug-07	Rainy	Calm	11:40	Middle	0.14	27.4 27.4	27.4	7.9 7.9	7.9	0.02 0.02	0.02	89.7 89.8	89.8	8.2 8.2	8.2	2.5 2.4	2.5	13.0 13.0	13
20-Aug-07	Cloudy	Calm	11:04	Middle	0.14	27.4 27.5	27.5	7.9 7.9	7.9	0.02 0.02	0.02	82.0 81.9	82	7.6 7.6	7.6	2.1 2.0	2.1	4.0 5.0	4.5
22-Aug-07	Cloudy	Calm	12:55	Middle	0.14	27.4 27.4	27.4	7.9 7.9	7.9	0.02 0.02	0.02	85.8 85.8	85.8	7.9 7.9	7.9	2.2 2.1	2.2	4.0 4.0	4
24-Aug-07	Sunny	Calm	12:00	Middle	0.14	27.4 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	83.9 83.8	83.9	7.8 7.8	7.8	2.0 1.9	2	4.0 4.0	4
27-Aug-07	Sunny	Calm	13:45	Middle	0.14	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	88.4 88.6	88.5	8.2 8.2	8.2	1.8 1.9	1.9	4.0 5.0	4.5
29-Aug-07	Cloudy	Calm	15:51	Middle	0.14	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	86.1 86.2	86.2	8.0 8.0	8	2.0 2.1	2.1	6.0 6.0	6
31-Aug-07	Sunny	Calm	13:47	Middle	0.14	27.9 27.9	27.9	7.9 7.9	7.9	0.02 0.02	0.02	86.1 86.2	86.2	8.0 8.0	8	1.8 1.9	1.9	6.0 5.0	5.5

Water Quality Monitoring Results at 21_R

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:51	Middle	0.1	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	93.1 92.7	92.9	8.5 8.5	8.5	1.9 1.9	1.9	7.0 7.0	7
3-Aug-07	Sunny	Calm	14:38	Middle	0.1	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	94.0 93.4	93.7	8.6 8.6	8.6	2.0 2.0	2	4.0 4.0	4
6-Aug-07	Fine	Calm	14:31	Middle	0.1	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	92.6 91.8	92.2	8.6 8.5	8.6	2.3 2.3	2.3	20.0 20.0	20
8-Aug-07	Rainy	Calm	12:06	Middle	0.1	27.6 27.6	27.6	7.7 7.7	7.7	0.02 0.02	0.02	91.6 90.8	91.2	8.5 8.5	8.5	2.0 2.0	2	7.0 8.0	7.5
10-Aug-07	Rainy	Calm	12:16	Middle	0.1	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	90.4 89.6	90	8.4 8.4	8.4	2.4 2.3	2.4	6.0 6.0	6
13-Aug-07	Cloudy	Calm	12:26	Middle	0.1	27.6 27.6	27.6	7.9 7.9	7.9	0.02 0.02	0.02	91.5 90.7	91.1	8.5 8.4	8.5	2.6 2.5	2.6	4.0 5.0	4.5
15-Aug-07	Cloudy	Calm	12:26	Middle	0.1	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	90.3 89.6	90	8.4 8.4	8.4	2.3 2.2	2.3	4.0 4.0	4
17-Aug-07	Rainy	Calm	11:35	Middle	0.1	27.4 27.4	27.4	7.9 7.9	7.9	0.02 0.02	0.02	90.6 90.2	90.4	8.2 8.2	8.2	3.1 3.0	3.1	27.0 26.0	26.5
20-Aug-07	Cloudy	Calm	11:00	Middle	0.1	27.4 27.4	27.4	7.9 7.9	7.9	0.02 0.02	0.02	82.3 82.0	82.2	7.7 7.6	7.7	2.2 2.2	2.2	5.0 5.0	5
22-Aug-07	Cloudy	Calm	12:51	Middle	0.1	27.3 27.3	27.3	7.9 7.9	7.9	0.02 0.02	0.02	86.4 86.1	86.3	7.9 7.9	7.9	2.3 2.3	2.3	4.0 4.0	4
24-Aug-07	Sunny	Calm	11:55	Middle	0.1	27.4 27.4	27.4	7.8 7.8	7.8	0.02 0.02	0.02	84.3 84.0	84.2	7.8 7.8	7.8	2.1 2.1	2.1	4.0 4.0	4
27-Aug-07	Sunny	Calm	13:41	Middle	0.1	27.7 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	89.5 88.9	89.2	8.3 8.2	8.3	1.9 1.9	1.9	5.0 5.0	5
29-Aug-07	Cloudy	Calm	15:47	Middle	0.1	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	86.9 86.4	86.7	8.0 8.0	8	2.1 2.1	2.1	4.0 5.0	4.5
31-Aug-07	Sunny	Calm	13:43	Middle	0.1	27.8 27.8	27.8	7.9 7.9	7.9	0.02 0.02	0.02	86.9 86.4	86.7	8.0 8.0	8	1.8 1.8	1.8	4.0 4.0	4

Water Quality Monitoring Results at 23_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:45	Middle	0.09	28.0 28.0	28	7.6 7.6	7.6	0.03 0.03	0.03	94.5 94.2	94.4	8.6 8.6	8.6	1.8 1.8	1.8	10.0 9.0	9.5
3-Aug-07	Sunny	Calm	14:32	Middle	0.09	27.9 27.9	27.9	7.6 7.6	7.6	0.03 0.03	0.03	94.4 93.9	94.2	8.6 8.6	8.6	2.0 1.9	2	6.0 6.0	6
6-Aug-07	Fine	Calm	14:25	Middle	0.09	27.9 27.9	27.9	7.6 7.6	7.6	0.02 0.02	0.02	92.8 92.4	92.6	8.6 8.5	8.6	2.3 2.2	2.3	12.0 12.0	12
8-Aug-07	Rainy	Calm	12:00	Middle	0.09	27.8 27.8	27.8	7.6 7.6	7.6	0.02 0.02	0.02	90.9 90.5	90.7	8.5 8.4	8.5	1.9 1.9	1.9	10.0 10.0	10
10-Aug-07	Rainy	Calm	12:10	Middle	0.09	27.7 27.7	27.7	7.6 7.6	7.6	0.02 0.02	0.02	90.5 89.9	90.2	8.4 8.4	8.4	2.1 2.1	2.1	3.0 3.0	3
13-Aug-07	Cloudy	Calm	12:20	Middle	0.09	27.8 27.8	27.8	7.7 7.7	7.7	0.02 0.02	0.02	91.6 91.1	91.4	8.5 8.5	8.5	2.3 2.3	2.3	<2.5 <2.5	<2.5
15-Aug-07	Cloudy	Calm	12:20	Middle	0.09	27.6 27.6	27.6	7.6 7.6	7.6	0.02 0.02	0.02	90.5 89.9	90.2	8.4 8.4	8.4	2.1 2.1	2.1	5.0 5.0	5
17-Aug-07	Rainy	Calm	11:29	Middle	0.09	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	87.9 91.4	89.7	7.9 8.3	8.1	2.5 2.4	2.5	15.0 16.0	15.5
20-Aug-07	Cloudy	Calm	10:54	Middle	0.09	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	84.5 86.1	85.3	7.8 8.0	7.9	2.2 2.1	2.2	4.0 4.0	4
22-Aug-07	Cloudy	Calm	12:45	Middle	0.09	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	86.2 88.7	87.5	7.9 8.1	8	2.3 2.2	2.3	3.0 3.0	3
24-Aug-07	Sunny	Calm	11:49	Middle	0.09	27.6 27.6	27.6	7.7 7.7	7.7	0.02 0.02	0.02	85.3 87.4	86.4	7.9 8.1	8	2.1 2.0	2.1	4.0 4.0	4
27-Aug-07	Sunny	Calm	13:35	Middle	0.09	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	89.5 90.5	90	8.2 8.3	8.3	1.9 1.8	1.9	6.0 6.0	6
29-Aug-07	Cloudy	Calm	15:41	Middle	0.09	27.9 27.9	27.9	7.6 7.6	7.6	0.02 0.02	0.02	87.4 88.9	88.2	8.0 8.2	8.1	2.1 2.0	2.1	6.0 6.0	6
31-Aug-07	Sunny	Calm	13:37	Middle	0.09	28.0 28.0	28	7.7 7.7	7.7	0.02 0.02	0.02	87.4 88.9	88.2	8.0 8.2	8.1	1.8 1.7	1.8	4.0 4.0	4

Water Quality Monitoring Results at 23_R1

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:32	Middle	0.09	27.9 27.9	27.9	7.6 7.6	7.6	0.03 0.03	0.03	95.5 95.0	95.3	8.7 8.7	8.7	1.8 1.8	1.8	6.0 6.0	6
3-Aug-07	Sunny	Calm	14:19	Middle	0.09	27.9 27.9	27.9	7.6 7.6	7.6	0.03 0.03	0.03	96.4 95.5	96	8.8 8.8	8.8	2.0 2.0	2	6.0 6.0	6
6-Aug-07	Fine	Calm	14:12	Middle	0.09	27.8 27.8	27.8	7.6 7.6	7.6	0.02 0.02	0.02	95.4 94.5	95	8.8 8.8	8.8	2.3 2.3	2.3	17.0 17.0	17
8-Aug-07	Rainy	Calm	11:47	Middle	0.09	27.7 27.7	27.7	7.6 7.6	7.6	0.02 0.02	0.02	93.8 92.7	93.3	8.7 8.6	8.7	1.9 1.9	1.9	8.0 8.0	8
10-Aug-07	Rainy	Calm	11:57	Middle	0.09	27.7 27.7	27.7	7.6 7.6	7.6	0.02 0.02	0.02	93.7 92.2	93	8.7 8.6	8.7	2.2 2.2	2.2	3.0 3.0	3
13-Aug-07	Cloudy	Calm	12:07	Middle	0.09	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	94.5 93.3	93.9	8.8 8.7	8.8	2.4 2.4	2.4	5.0 5.0	5
15-Aug-07	Cloudy	Calm	12:07	Middle	0.09	27.6 27.6	27.6	7.6 7.6	7.6	0.02 0.02	0.02	93.6 92.2	92.9	8.7 8.6	8.7	2.0 2.0	2	5.0 5.0	5
17-Aug-07	Rainy	Calm	11:16	Middle	0.09	27.5 27.5	27.5	7.9 7.8	7.9	0.02 0.02	0.02	90.8 90.0	90.4	8.2 8.2	8.2	2.9 2.8	2.9	19.0 19.0	19
20-Aug-07	Cloudy	Calm	10:41	Middle	0.09	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	88.0 86.9	87.5	8.2 8.1	8.2	2.4 2.3	2.4	5.0 4.0	4.5
22-Aug-07	Cloudy	Calm	12:32	Middle	0.09	27.4 27.4	27.4	7.8 7.8	7.8	0.02 0.02	0.02	89.4 88.4	88.9	8.2 8.1	8.2	2.5 2.4	2.5	3.0 3.0	3
24-Aug-07	Sunny	Calm	11:36	Middle	0.09	27.5 27.5	27.5	7.7 7.7	7.7	0.02 0.02	0.02	88.7 87.6	88.2	8.2 8.1	8.2	2.3 2.2	2.3	4.0 4.0	4
27-Aug-07	Sunny	Calm	13:22	Middle	0.09	27.8 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	92.4 91.4	91.9	8.5 8.4	8.5	1.9 1.9	1.9	5.0 5.0	5
29-Aug-07	Cloudy	Calm	15:28	Middle	0.09	27.9 27.9	27.9	7.6 7.6	7.6	0.02 0.02	0.02	90.5 89.5	90	8.4 8.3	8.4	2.1 2.1	2.1	6.0 6.0	6
31-Aug-07	Sunny	Calm	13:24	Middle	0.09	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	90.5 89.5	90	8.4 8.3	8.4	1.8 1.8	1.8	4.0 4.0	4

Water Quality Monitoring Results at 23_R2

Date	Weather	Sea	Sampling	Dent	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:38	Middle	0.1	27.9 27.9	27.9	7.6 7.6	7.6	0.03 0.03	0.03	95.0 94.9	95	8.6 8.6	8.6	1.8 1.8	1.8	8.0 8.0	8
3-Aug-07	Sunny	Calm	14:25	Middle	0.1	27.9 27.9	27.9	7.6 7.6	7.6	0.03 0.03	0.03	95.6 95.3	95.5	8.8 8.7	8.8	1.9 1.9	1.9	6.0 6.0	6
6-Aug-07	Fine	Calm	14:18	Middle	0.1	27.8 27.8	27.8	7.6 7.6	7.6	0.02 0.02	0.02	94.5 94.3	94.4	8.7 8.7	8.7	2.2 2.2	2.2	20.0 19.0	19.5
8-Aug-07	Rainy	Calm	11:53	Middle	0.1	27.7 27.7	27.7	7.6 7.6	7.6	0.02 0.02	0.02	92.6 92.4	92.5	8.6 8.6	8.6	1.8 1.8	1.8	10.0 10.0	10
10-Aug-07	Rainy	Calm	12:03	Middle	0.1	27.7 27.7	27.7	7.6 7.6	7.6	0.02 0.02	0.02	92.3 92.1	92.2	8.6 8.6	8.6	2.1 2.0	2.1	4.0 4.0	4
13-Aug-07	Cloudy	Calm	12:13	Middle	0.1	27.7 27.7	27.7	7.7 7.7	7.7	0.02 0.02	0.02	93.4 93.2	93.3	8.7 8.7	8.7	2.3 2.2	2.3	5.0 5.0	5
15-Aug-07	Cloudy	Calm	12:13	Middle	0.1	27.6 27.6	27.6	7.6 7.6	7.6	0.02 0.02	0.02	92.4 92.1	92.3	8.6 8.6	8.6	2.1 2.1	2.1	6.0 6.0	6
17-Aug-07	Rainy	Calm	11:22	Middle	0.1	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	90.0 88.8	89.4	8.2 8.0	8.1	2.7 2.6	2.7	19.0 19.0	19
20-Aug-07	Cloudy	Calm	10:47	Middle	0.1	27.5 27.5	27.5	7.8 7.8	7.8	0.02 0.02	0.02	85.9 85.4	85.7	8.0 7.9	8	2.2 2.2	2.2	4.0 4.0	4
22-Aug-07	Cloudy	Calm	12:38	Middle	0.1	27.4 27.4	27.4	7.8 7.8	7.8	0.02 0.02	0.02	87.9 87.1	87.5	8.1 8.0	8.1	2.3 2.3	2.3	4.0 4.0	4
24-Aug-07	Sunny	Calm	11:42	Middle	0.1	27.5 27.5	27.5	7.7 7.7	7.7	0.02 0.02	0.02	86.9 86.2	86.6	8.0 7.9	8	2.1 2.1	2.1	5.0 4.0	4.5
27-Aug-07	Sunny	Calm	13:28	Middle	0.1	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	91.2 90.7	91	8.4 8.3	8.4	1.8 1.8	1.8	8.0 8.0	8
29-Aug-07	Cloudy	Calm	15:34	Middle	0.1	27.9 27.9	27.9	7.6 7.6	7.6	0.02 0.02	0.02	89.0 88.4	88.7	8.2 8.1	8.2	2.0 2.0	2	6.0 6.0	6
31-Aug-07	Sunny	Calm	13:30	Middle	0.1	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	89.0 88.4	88.7	8.2 8.1	8.2	1.7 1.7	1.7	4.0 4.0	4

Water Quality Monitoring Results at 26_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	10:51	Middle	0.14	27.9 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	93.5 91.7	92.6	8.4 8.0	8.2	1.7 1.8	1.8	5.0 6.0	5.5
3-Aug-07	Sunny	Calm	13:38	Middle	0.14	27.9 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	94.4 92.7	93.6	8.6 8.2	8.4	1.7 1.7	1.7	6.0 6.0	6
6-Aug-07	Fine	Calm	13:32	Middle	0.14	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	93.6 93.2	93.4	8.6 8.5	8.6	2.1 2.2	2.2	18.0 19.0	18.5
8-Aug-07	Rainy	Calm	11:06	Middle	0.14	27.7 27.7	27.7	7.8 7.8	7.8	0.03 0.03	0.03	92.5 92.3	92.4	8.6 8.5	8.6	1.8 1.9	1.9	10.0 11.0	10.5
10-Aug-07	Rainy	Calm	11:16	Middle	0.14	27.7 27.7	27.7	7.9 7.9	7.9	0.03 0.03	0.03	92.2 92.3	92.3	8.5 8.5	8.5	2.0 2.0	2	5.0 4.0	4.5
13-Aug-07	Cloudy	Calm	11:26	Middle	0.14	27.7 27.7	27.7	8.0 8.0	8	0.02 0.02	0.02	92.9 92.7	92.8	8.6 8.5	8.6	2.2 2.2	2.2	3.0 4.0	3.5
15-Aug-07	Cloudy	Calm	11:26	Middle	0.14	27.6 27.6	27.6	7.9 7.9	7.9	0.03 0.03	0.03	91.8 91.7	91.8	8.5 8.4	8.5	2.1 2.1	2.1	6.0 6.0	6
17-Aug-07	Rainy	Calm	10:36	Middle	0.14	27.5 27.5	27.5	8.0 8.0	8	0.03 0.03	0.03	94.8 98.0	96.4	8.6 8.6	8.6	2.3 2.3	2.3	12.0 12.0	12
20-Aug-07	Cloudy	Calm	10:00	Middle	0.14	27.5 27.5	27.5	8.0 8.0	8	0.03 0.03	0.03	88.5 89.9	89.2	8.2 8.2	8.2	1.9 1.9	1.9	6.0 5.0	5.5
22-Aug-07	Cloudy	Calm	11:51	Middle	0.14	27.4 27.4	27.4	7.9 7.9	7.9	0.03 0.03	0.03	91.6 93.9	92.8	8.4 8.4	8.4	1.9 1.9	1.9	4.0 4.0	4
24-Aug-07	Sunny	Calm	10:56	Middle	0.14	27.5 27.5	27.5	7.9 7.8	7.9	0.03 0.03	0.03	90.0 91.9	91	8.3 8.3	8.3	1.7 1.7	1.7	4.0 4.0	4
27-Aug-07	Sunny	Calm	12:41	Middle	0.14	27.8 27.8	27.8	7.9 7.9	7.9	0.03 0.03	0.03	92.6 93.5	93.1	8.5 8.4	8.5	1.7 1.8	1.8	4.0 5.0	4.5
29-Aug-07	Cloudy	Calm	14:47	Middle	0.14	27.9 27.9	27.9	7.9 7.9	7.9	0.03 0.03	0.03	91.3 92.7	92	8.4 8.4	8.4	1.9 2.0	2	5.0 5.0	5
31-Aug-07	Sunny	Calm	12:43	Middle	0.14	27.9 27.9	27.9	8.0 8.0	8	0.03 0.03	0.03	91.3 92.7	92	8.4 8.4	8.4	1.8 1.9	1.9	5.0 5.0	5

Water Quality Monitoring Results at 26_R

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:21	Middle	0.09	28.0 28.0	28	7.8 7.8	7.8	0.02 0.02	0.02	95.2 94.9	95.1	8.5 8.5	8.5	1.8 1.8	1.8	8.0 8.0	8
3-Aug-07	Sunny	Calm	14:08	Middle	0.09	28.0 28.0	28	7.7 7.7	7.7	0.02 0.02	0.02	95.3 94.9	95.1	8.6 8.6	8.6	1.9 1.9	1.9	6.0 6.0	6
6-Aug-07	Fine	Calm	14:01	Middle	0.09	27.9 27.9	27.9	7.8 7.7	7.8	0.02 0.02	0.02	93.0 92.6	92.8	8.5 8.5	8.5	2.2 2.2	2.2	16.0 16.0	16
8-Aug-07	Rainy	Calm	11:36	Middle	0.09	27.8 27.8	27.8	7.8 7.8	7.8	0.03 0.03	0.03	91.8 91.4	91.6	8.5 8.5	8.5	1.9 1.9	1.9	13.0 13.0	13
10-Aug-07	Rainy	Calm	11:46	Middle	0.09	27.8 27.8	27.8	7.8 7.8	7.8	0.03 0.03	0.03	90.7 90.3	90.5	8.4 8.4	8.4	1.8 1.8	1.8	4.0 4.0	4
13-Aug-07	Cloudy	Calm	11:55	Middle	0.09	27.8 27.8	27.8	7.9 7.9	7.9	0.02 0.02	0.02	91.8 91.4	91.6	8.5 8.4	8.5	2.0 2.0	2	4.0 4.0	4
15-Aug-07	Cloudy	Calm	11:55	Middle	0.09	27.7 27.7	27.7	7.8 7.8	7.8	0.03 0.03	0.03	90.6 90.2	90.4	8.4 8.4	8.4	2.0 2.0	2	7.0 6.0	6.5
17-Aug-07	Rainy	Calm	11:05	Middle	0.09	27.6 27.6	27.6	8.0 8.0	8	0.03 0.03	0.03	96.9 89.3	93.1	8.6 8.1	8.4	2.2 2.2	2.2	16.0 16.0	16
20-Aug-07	Cloudy	Calm	10:30	Middle	0.09	27.6 27.6	27.6	8.0 8.0	8	0.03 0.03	0.03	88.9 84.9	86.9	8.1 7.8	8	1.8 1.8	1.8	5.0 5.0	5
22-Aug-07	Cloudy	Calm	12:21	Middle	0.09	27.5 27.5	27.5	7.9 7.9	7.9	0.03 0.03	0.03	92.9 87.1	90	8.3 8.0	8.2	1.9 1.9	1.9	3.0 4.0	3.5
24-Aug-07	Sunny	Calm	11:25	Middle	0.09	27.6 27.6	27.6	7.9 7.8	7.9	0.03 0.03	0.03	90.9 86.0	88.5	8.2 7.9	8.1	1.7 1.7	1.7	4.0 4.0	4
27-Aug-07	Sunny	Calm	13:11	Middle	0.09	27.9 28.0	28	7.8 7.8	7.8	0.03 0.03	0.03	92.9 89.8	91.4	8.4 8.2	8.3	1.8 1.8	1.8	6.0 6.0	6
29-Aug-07	Cloudy	Calm	15:17	Middle	0.09	28.0 28.0	28	7.8 7.8	7.8	0.03 0.03	0.03	91.9 87.9	89.9	8.3 8.1	8.2	2.0 2.0	2	3.0 3.0	3
31-Aug-07	Sunny	Calm	13:13	Middle	0.09	28.0 28.0	28	7.9 7.9	7.9	0.03 0.03	0.03	91.9 87.9	89.9	8.3 8.1	8.2	1.7 1.7	1.7	3.0 4.0	3.5

Water Quality Monitoring Results at 27_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:14	Middle	0.08	27.9 28.0	28	7.8 7.8	7.8	0.02 0.02	0.02	95.4 95.2	95.3	8.7 8.6	8.7	1.6 1.6	1.6	6.0 6.0	6
3-Aug-07	Sunny	Calm	14:02	Middle	0.08	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	95.8 95.6	95.7	8.8 8.8	8.8	1.7 1.7	1.7	8.0 8.0	8
6-Aug-07	Fine	Calm	13:55	Middle	0.08	27.8 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	93.5 93.4	93.5	8.6 8.6	8.6	2.1 2.1	2.1	9.0 9.0	9
8-Aug-07	Rainy	Calm	11:30	Middle	0.08	27.7 27.8	27.8	7.8 7.8	7.8	0.03 0.03	0.03	92.7 92.6	92.7	8.6 8.6	8.6	1.8 1.8	1.8	9.0 10.0	9.5
10-Aug-07	Rainy	Calm	11:40	Middle	0.08	27.7 27.7	27.7	7.8 7.8	7.8	0.03 0.03	0.03	91.8 91.7	91.8	8.6 8.5	8.6	1.8 1.8	1.8	6.0 6.0	6
13-Aug-07	Cloudy	Calm	11:49	Middle	0.08	27.7 27.8	27.8	7.9 7.9	7.9	0.02 0.02	0.02	92.6 92.5	92.6	8.6 8.6	8.6	2.0 2.0	2	4.0 4.0	4
15-Aug-07	Cloudy	Calm	11:49	Middle	0.08	27.6 27.6	27.6	7.8 7.8	7.8	0.03 0.03	0.03	91.7 91.6	91.7	8.6 8.5	8.6	1.9 1.9	1.9	5.0 5.0	5
17-Aug-07	Rainy	Calm	10:59	Middle	0.08	27.5 27.5	27.5	8.1 8.1	8.1	0.03 0.03	0.03	97.7 97.5	97.6	8.7 8.7	8.7	2.1 2.1	2.1	18.0 17.0	17.5
20-Aug-07	Cloudy	Calm	10:23	Middle	0.08	27.5 27.6	27.6	8.0 8.0	8	0.03 0.03	0.03	89.7 89.4	89.6	8.2 8.2	8.2	1.7 1.7	1.7	5.0 5.0	5
22-Aug-07	Cloudy	Calm	12:15	Middle	0.08	27.4 27.5	27.5	7.9 7.9	7.9	0.03 0.03	0.03	93.7 93.4	93.6	8.4 8.4	8.4	1.8 1.8	1.8	4.0 4.0	4
24-Aug-07	Sunny	Calm	11:19	Middle	0.08	27.5 27.6	27.6	7.9 7.9	7.9	0.03 0.03	0.03	91.7 91.4	91.6	8.3 8.3	8.3	1.6 1.6	1.6	6.0 5.0	5.5
27-Aug-07	Sunny	Calm	13:04	Middle	0.08	27.9 27.9	27.9	7.9 7.8	7.9	0.03 0.03	0.03	93.6 93.4	93.5	8.5 8.5	8.5	1.7 1.7	1.7	5.0 5.0	5
29-Aug-07	Cloudy	Calm	15:11	Middle	0.08	27.9 27.9	27.9	7.8 7.8	7.8	0.03 0.03	0.03	92.6 92.4	92.5	8.4 8.4	8.4	1.9 1.9	1.9	5.0 5.0	5
31-Aug-07	Sunny	Calm	13:07	Middle	0.08	27.9 28.0	28	7.9 7.9	7.9	0.03 0.03	0.03	92.6 92.4	92.5	8.4 8.4	8.4	1.7 1.7	1.7	5.0 5.0	5

Water Quality Monitoring Results at 27_R

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	11:00	Middle	0.13	27.9 27.9	27.9	7.8 7.8	7.8	0.02 0.02	0.02	96.9 96.6	96.8	8.8 8.8	8.8	2.0 2.0	2	5.0 6.0	5.5
3-Aug-07	Sunny	Calm	13:47	Middle	0.13	27.9 27.9	27.9	7.7 7.7	7.7	0.02 0.02	0.02	97.7 97.2	97.5	9.0 8.9	9	2.0 2.1	2.1	5.0 6.0	5.5
6-Aug-07	Fine	Calm	13:40	Middle	0.13	27.8 27.8	27.8	7.8 7.8	7.8	0.02 0.02	0.02	96.5 95.9	96.2	8.9 8.9	8.9	2.3 2.4	2.4	17.0 17.0	17
8-Aug-07	Rainy	Calm	11:15	Middle	0.13	27.7 27.7	27.7	7.8 7.8	7.8	0.03 0.03	0.03	94.9 94.4	94.7	8.8 8.8	8.8	1.9 2.0	2	7.0 6.0	6.5
10-Aug-07	Rainy	Calm	11:25	Middle	0.13	27.7 27.7	27.7	7.8 7.8	7.8	0.03 0.03	0.03	94.7 94.1	94.4	8.8 8.8	8.8	2.1 2.0	2.1	<2.5 <2.5	<2.5
13-Aug-07	Cloudy	Calm	11:35	Middle	0.13	27.7 27.7	27.7	7.9 7.9	7.9	0.02 0.02	0.02	95.6 95.0	95.3	8.9 8.8	8.9	2.3 2.2	2.3	4.0 4.0	4
15-Aug-07	Cloudy	Calm	11:35	Middle	0.13	27.6 27.6	27.6	7.8 7.8	7.8	0.03 0.03	0.03	94.1 93.5	93.8	8.8 8.7	8.8	2.1 2.1	2.1	4.0 5.0	4.5
17-Aug-07	Rainy	Calm	10:44	Middle	0.13	27.5 27.5	27.5	8.0 8.0	8	0.03 0.03	0.03	99.1 98.7	98.9	8.8 8.8	8.8	2.3 2.3	2.3	17.0 17.0	17
20-Aug-07	Cloudy	Calm	10:09	Middle	0.13	27.5 27.5	27.5	8.0 8.0	8	0.03 0.03	0.03	89.8 89.7	89.8	8.2 8.2	8.2	1.9 1.8	1.9	6.0 5.0	5.5
22-Aug-07	Cloudy	Calm	12:00	Middle	0.13	27.4 27.4	27.4	7.9 7.9	7.9	0.03 0.03	0.03	94.4 94.2	94.3	8.5 8.5	8.5	2.0 1.9	2	4.0 4.0	4
24-Aug-07	Sunny	Calm	11:04	Middle	0.13	27.5 27.5	27.5	7.8 7.8	7.8	0.03 0.03	0.03	92.1 91.9	92	8.4 8.3	8.4	1.8 1.7	1.8	7.0 6.0	6.5
27-Aug-07	Sunny	Calm	12:50	Middle	0.13	27.8 27.8	27.8	7.9 7.9	7.9	0.03 0.03	0.03	95.4 95.0	95.2	8.7 8.7	8.7	1.9 2.0	2	5.0 5.0	5
29-Aug-07	Cloudy	Calm	14:56	Middle	0.13	27.9 27.9	27.9	7.8 7.8	7.8	0.03 0.03	0.03	93.7 93.4	93.6	8.5 8.5	8.5	2.1 2.2	2.2	5.0 5.0	5
31-Aug-07	Sunny	Calm	12:52	Middle	0.13	27.9 27.9	27.9	7.9 7.9	7.9	0.03 0.03	0.03	93.7 93.4	93.6	8.5 8.5	8.5	1.9 2.0	2	4.0 4.0	4

Water Quality Monitoring Results at 40_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	10:23	Middle	0.09	28.2 28.2	28.2	7.7 7.7	7.7	0.04 0.04	0.04	95.8 95.5	95.7	8.4 8.4	8.4	1.8 1.7	1.8	6.0 6.0	6
3-Aug-07	Sunny	Calm	13:10	Middle	0.09	28.2 28.2	28.2	7.7 7.7	7.7	0.04 0.04	0.04	98.3 98.1	98.2	8.7 8.7	8.7	1.6 1.6	1.6	8.0 8.0	8
6-Aug-07	Fine	Calm	13:04	Middle	0.09	28.1 28.1	28.1	7.7 7.7	7.7	0.04 0.04	0.04	97.4 97.2	97.3	8.7 8.7	8.7	2.1 2.1	2.1	17.0 17.0	17
8-Aug-07	Rainy	Calm	10:38	Middle	0.09	28.1 28.1	28.1	7.8 7.7	7.8	0.04 0.04	0.04	97.8 97.6	97.7	8.8 8.8	8.8	1.8 1.8	1.8	5.0 4.0	4.5
10-Aug-07	Rainy	Calm	10:56	Middle	0.09	28.0 28.0	28	7.8 7.8	7.8	0.05 0.05	0.05	97.1 96.9	97	8.8 8.8	8.8	2.0 2.0	2	5.0 5.0	5
13-Aug-07	Cloudy	Calm	11:06	Middle	0.09	28.1 28.1	28.1	7.9 7.9	7.9	0.05 0.05	0.05	97.2 97.0	97.1	8.8 8.7	8.8	2.2 2.2	2.2	5.0 5.0	5
15-Aug-07	Cloudy	Calm	11:06	Middle	0.09	28.0 28.0	28	7.8 7.8	7.8	0.04 0.04	0.04	97.2 96.9	97.1	8.8 8.8	8.8	2.0 2.0	2	10.0 9.0	9.5
17-Aug-07	Rainy	Calm	10:16	Middle	0.09	27.9 27.9	27.9	7.9 7.9	7.9	0.05 0.05	0.05	98.3 98.0	98.2	8.8 8.7	8.8	2.2 2.2	2.2	17.0 17.0	17
20-Aug-07	Cloudy	Calm	9:40	Middle	0.09	27.9 27.9	27.9	7.9 7.9	7.9	0.05 0.05	0.05	93.8 93.5	93.7	8.5 8.5	8.5	1.9 1.9	1.9	4.0 4.0	4
22-Aug-07	Cloudy	Calm	11:31	Middle	0.09	27.8 27.8	27.8	7.9 7.9	7.9	0.05 0.05	0.05	96.0 95.7	95.9	8.6 8.6	8.6	1.9 2.0	2	4.0 4.0	4
24-Aug-07	Sunny	Calm	10:36	Middle	0.09	27.9 27.9	27.9	7.8 7.8	7.8	0.05 0.05	0.05	94.9 94.6	94.8	8.6 8.5	8.6	1.7 1.8	1.8	4.0 4.0	4
27-Aug-07	Sunny	Calm	12:13	Middle	0.09	28.1 28.1	28.1	7.8 7.8	7.8	0.04 0.04	0.04	96.7 96.4	96.6	8.7 8.7	8.7	1.7 1.7	1.7	6.0 6.0	6
29-Aug-07	Cloudy	Calm	14:19	Middle	0.09	28.1 28.1	28.1	7.8 7.8	7.8	0.04 0.04	0.04	95.8 95.5	95.7	8.6 8.6	8.6	1.9 1.9	1.9	5.0 5.0	5
31-Aug-07	Sunny	Calm	12:15	Middle	0.09	28.2 28.2	28.2	7.9 7.9	7.9	0.04 0.04	0.04	95.8 95.5	95.7	8.6 8.6	8.6	1.8 1.8	1.8	8.0 8.0	8

Water Quality Monitoring Results at 40_R

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	10:18	Middle	0.2	28.2 28.2	28.2	7.8 7.8	7.8	0.04 0.04	0.04	96.6 96.5	96.6	8.6 8.6	8.6	1.6 1.6	1.6	6.0 6.0	6
3-Aug-07	Sunny	Calm	13:05	Middle	0.2	28.2 28.2	28.2	7.7 7.7	7.7	0.04 0.04	0.04	99.8 99.9	99.9	9.0 9.0	9	1.5 1.5	1.5	9.0 8.0	8.5
6-Aug-07	Fine	Calm	12:58	Middle	0.2	28.1 28.1	28.1	7.8 7.8	7.8	0.04 0.04	0.04	99.6 99.9	99.8	9.0 9.0	9	2.0 2.1	2.1	13.0 13.0	13
8-Aug-07	Rainy	Calm	10:33	Middle	0.2	28.1 28.1	28.1	7.8 7.8	7.8	0.04 0.04	0.04	99.9 100.2	100.1	9.1 9.1	9.1	1.9 1.8	1.9	8.0 8.0	8
10-Aug-07	Rainy	Calm	10:51	Middle	0.2	28.0 28.0	28	7.8 7.8	7.8	0.05 0.05	0.05	99.3 99.6	99.5	9.0 9.1	9.1	1.9 2.0	2	5.0 5.0	5
13-Aug-07	Cloudy	Calm	11:01	Middle	0.2	28.0 28.0	28	7.9 7.9	7.9	0.05 0.05	0.05	99.4 99.7	99.6	9.0 9.0	9	2.1 2.2	2.2	3.0 4.0	3.5
15-Aug-07	Cloudy	Calm	11:01	Middle	0.2	28.0 28.0	28	7.8 7.8	7.8	0.04 0.04	0.04	99.4 99.7	99.6	9.1 9.1	9.1	1.9 2.0	2	4.0 5.0	4.5
17-Aug-07	Rainy	Calm	10:10	Middle	0.2	27.9 27.9	27.9	8.0 8.0	8	0.05 0.05	0.05	99.8 99.8	99.8	8.9 8.9	8.9	2.1 2.2	2.2	17.0 17.0	17
20-Aug-07	Cloudy	Calm	9:35	Middle	0.2	27.9 27.9	27.9	7.9 7.9	7.9	0.05 0.05	0.05	95.0 94.7	94.9	8.6 8.6	8.6	1.9 1.9	1.9	5.0 5.0	5
22-Aug-07	Cloudy	Calm	11:26	Middle	0.2	27.8 27.8	27.8	7.9 7.9	7.9	0.05 0.05	0.05	97.4 97.2	97.3	8.8 8.7	8.8	2.0 2.0	2	3.0 3.0	3
24-Aug-07	Sunny	Calm	10:30	Middle	0.2	27.9 27.9	27.9	7.8 7.8	7.8	0.05 0.05	0.05	96.2 95.9	96.1	8.7 8.7	8.7	1.8 1.8	1.8	4.0 4.0	4
27-Aug-07	Sunny	Calm	12:08	Middle	0.2	28.1 28.1	28.1	7.9 7.9	7.9	0.04 0.04	0.04	98.5 98.5	98.5	8.9 8.9	8.9	1.7 1.7	1.7	5.0 5.0	5
29-Aug-07	Cloudy	Calm	14:14	Middle	0.2	28.1 28.1	28.1	7.8 7.8	7.8	0.04 0.04	0.04	97.3 97.2	97.3	8.8 8.8	8.8	1.9 1.9	1.9	5.0 5.0	5
31-Aug-07	Sunny	Calm	12:10	Middle	0.2	28.2 28.2	28.2	7.9 7.9	7.9	0.04 0.04	0.04	97.3 97.2	97.3	8.8 8.8	8.8	1.8 1.8	1.8	3.0 4.0	3.5

Water Quality Monitoring Results at CSS_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	10:32	Middle	0.19	28.0 28.0	28	7.8 7.8	7.8	0.03 0.03	0.03	95.2 95.2	95.2	8.4 8.4	8.4	1.8 1.8	1.8	7.0 7.0	7
3-Aug-07	Sunny	Calm	13:19	Middle	0.19	28.0 28.0	28	7.7 7.7	7.7	0.04 0.04	0.04	97.4 97.6	97.5	8.7 8.7	8.7	1.8 1.7	1.8	7.0 7.0	7
6-Aug-07	Fine	Calm	13:12	Middle	0.19	27.9 27.9	27.9	7.8 7.8	7.8	0.03 0.03	0.03	96.9 97.5	97.2	8.8 8.8	8.8	2.3 2.2	2.3	18.0 18.0	18
8-Aug-07	Rainy	Calm	10:47	Middle	0.19	27.9 27.9	27.9	7.8 7.8	7.8	0.03 0.03	0.03	96.9 97.4	97.2	8.9 8.9	8.9	2.0 2.0	2	15.0 15.0	15
10-Aug-07	Rainy	Calm	11:05	Middle	0.19	27.8 27.8	27.8	7.8 7.8	7.8	0.03 0.03	0.03	96.4 96.9	96.7	8.8 8.9	8.9	2.0 1.9	2	5.0 5.0	5
13-Aug-07	Cloudy	Calm	11:15	Middle	0.19	27.9 27.9	27.9	7.9 7.9	7.9	0.03 0.03	0.03	96.6 97.2	96.9	8.8 8.8	8.8	2.2 2.1	2.2	4.0 4.0	4
15-Aug-07	Cloudy	Calm	11:15	Middle	0.19	27.8 27.8	27.8	7.9 7.9	7.9	0.03 0.03	0.03	96.5 97.0	96.8	8.8 8.9	8.9	2.1 2.1	2.1	5.0 5.0	5
17-Aug-07	Rainy	Calm	10:24	Middle	0.19	27.7 27.7	27.7	8.0 8.0	8	0.05 0.05	0.05	97.6 97.6	97.6	8.8 8.8	8.8	2.2 2.3	2.3	16.0 17.0	16.5
20-Aug-07	Cloudy	Calm	9:49	Middle	0.19	27.7 27.7	27.7	8.0 8.0	8	0.03 0.03	0.03	92.3 92.2	92.3	8.4 8.4	8.4	1.9 1.9	1.9	5.0 5.0	5
22-Aug-07	Cloudy	Calm	11:40	Middle	0.19	27.6 27.6	27.6	7.9 7.9	7.9	0.04 0.04	0.04	94.9 94.9	94.9	8.6 8.6	8.6	2.0 2.0	2	3.0 3.0	3
24-Aug-07	Sunny	Calm	10:44	Middle	0.19	27.7 27.7	27.7	7.8 7.8	7.8	0.03 0.03	0.03	93.6 93.5	93.6	8.5 8.5	8.5	1.8 1.8	1.8	5.0 5.0	5
27-Aug-07	Sunny	Calm	12:22	Middle	0.19	27.9 28.0	28	7.9 7.9	7.9	0.03 0.03	0.03	95.9 96.2	96.1	8.7 8.7	8.7	1.9 1.8	1.9	5.0 5.0	5
29-Aug-07	Cloudy	Calm	14:28	Middle	0.19	28.0 28.0	28	7.8 7.8	7.8	0.03 0.03	0.03	94.7 94.8	94.8	8.6 8.6	8.6	2.1 2.0	2.1	6.0 6.0	6
31-Aug-07	Sunny	Calm	12:24	Middle	0.19	28.0 28.0	28	7.9 7.9	7.9	0.03 0.03	0.03	94.7 94.8	94.8	8.6 8.6	8.6	1.9 1.9	1.9	4.0 4.0	4

Water Quality Monitoring Results at TCB_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	12:50	Middle	0.35	28.2 28.2	28.2	7.5 7.5	7.5	12.03 12.04	12.04	94.9 94.7	94.8	8.2 8.2	8.2	4.4 4.3	4.4	11.0 11.0	11
3-Aug-07	Sunny	Calm	15:39	Middle	0.35	28.2 28.2	28.2	7.5 7.5	7.5	13.36 13.38	13.37	99.7 99.5	99.6	8.6 8.6	8.6	4.3 4.3	4.3	69.0 68.0	68.5
6-Aug-07	Fine	Calm	15:32	Middle	0.35	28.1 28.1	28.1	7.5 7.5	7.5	11.84 11.86	11.85	101.0 100.7	100.9	8.7 8.7	8.7	5.3 5.3	5.3	6.0 6.0	6
8-Aug-07	Rainy	Calm	13:07	Middle	0.35	28.1 28.1	28.1	7.5 7.5	7.5	11.49 11.51	11.5	99.1 98.8	99	8.6 8.6	8.6	5.2 5.3	5.3	9.0 10.0	9.5
10-Aug-07	Rainy	Calm	13:17	Middle	0.35	28.1 28.1	28.1	7.5 7.5	7.5	12.26 12.28	12.27	98.0 97.6	97.8	8.5 8.5	8.5	6.6 6.6	6.6	25.0 25.0	25
13-Aug-07	Cloudy	Calm	13:26	Middle	0.35	28.1 28.1	28.1	7.6 7.6	7.6	12.05 12.07	12.06	99.5 99.1	99.3	8.6 8.6	8.6	6.8 6.8	6.8	38.0 38.0	38
15-Aug-07	Cloudy	Calm	13:26	Middle	0.35	28.0 28.0	28	7.5 7.5	7.5	11.92 11.94	11.93	98.6 98.3	98.5	8.6 8.5	8.6	6.0 6.0	6	5.0 5.0	5
17-Aug-07	Rainy	Calm	12:36	Middle	0.35	27.9 27.9	27.9	7.3 7.3	7.3	9.42 9.43	9.43	92.0 91.9	92	7.8 7.8	7.8	5.2 5.2	5.2	43.0 43.0	43
20-Aug-07	Cloudy	Calm	12:00	Middle	0.35	28.0 28.0	28	7.6 7.6	7.6	8.42 8.42	8.42	86.8 86.8	86.8	7.6 7.6	7.6	3.5 3.5	3.5	8.0 8.0	8
22-Aug-07	Cloudy	Calm	13:52	Middle	0.35	27.9 27.9	27.9	7.5 7.6	7.6	8.92 8.92	8.92	89.4 89.3	89.4	7.7 7.7	7.7	3.7 3.7	3.7	3.0 3.0	3
24-Aug-07	Sunny	Calm	12:56	Middle	0.35	28.0 28.0	28	7.5 7.5	7.5	8.67 8.66	8.67	88.1 88.0	88.1	7.7 7.7	7.7	3.4 3.5	3.5	4.0 4.0	4
27-Aug-07	Sunny	Calm	14:42	Middle	0.35	28.1 28.1	28.1	7.5 7.6	7.6	10.38 10.39	10.39	95.2 95.0	95.1	8.2 8.2	8.2	4.9 4.9	4.9	5.0 5.0	5
29-Aug-07	Cloudy	Calm	16:48	Middle	0.35	28.2 28.2	28.2	7.5 7.5	7.5	9.52 9.52	9.52	91.6 91.5	91.6	7.9 7.9	7.9	5.1 5.1	5.1	5.0 5.0	5
31-Aug-07	Sunny	Calm	14:44	Middle	0.35	28.2 28.2	28.2	7.6 7.6	7.6	9.52 9.52	9.52	91.6 91.5	91.6	7.9 7.9	7.9	5.1 5.1	5.1	4.0 4.0	4

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.

Water Quality Monitoring Results at TCB_R

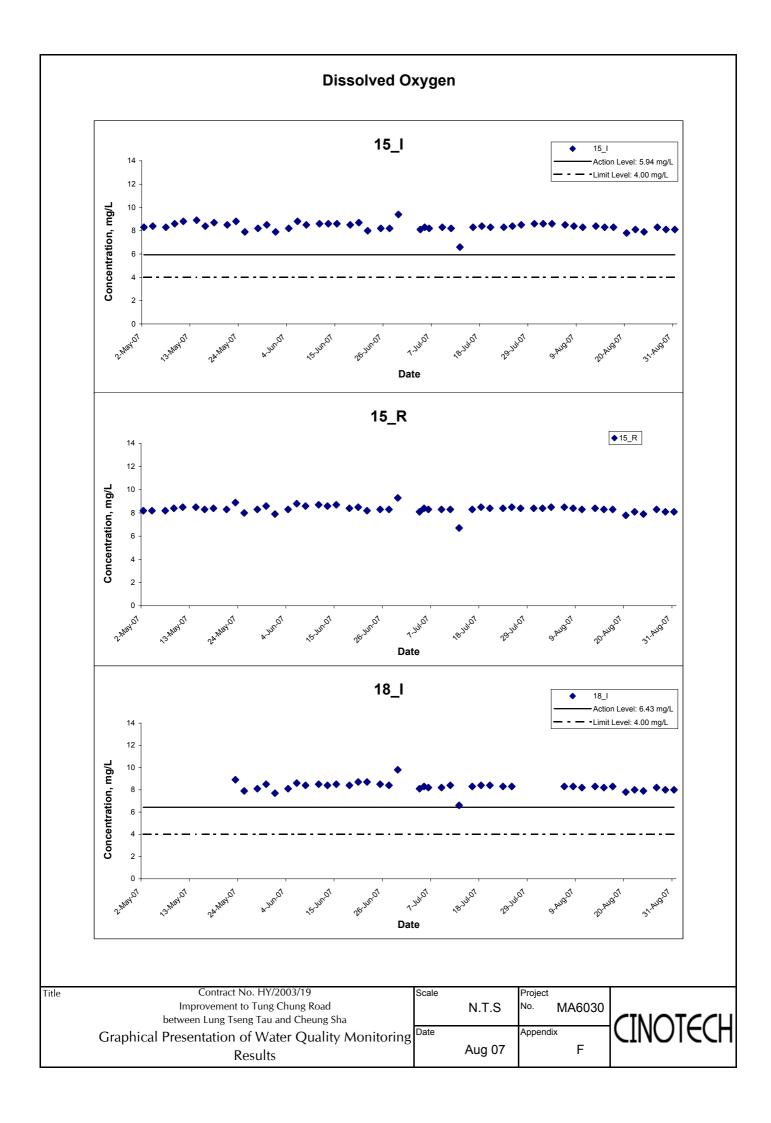
Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	12:45	Middle	0.2	28.2 28.3	28.3	7.4 7.4	7.4	24.26 24.31	24.29	97.2 97.1	97.2	8.2 8.2	8.2	8.1 8.1	8.1	20.0 20.0	20
3-Aug-07	Sunny	Calm	15:34	Middle	0.2	28.2 28.3	28.3	7.2 7.3	7.3	22.72 22.77	22.75	98.4 98.2	98.3	8.4 8.4	8.4	7.6 7.5	7.6	54.0 55.0	54.5
6-Aug-07	Fine	Calm	15:27	Middle	0.2	28.2 28.2	28.2	7.3 7.3	7.3	18.76 18.79	18.78	98.7 98.4	98.6	8.5 8.5	8.5	7.9 7.8	7.9	13.0 13.0	13
8-Aug-07	Rainy	Calm	13:02	Middle	0.2	28.1 28.1	28.1	7.4 7.4	7.4	19.79 19.82	19.81	96.7 96.4	96.6	8.4 8.4	8.4	7.7 7.6	7.7	10.0 10.0	10
10-Aug-07	Rainy	Calm	13:12	Middle	0.2	28.1 28.1	28.1	7.4 7.4	7.4	17.22 17.25	17.24	97.5 97.2	97.4	8.4 8.4	8.4	9.7 9.6	9.7	40.0 40.0	40
13-Aug-07	Cloudy	Calm	13:21	Middle	0.2	28.1 28.1	28.1	7.5 7.5	7.5	17.99 18.02	18.01	98.1 97.8	98	8.5 8.4	8.5	9.9 9.8	9.9	41.0 40.0	40.5
15-Aug-07	Cloudy	Calm	13:21	Middle	0.2	28.0 28.0	28	7.4 7.4	7.4	17.54 17.56	17.55	97.0 96.6	96.8	8.4 8.4	8.4	8.2 8.1	8.2	7.0 7.0	7
17-Aug-07	Rainy	Calm	12:31	Middle	0.2	27.9 28.0	28	7.7 7.8	7.8	23.93 23.95	23.94	91.8 91.5	91.7	7.3 7.3	7.3	6.6 6.5	6.6	47.0 47.0	47
20-Aug-07	Cloudy	Calm	11:56	Middle	0.2	28.0 28.0	28	7.6 7.7	7.7	22.77 22.80	22.79	87.6 87.5	87.6	7.3 7.3	7.3	7.0 7.0	7	7.0 8.0	7.5
22-Aug-07	Cloudy	Calm	13:47	Middle	0.2	27.9 27.9	27.9	7.6 7.6	7.6	23.35 23.37	23.36	89.7 89.5	89.6	7.3 7.3	7.3	7.2 7.2	7.2	3.0 3.0	3
24-Aug-07	Sunny	Calm	12:51	Middle	0.2	28.0 28.0	28	7.5 7.5	7.5	23.06 23.08	23.07	88.6 88.5	88.6	7.3 7.3	7.3	7.7 7.7	7.7	5.0 4.0	4.5
27-Aug-07	Sunny	Calm	14:36	Middle	0.2	28.2 28.2	28.2	7.4 7.4	7.4	21.05 21.08	21.07	94.2 93.9	94.1	7.9 7.9	7.9	7.5 7.4	7.5	6.0 5.0	5.5
29-Aug-07	Cloudy	Calm	16:43	Middle	0.2	28.2 28.2	28.2	7.4 7.4	7.4	22.05 22.08	22.07	91.4 91.2	91.3	7.6 7.6	7.6	7.7 7.6	7.7	4.0 5.0	4.5
31-Aug-07	Sunny	Calm	14:39	Middle	0.2	28.3 28.3	28.3	7.5 7.5	7.5	22.05 22.08	22.07	91.4 91.2	91.3	7.6 7.6	7.6	8.7 8.6	8.7	5.0 5.0	5

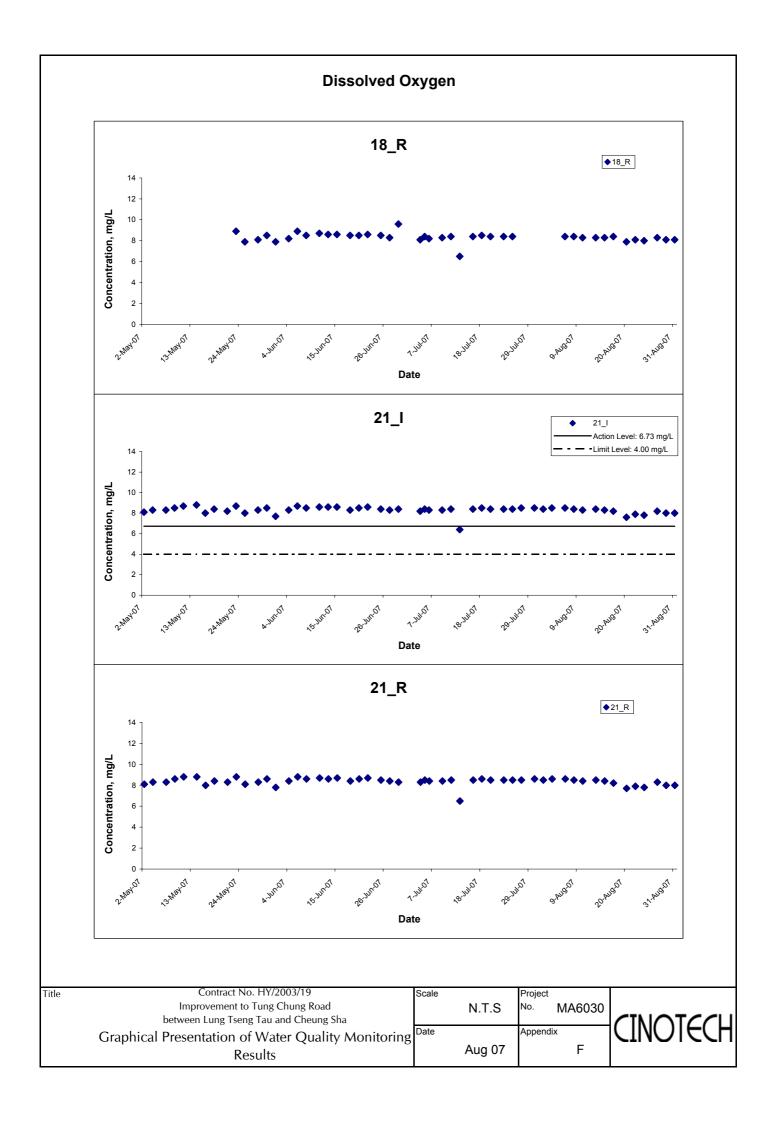
The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

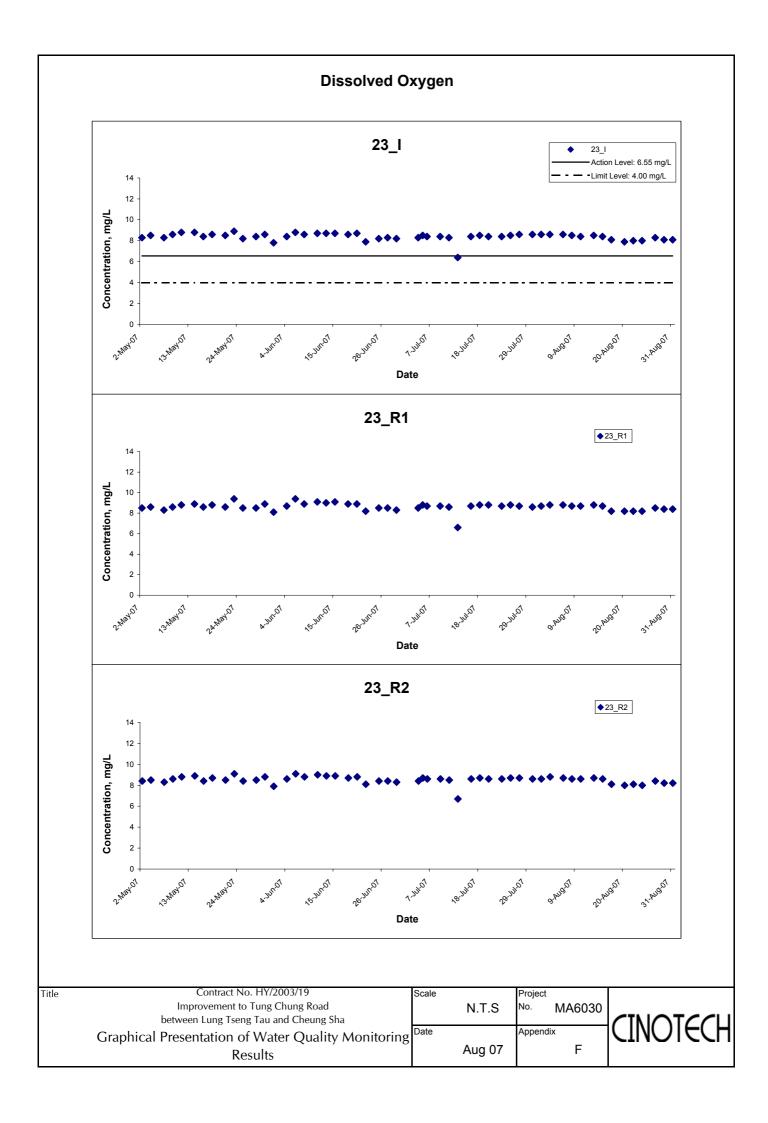
Water Quality Monitoring Results at TCS_I

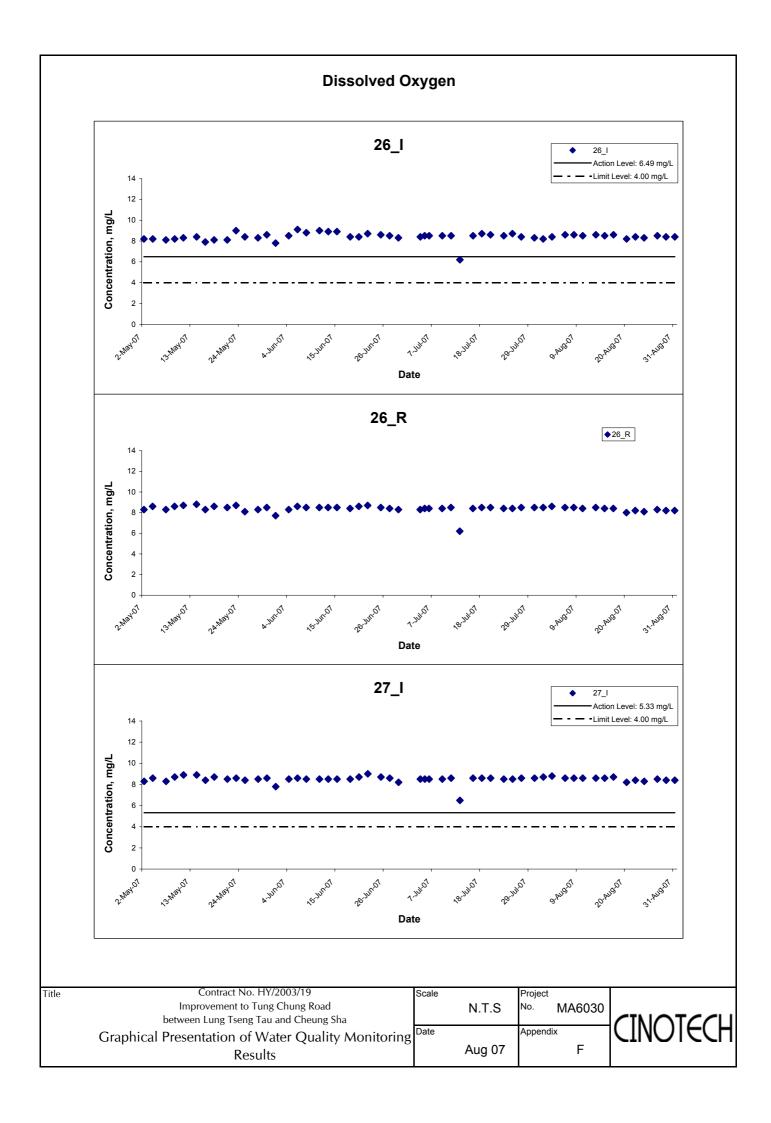
Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	kygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
1-Aug-07	Sunny	Calm	12:26	Middle	0.2	27.9 27.9	27.9	7.5 7.5	7.5	0.03 0.03	0.03	95.6 95.0	95.3	8.5 8.5	8.5	1.6 1.6	1.6	6.0 6.0	6
3-Aug-07	Sunny	Calm	15:15	Middle	0.2	27.9 27.9	27.9	7.4 7.4	7.4	0.03 0.03	0.03	96.4 95.8	96.1	8.6 8.6	8.6	1.6 1.6	1.6	6.0 6.0	6
6-Aug-07	Fine	Calm	15:08	Middle	0.2	27.8 27.9	27.9	7.4 7.5	7.5	0.02 0.02	0.02	95.2 94.7	95	8.5 8.5	8.5	2.4 2.4	2.4	16.0 16.0	16
8-Aug-07	Rainy	Calm	12:43	Middle	0.2	27.8 27.8	27.8	7.5 7.5	7.5	0.02 0.02	0.02	92.9 92.4	92.7	8.3 8.3	8.3	2.0 1.9	2	11.0 10.0	10.5
10-Aug-07	Rainy	Calm	12:53	Middle	0.2	27.7 27.8	27.8	7.5 7.5	7.5	0.02 0.02	0.02	91.2 90.7	91	8.2 8.2	8.2	2.0 2.0	2	<2.5 <2.5	<2.5
13-Aug-07	Cloudy	Calm	13:02	Middle	0.2	27.8 27.8	27.8	7.6 7.6	7.6	0.02 0.02	0.02	93.2 92.7	93	8.4 8.3	8.4	2.2 2.2	2.2	6.0 6.0	6
15-Aug-07	Cloudy	Calm	13:02	Middle	0.2	27.7 27.7	27.7	7.5 7.5	7.5	0.02 0.02	0.02	91.8 91.3	91.6	8.3 8.3	8.3	2.0 2.1	2.1	4.0 4.0	4
17-Aug-07	Rainy	Calm	12:12	Middle	0.2	27.6 27.6	27.6	7.8 7.8	7.8	0.02 0.02	0.02	92.8 92.1	92.5	8.3 8.2	8.3	2.8 2.8	2.8	12.0 12.0	12
20-Aug-07	Cloudy	Calm	11:37	Middle	0.2	27.6 27.6	27.6	7.7 7.7	7.7	0.02 0.02	0.02	82.2 81.9	82.1	7.5 7.5	7.5	2.0 2.0	2	3.0 3.0	3
22-Aug-07	Cloudy	Calm	13:28	Middle	0.2	27.5 27.5	27.5	7.6 7.6	7.6	0.02 0.02	0.02	87.5 87.0	87.3	7.9 7.9	7.9	2.1 2.1	2.1	4.0 4.0	4
24-Aug-07	Sunny	Calm	12:32	Middle	0.2	27.6 27.6	27.6	7.6 7.6	7.6	0.02 0.02	0.02	84.8 84.4	84.6	7.7 7.7	7.7	1.9 1.9	1.9	4.0 5.0	4.5
27-Aug-07	Sunny	Calm	14:18	Middle	0.2	27.9 27.9	27.9	7.5 7.5	7.5	0.02 0.02	0.02	91.3 90.8	91.1	8.2 8.2	8.2	2.0 2.0	2	6.0 6.0	6
29-Aug-07	Cloudy	Calm	16:24	Middle	0.2	27.9 27.9	27.9	7.5 7.5	7.5	0.02 0.02	0.02	88.0 87.6	87.8	7.9 7.9	7.9	2.2 2.2	2.2	4.0 4.0	4
31-Aug-07	Sunny	Calm	14:20	Middle	0.2	27.9 28.0	28	7.6 7.6	7.6	0.02 0.02	0.02	88.0 87.6	87.8	7.9 7.9	7.9	2.0 2.0	2	3.0 4.0	3.5

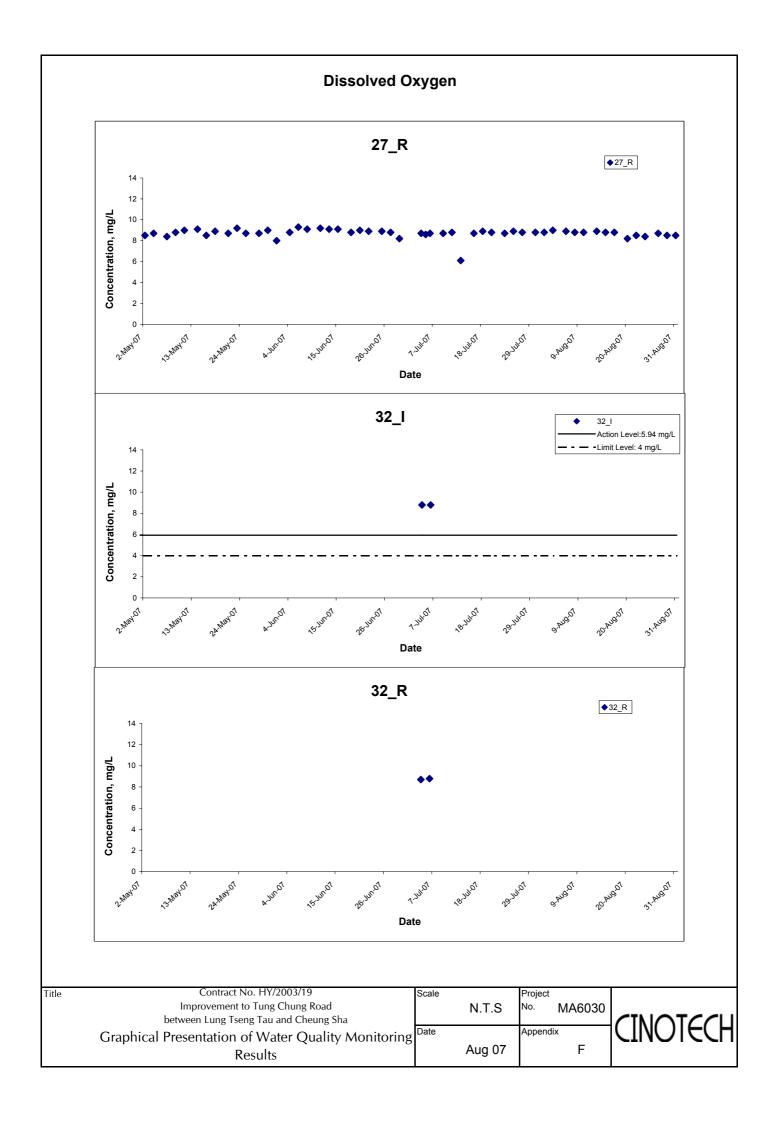
The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

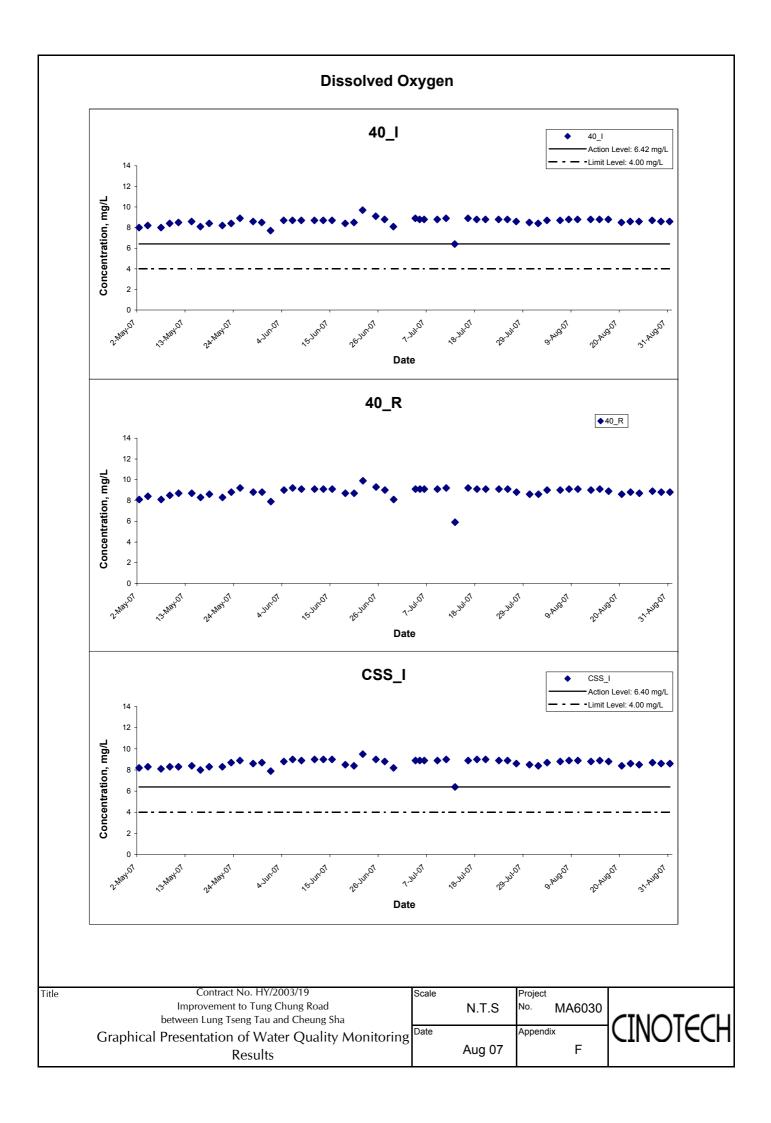


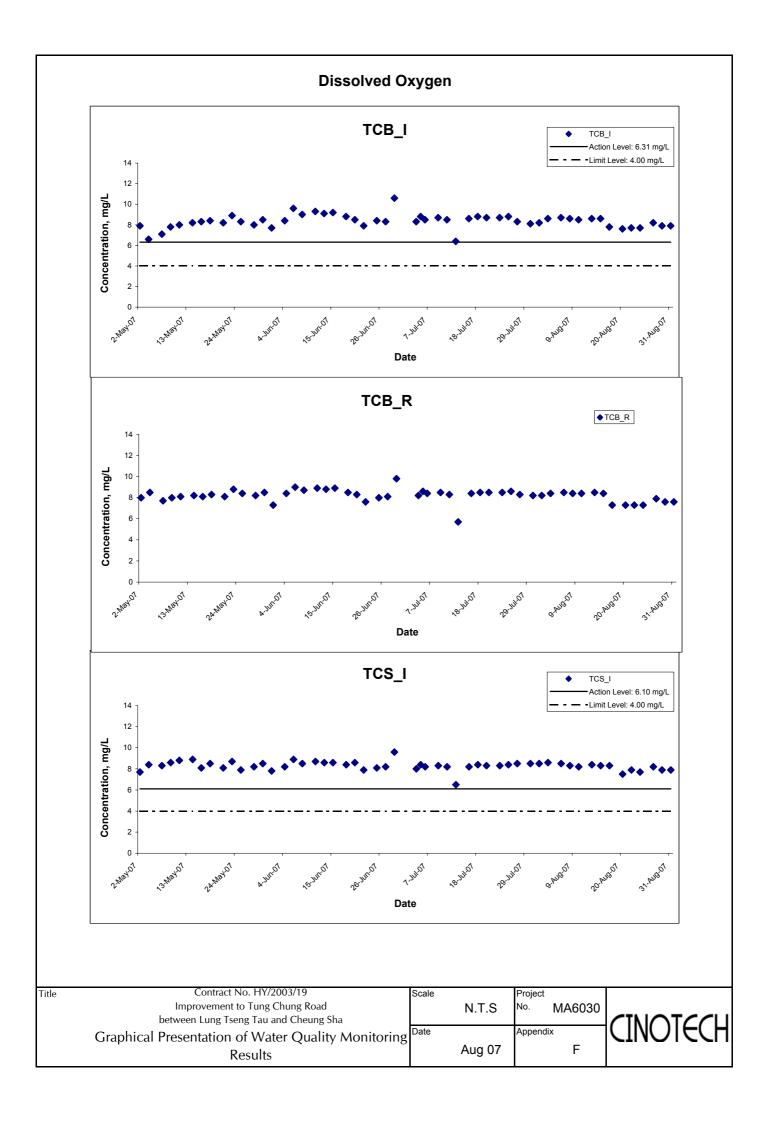


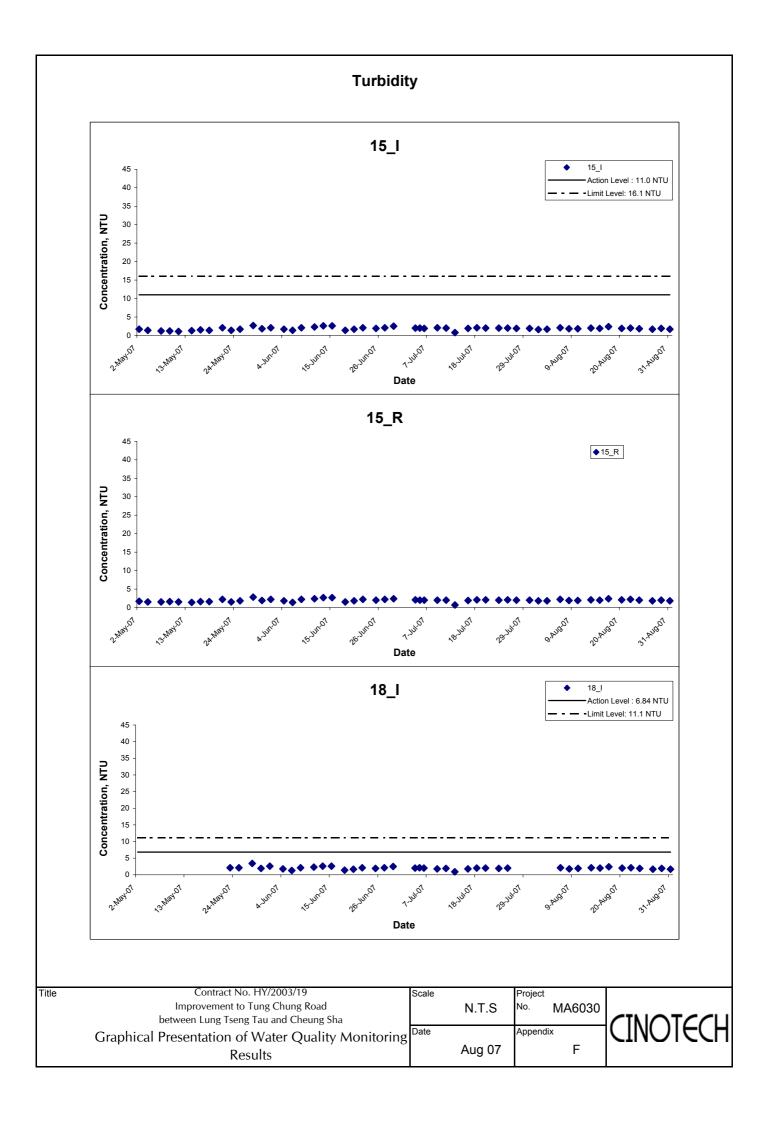


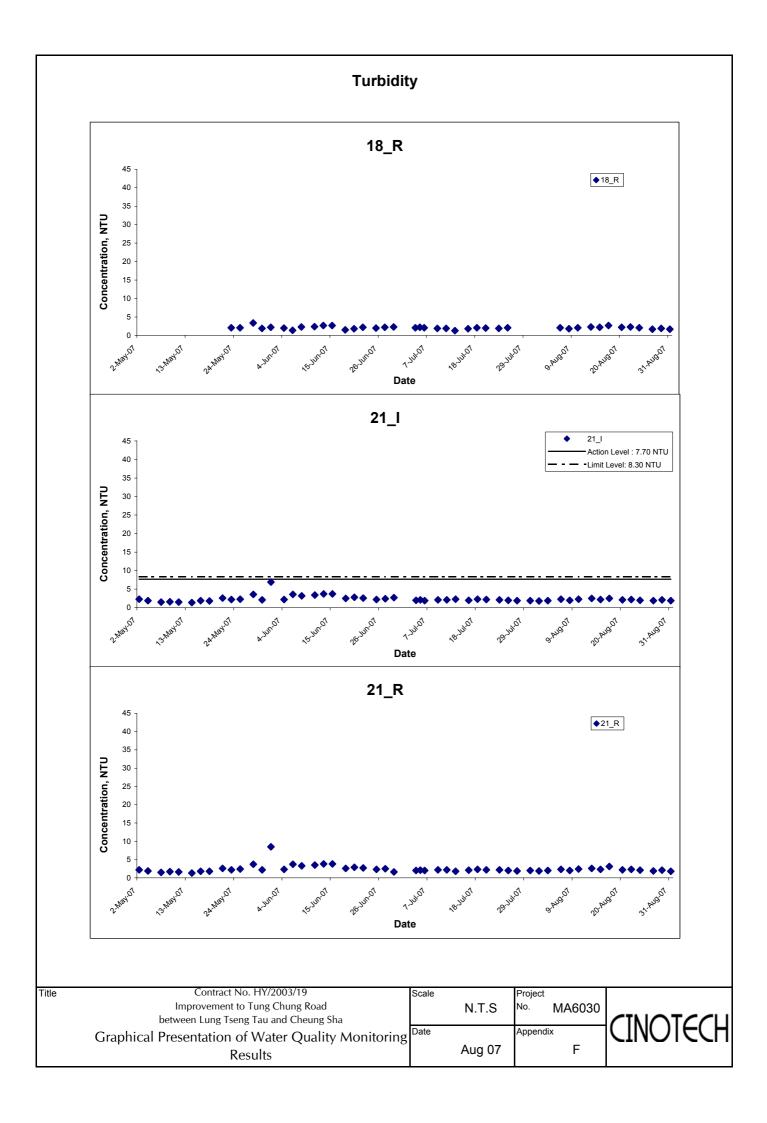


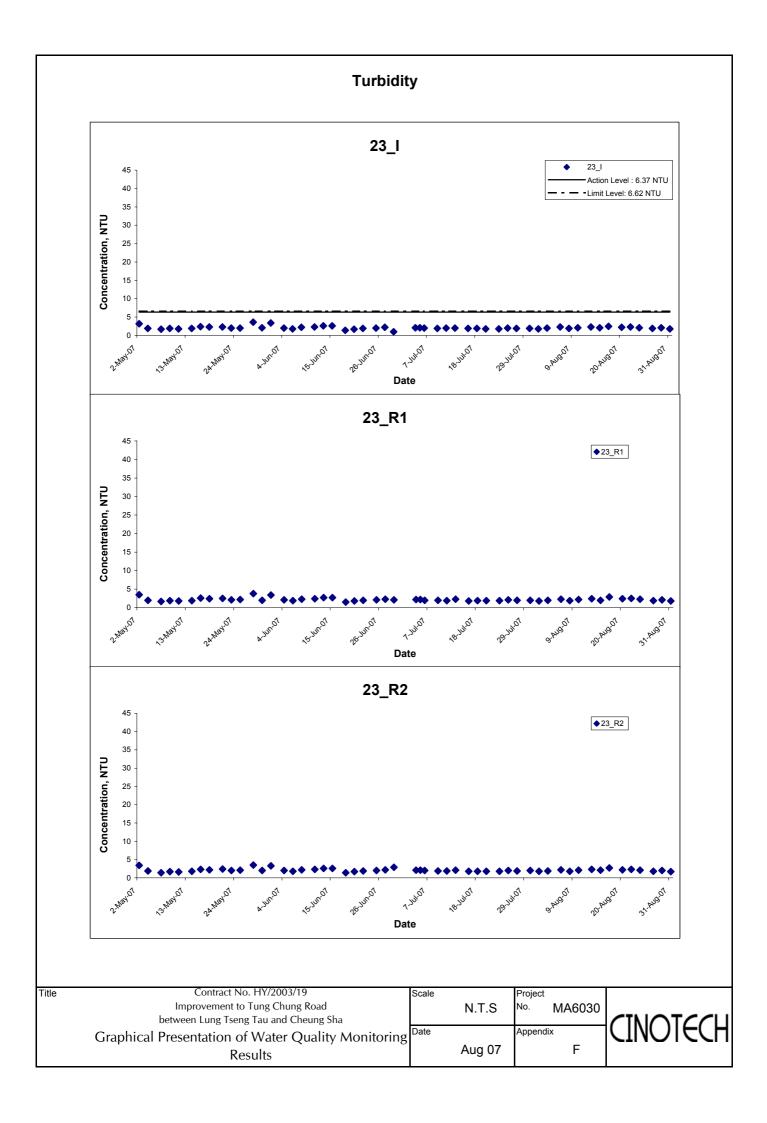


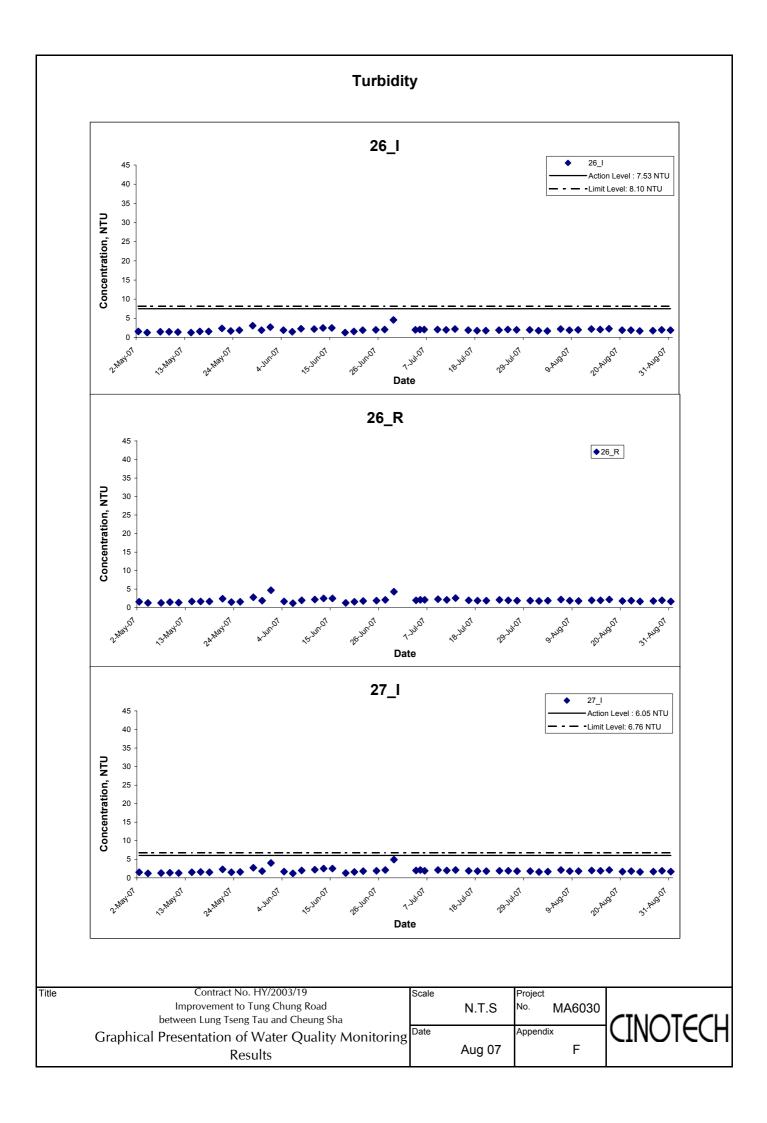


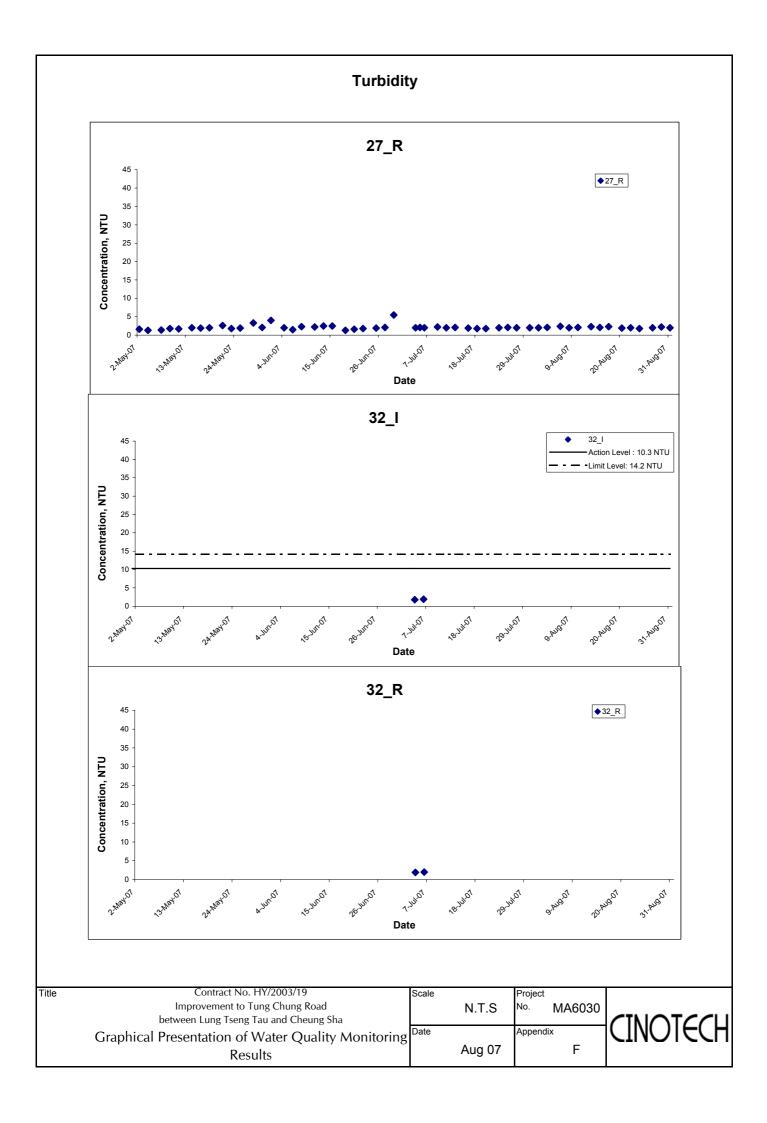


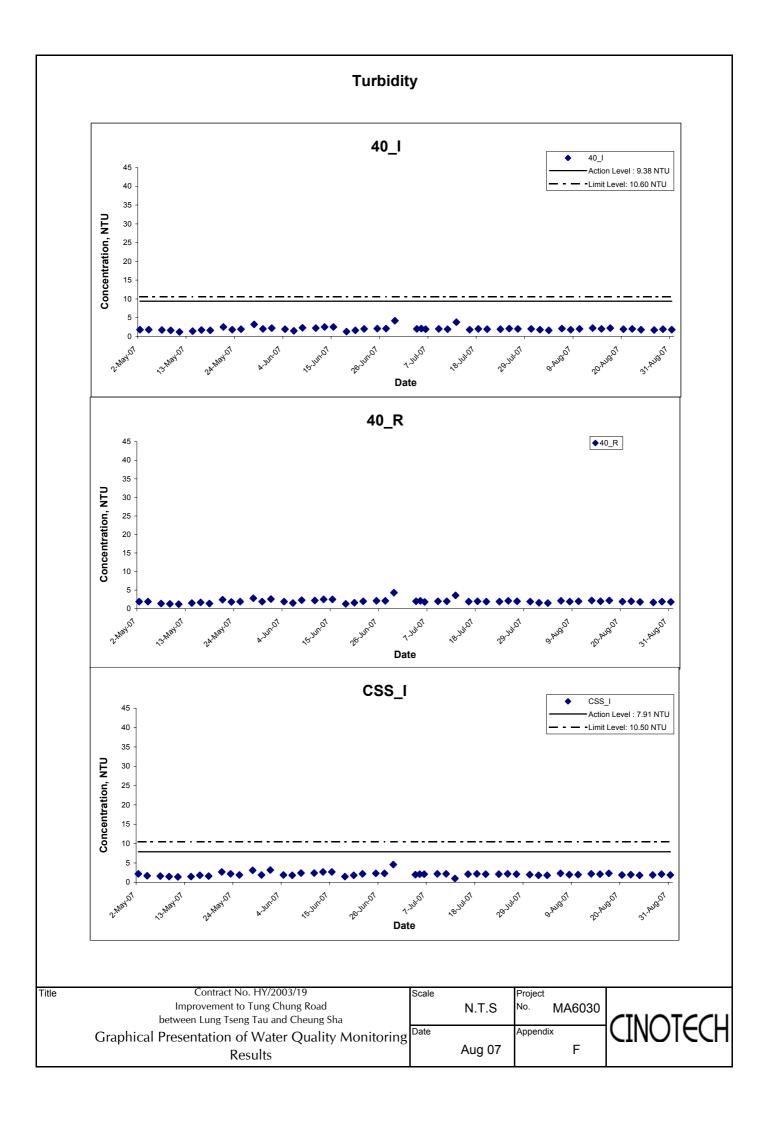


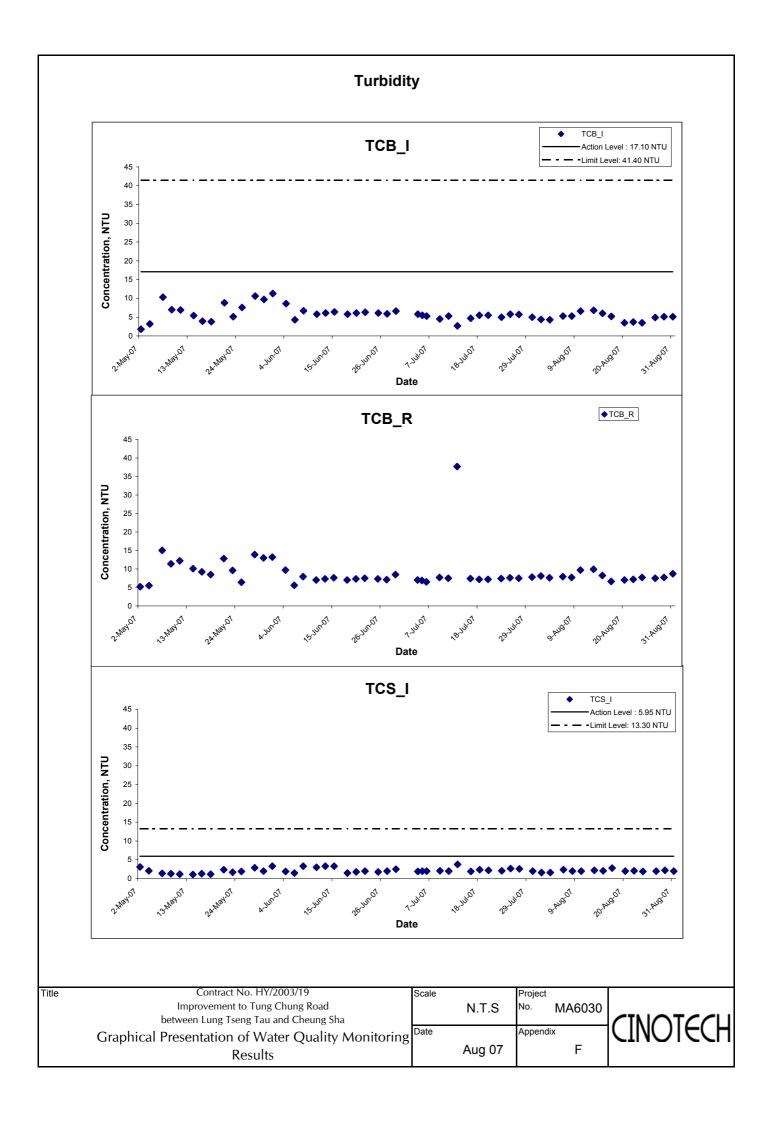


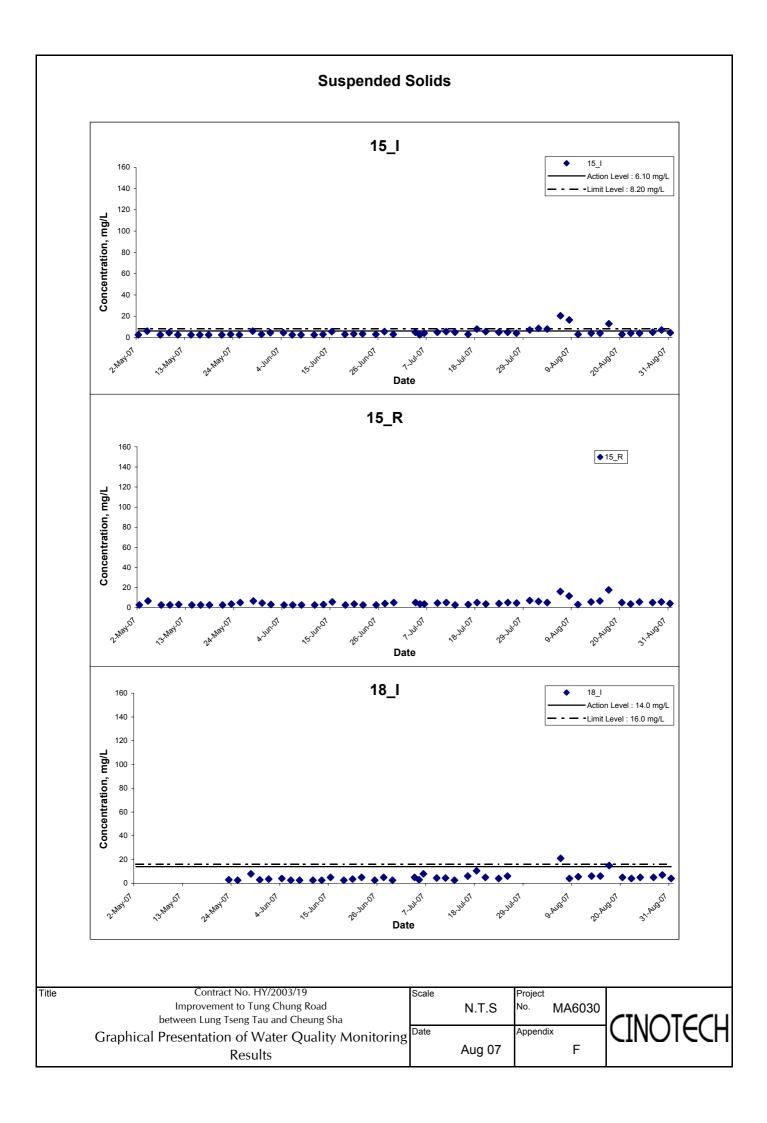


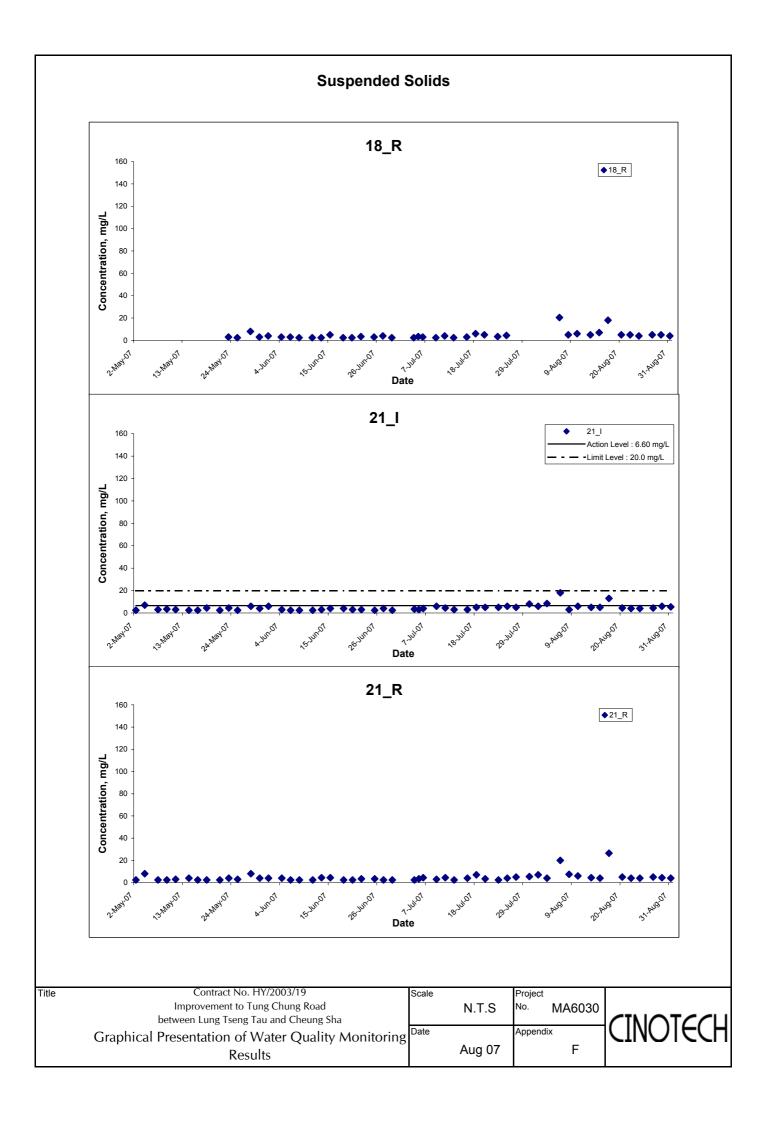


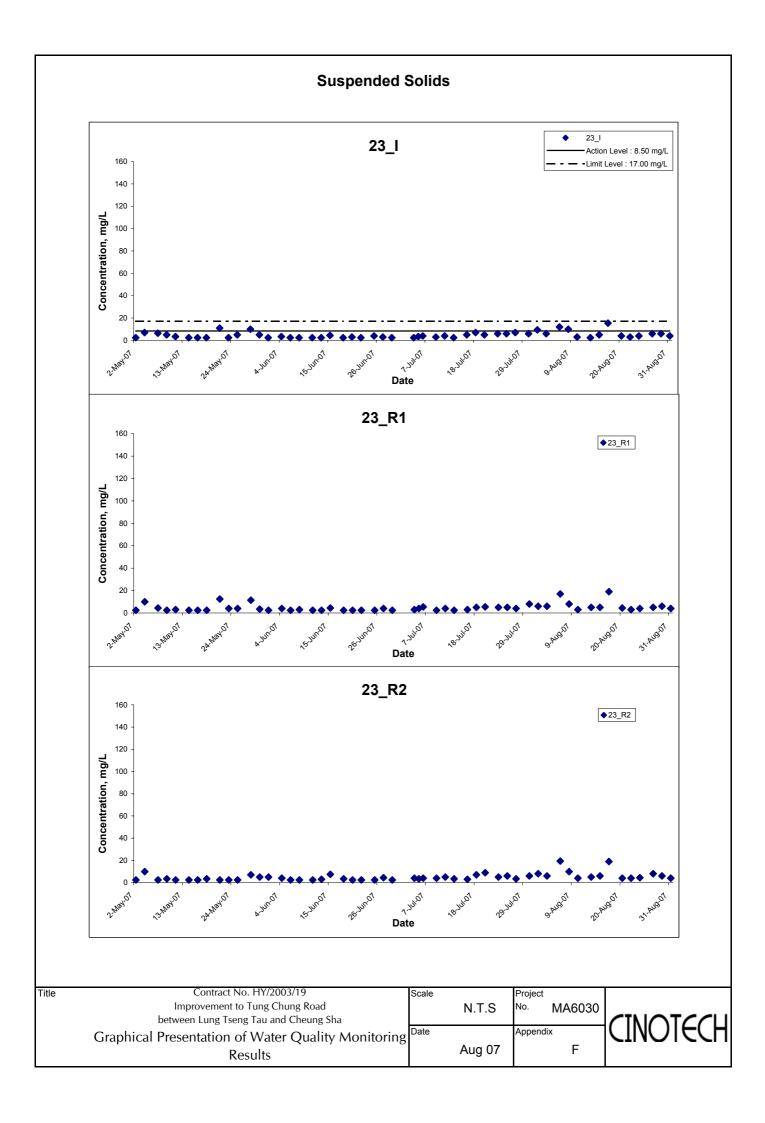


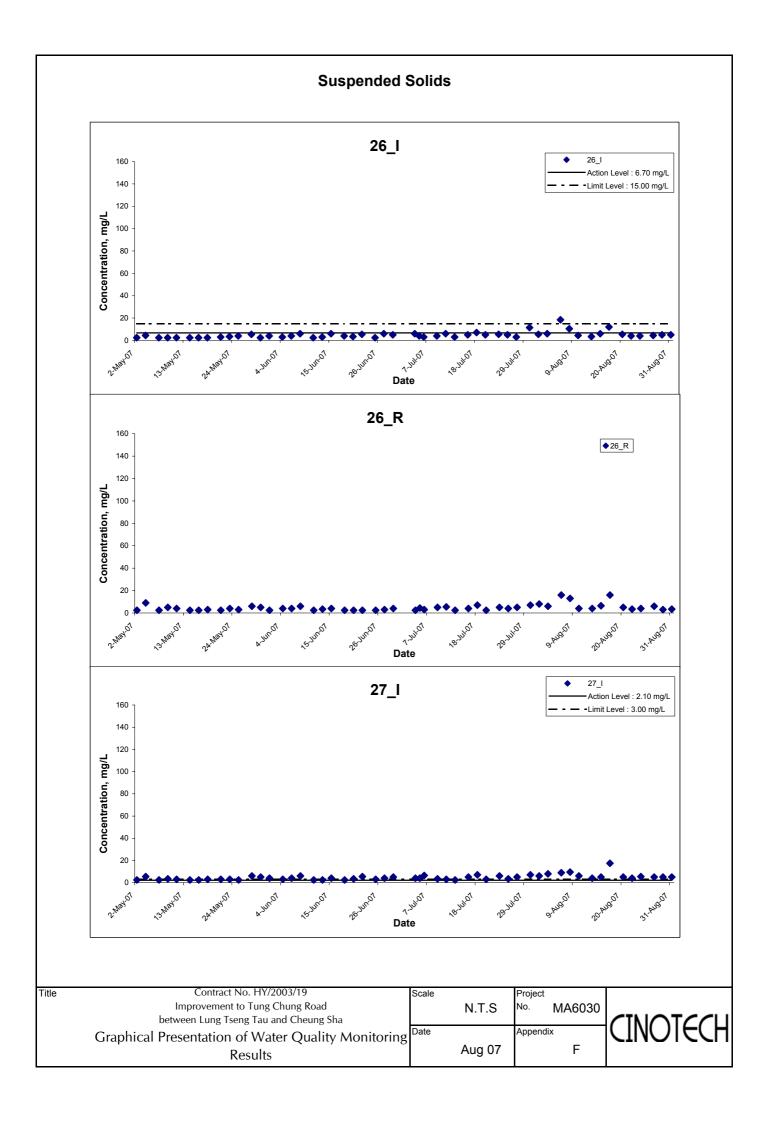


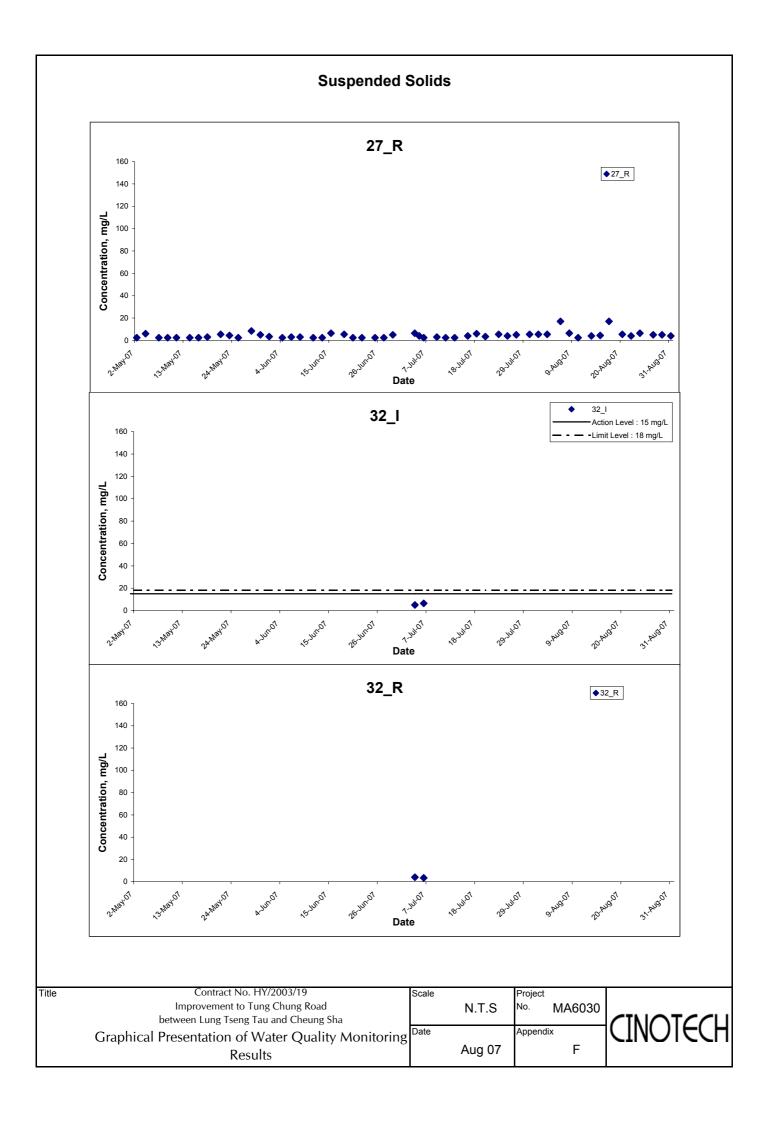


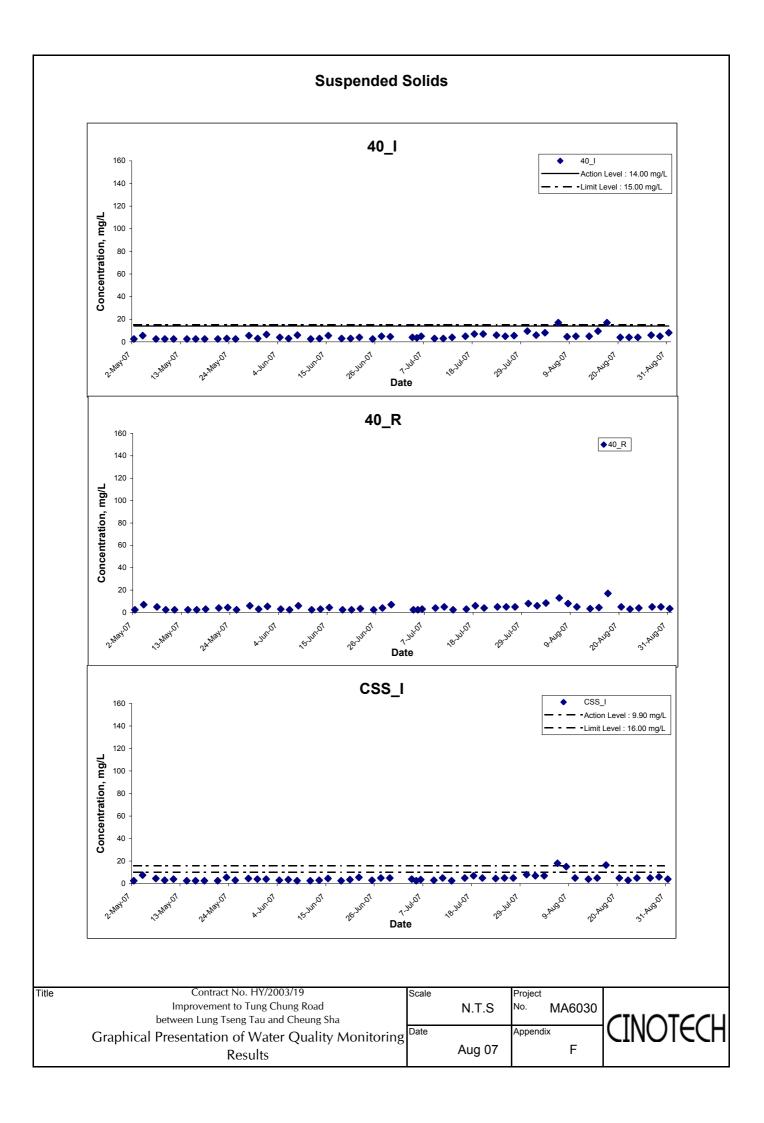


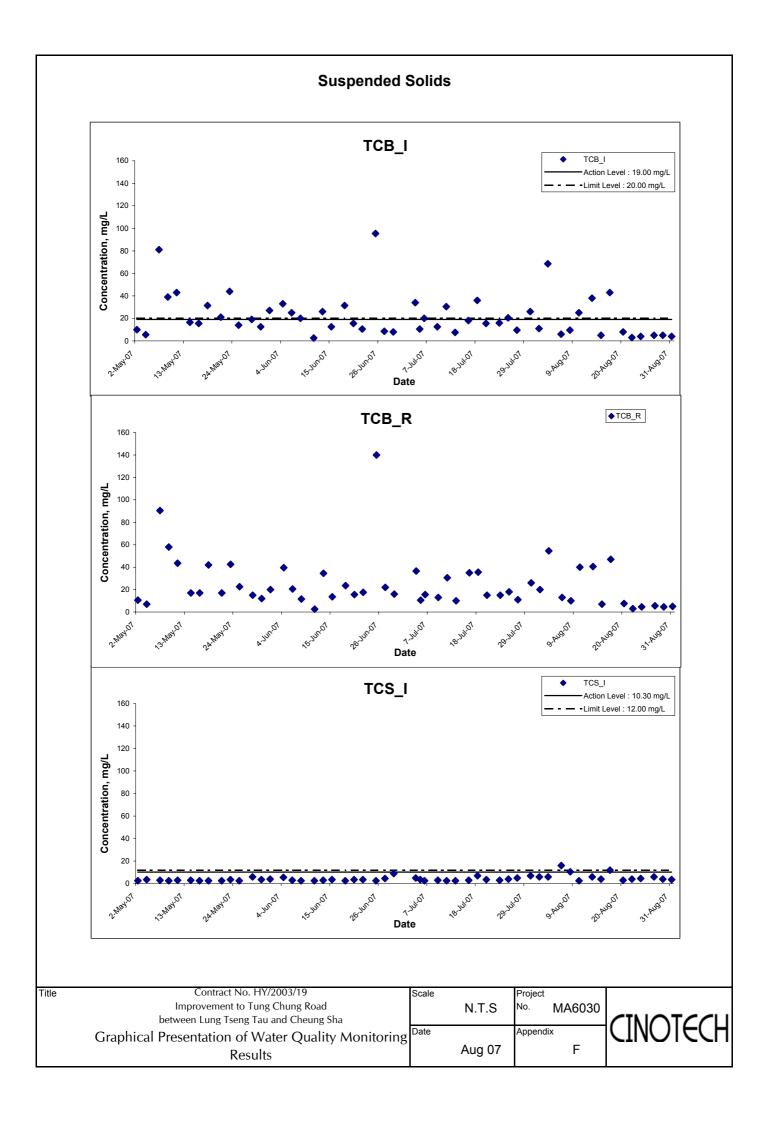












APPENDIX G QUALITY CONTROL REPORTS FOR LABORATORY ANALYSIS

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

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

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05189

 Date of Issue:
 2007/08/02

 Date Received:
 2007/08/01

 Date Tested:
 2007/08/02

 Date Completed:
 2007/08/02

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/01

Number of Sample: 34

Custody No.: MA6030/070801

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
27_I	6	5	18	99

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

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

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

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05211

 Date of Issue:
 2007/08/06

 Date Received:
 2007/08/03

 Date Tested:
 2007/08/03

 Date Completed:
 2007/08/06

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/03

Number of Sample: 34

Custody No.: MA6030/070803

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
27_I	8	8	7	97

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

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

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

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05220

 Date of Issue:
 2007/08/07

 Date Received:
 2007/08/06

 Date Tested:
 2007/08/06

 Date Completed:
 2007/08/07

1 of 1

Page:

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/06

Number of Sample: 38

Custody No.: MA6030/070806

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	18	17	1	91

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

Talky C

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit,

Shatin, Hong Kong. Tel: (852) 2898 7388 Fax: (852) 2898 7076

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05231

 Date of Issue:
 2007/08/09

 Date Received:
 2007/08/08

 Date Tested:
 2007/08/08

 Date Completed:
 2007/08/09

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/08

Number of Sample: 38

Custody No.: MA6030/070808

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	10	11	11	85

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE

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

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

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05247

 Date of Issue:
 2007/08/14

 Date Received:
 2007/08/11

 Date Tested:
 2007/08/11

 Date Completed:
 2007/08/14

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/10

Number of Sample: 38

Custody No.: MA6030/070810

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	5	4	16	98

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE

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

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

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05248

 Date of Issue:
 2007/08/14

 Date Received:
 2007/08/13

 Date Tested:
 2007/08/13

 Date Completed:
 2007/08/14

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/13

Number of Sample: 38

Custody No.: MA6030/070813

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	3	3	8	91

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE

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

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

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05262

 Date of Issue:
 2007/08/16

 Date Received:
 2007/08/15

 Date Tested:
 2007/08/15

 Date Completed:
 2007/08/16

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/15

Number of Sample: 38

Custody No.: MA6030/070815

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
15_R	7	6	17	98

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit,

Shatin, Hong Kong. Tel: (852) 2898 7388 Fax: (852) 2898 7076

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05277

 Date of Issue:
 2007/08/20

 Date Received:
 2007/08/17

 Date Tested:
 2007/08/17

 Date Completed:
 2007/08/20

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/17

Number of Sample: 38

Custody No.: MA6030/070817

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	12	14	15	95

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit,

Shatin, Hong Kong. Tel: (852) 2898 7388 Fax: (852) 2898 7076

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05284

 Date of Issue:
 2007/08/21

 Date Received:
 2007/08/20

 Date Tested:
 2007/08/20

 Date Completed:
 2007/08/21

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/20

Number of Sample: 38

Custody No.: MA6030/070820

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	6	7	6	93

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Unit C, 1/F, Goldlion Holdings Center 13-15 Yuen Shun Circuit,

Shatin, Hong Kong. Tel: (852) 2898 7388 Fax: (852) 2898 7076

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05297

 Date of Issue:
 2007/08/23

 Date Received:
 2007/08/22

 Date Tested:
 2007/08/22

 Date Completed:
 2007/08/23

 Page:
 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2007/08/22

Number of Sample: 38

Custody No.: MA6030/070822

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
23_R2	4	4	7	86

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T. Laboratory No.: 05315 Date of Issue: 2007/08/27

Date Received: 2007/08/24 Date Tested: 2007/08/24

Page:

Date Completed: 2007/08/27

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2007/08/24

Number of Sample:

38

Custody No.: MA6030/070824

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	4	4	8	84

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05319

 Date of Issue:
 2007/08/28

 Date Received:
 2007/08/27

 Date Tested:
 2007/08/27

Date Completed: 2007/08/28

1 of 1

Page:

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2007/08/27

Number of Sample:

38

Custody No.: MA6030/070827

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	4	5	7	92

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist



TEST REPORT

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05336

 Date of Issue:
 2007/08/30

 Date Received:
 2007/08/29

 Date Tested:
 2007/08/29

Date Completed: 2007/08/29

1 of 1

Page:

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2007/08/29

Number of Sample: Custody No.: 38 MA6030/070829

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	5	6	15	93

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist



TEST REPORT

QC REPORT

APPLICANT: Cinotech Consultants Limited

1602-1610 Delta House,

3 On Yiu Street, Shatin, N.T.

 Laboratory No.:
 05347

 Date of Issue:
 2007/09/03

 Date Received:
 2007/08/31

 Date Tested:
 2007/08/31

Date Completed: 2007/09/03

1 of 1

Page:

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2007/08/31

Number of Sample:

38

Custody No.:

MA6030/070831

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	5	4	11	96

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist

APPENDIX H SUMMARY OF EXCEEDANCES

Summary of Exceedances Recorded in the Reporting Month

a)	Exceed	lance	Report	for 2	4-hr	TSP
	(NIL)					

(NIL)

b) Exceedance Report for Construction Noise

c) Exceedance Report for Water Quality

• Exceedances of suspended solids (SS) were recorded in the recording month.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70806W-70801_S$

Part A – Exceedance Summary Tables

Table 2: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criter	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification*	Validity (Y/N)	Taken (Y/N)
15_I	8.5	6.1	7.2	8.2	7.8	Limit	(1)	N	N
23_I	9.5	8.5	7.2 ⁺ 9.6 ⁺⁺	17.0	7.8 ⁺ 10.8 ⁺⁺	- Action	(1) & (3)	N	N
27_I	6.0	2.1	6.6	3.0	7.2	Limit	(2) & (4)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.
- (+) Reference point value of 23_R1
- $\binom{++}{l}$ Reference point value of $2\overline{3}$ _R2

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70809W-70803_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification*	Validity (Y/N)	Taken (Y/N)
15_I	8.0	6.1	6.0	8.2	6.5	Limit	(1)	N	N
21_I	8.5	6.6	4.8	20.0	5.2	Limit	(1)	N	N
27_I	8.0	2.1	6.6	3.0	7.2	Limit	(2) & (3)	N	N
TCB_I	68.5	19.0	64.5	20.0	70.9	Limit	(1) & (4)	N	N

^{*}Remarks (1) – No construction activity was observed.

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70813W-70808_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
15_I	16.5	6.1	13.8	8.2	15.0	Limit	(1)	N	N
23_I	10.0	8.5	9.6 ⁺ 12.0 ⁺⁺	17.0	10.8 ⁺ 13.0 ⁺⁺	Action	(1) & (4)	N	N
26_I	10.5	6.7	15.6	15.0	16.9	Action	(1) & (4)	N	N
27_I	9.5	2.1	7.8	3.0	8.5	Limit	(2)	N	N
CSS_I	15.0	9.9	15.6	16.0	16.9	Action	(1) & (4)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.
- (+) Reference point value of 23 R1
- (**) Reference point value of 23_R2

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70814W-70810_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
27_I	6.0	2.1	3.0	3.0	3.3	Limit	(1) & (3)	N	N
CSS_I	5.0	9.9	4.8	16.0	5.2	Action	(1)	N	N
TCB_I	25.0	19.0	48.0	20.0	52.0	Limit	(1) & (4)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70814W-70813_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
27_I	4.0	2.1	4.8	3.0	5.2	Limit	(2) & (4)	N	N
40_I	5.0	14.0	4.2	15.0	4.6	Limit	(1)	N	N
TCB_I	38.0	19.0	48.6	20.0	52.7	Limit	(1) & (4)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70815W-70806_S_v2$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
15_I	20.5	6.1	19.2	8.2	20.8	Limit	(1) & (4)	N	N
18_I	21.0	14.0	24.6	16.0	26.7	Limit	(1) & (4)	N	N
21_I	18.0	6.6	24.0	20.0	26.0	Action	(1) & (4)	N	N
23_I	12.0	8.5	20.4 ⁺ 23.4 ⁺⁺	17.0	22.1 ⁺ 25.4 ⁺⁺	- Action	(1) & (4)	N	N
26_I	18.5	6.7	19.2	15.0	20.8	Limit	(2) & (4)	N	N
27_I	9.0	2.1	20.4	3.0	22.1	Limit	(2) & (4)	N	N
40_I	17.0	14.0	15.6	15.0	16.9	Limit	(2) & (3)	N	N
CSS_I	18.0	9.9	19.2	16.0	20.8	Limit	(1) & (4)	N	N
TCS_I	16.0	10.3	19.2	12.0	20.8	Limit	(1) & (4)	N	N

^{*}Remarks (1) – No construction activity was observed.

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.
- (*) Reference point value of 23_R1
- (*+) Reference point value of 23_R2

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70817W-70815_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
21_I	5.0	6.6	4.8	20.0	5.2	Action	(1)	N	N
27_I	5.0	2.1	5.4	3.0	5.9	Limit	(2) & (4)	N	N
40_I	9.5	14.0	5.4	15.0	5.9	Limit	(1)	N	N

*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70821W\text{-}70817_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
15_I	13.0	6.1	21.0	8.2	22.8	Limit	(2) & (4)	N	N
18_I	15.0	14.0	21.6	16.0	23.4	Action	(1) & (4)	N	N
21_I	13.0	6.6	31.8	20.0	34.5	Action	(1) & (4)	N	N
23_I	15.5	8.5	22.8 ⁺ 22.8 ⁺⁺	17.0	24.7 ⁺ 24.7 ⁺⁺	- Action	(1) & (4)	N	N
26_I	12.0	6.7	19.2	15.0	20.8	Action	(1) & (4)	N	N
27_I	17.5	2.1	20.4	3.0	22.1	Limit	(2) & (4)	N	N
40_I	17.0	14.0	20.4	15.0	22.1	Limit	(1) & (4)	N	N
CSS_I	16.5	9.9	19.2	16.0	20.8	Limit	(1) & (4)	N	N
TCB_I	43.0	19.0	56.4	20.0	61.1	Limit	(1) & (4)	N	N
TCS_I	12.0	10.3	21.0	12.0	22.8	Action	(1) & (4)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70822W-70820_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification*	Validity (Y/N)	Taken (Y/N)
27_I	5.0	2.1	6.6	3.0	7.2	Limit	(2) & (4)	N	N

^{*}Remarks (1) – No construction activity was observed.

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70824W-70822_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

	ream Measured 120% of				ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification*	Validity (Y/N)	Taken (Y/N)
27_I	4.0	2.1	4.8	3.0	5.2	Limit	(2) & (4)	N	N
40_I	4.0	14.0	3.6	15.0	3.9	Limit	(1)	N	N

*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70828W-70824_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
18_I	5.0	14.0	4.8	16.0	5.2	Action	(1)	N	N
27_I	5.5	2.1	7.8	3.0	8.5	Limit	(2) & (4)	N	N
CSS_I	5.0	9.9	4.8	16.0	5.2	Action	(1)	N	N

*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70829W-70827_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification*	Validity (Y/N)	Taken (Y/N)
27_I	5.0	2.1	6.0	3.0	6.5	Limit	(2) & (4)	N	N

^{*}Remarks (1) – No construction activity was observed.

- $(2) No\ pollution\ discharge\ from\ construction\ activity\ was\ observed.$
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70831W-70829_S$

Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
15_I	7.0	6.1	6.6	8.2	7.2	Action	(2)	N	N
18_I	7.0	14.0	6.0	16.0	6.5	Limit	(1)	N	N
21_I	6.0	6.6	5.4	20.0	5.9	Limit	(1)	N	N
26_I	5.0	6.7	3.6	15.0	3.9	Limit	(1)	N	N
27_I	5.0	2.1	6.0	3.0	6.5	Limit	(2) & (4)	N	N
CSS I	6.0	9.9	3.6	16.0	3.9	Limit	(1)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $70904W-70831_S$

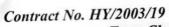
Part A – Exceedance Summary Tables

Table 1: Parameter – Suspended Solids (mg/L)

			Exceedan	ces Criteri	ia				Action
Stream Location	Measured Value	Action value	120% of Reference value [*]	Limit Value	130% of Reference Value [*]	Action / Limit Levels	Justification [*]	Validity (Y/N)	Taken (Y/N)
21_I	5.5	6.6	4.8	20.0	5.2	Limit	(1)	N	N
26_I	5.0	6.7	4.2	15.0	4.6	Limit	(1)	N	N
27_I	5.0	2.1	4.8	3.0	5.2	Limit	(2) & (4)	N	N
40_I	8.0	14.0	4.2	15.0	4.6	Limit	(1)	N	N

- (2) No pollution discharge from construction activity was observed.
- (3) Natural humus or mosses was observed.
- (4) Reference point value already exceeded either the Action or Limit Levels.

APPENDIX I SITE AUDIT SUMMARY



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

Weekly Site Inspection Record Summary

Inspection Information

Inspection Information	LIL 9 Carl
Checklist Reference Number	70802
Date	2 August 2007 (Thursday)
Time	13:45 – 16:00

		Related Item No.
Ref. No.	Non-Compliance	
-	None identified	

			Related Item No
	Ref. No.	Remarks/Observations	
		 A. Water Quality Exposed slope was observed near STR 10(Pier). The Contractor was recommended to provide 	В8
,	70002 001	• Exposed slope was observed near STR 10(Pier). The Contractor was recommended to	Во
	70802-O01		B8
•	70802-O02	• Exposed slope was observed near STR 10(NA). The Contractor was recommended to cover it.	B8
	70802-O03		B8
	70802-O04	- 1 1 I Inder II I I I I I I I Was recommended	B8
	70802-O05	t and the contractor was recommended to cover an	B8
	70802-006		В8
	70802-O07		B8
	70802-O08	Exposed slope was observed near STR17 (14A). The Contractor was recommended to cover it. Exposed slope was observed near RW16. The Contractor was recommended to	B8
	70802-O09	• Exposed slope was observed near RW16. The Contractor was recommended to	Do
		 Exposed slope was observed near RW16. The Contractor was recommended to Stockpile without covering was observed near RW19. The Contractor was recommended to 	B8
	70802-O10		
		 cover it. Exposed soil surface was observed on the platform of STR14. The Contractor was recommended 	B8
	70802-O11		
		to provide shotcrete on it. Insufficient temporary drainage system was observed at STR 12 (SA). The Contractor was	B1
	70802-O12	1 14 · · · · · · · · · · · · · · · · · ·	
		• Insufficient temporary drainage system was observed at STR 5. The Contractor was	B1
	70802-O13		
	70002-015	recommended to improve it.	B1
	70002 014	 recommended to improve it. Insufficient temporary drainage system was observed at STR 12 (NA). The Contractor was 	Di
	70802-O14		D1
١		• Soil and mud fallen on u-channel near CH6800 was observed. The Contractor was reconstructed was reco	B1
۱	70802-O15	to remove the fallen soil and mud.	
	70802-O16	 B. Air Quality Black smoke emitted from excavators was observed. The Contractor was recommended to provide plant equipment maintenance. 	C14
		CANDEL 4	
		 No environmental deficiency was identified during site inspection. 	
	100		
		D. Waste / Chemical Management	
		No environmental deficiency was identified during site inspection.	
		• No environmental devices	(11)
	100		
		E. Ecology	
		• No environmental deficiency was identified during site inspection.	
		 F. Others All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (70726-O01, 70726-O02, 70726-O03, 70726-O04, 70726-O05, 70726-O07, 70726-O09, 70726-O11, 70726-O12, 70726-O13, 70726-O16, 70726-O17, 	
		70726-007, 70726-003, 70726 or 70726-R19. Follow-up action is needed for the outstanding items. • Item 70726-O15 was considered not applicable to the current situation because no cement debagging was observed near RW27.	



	Reminders	Related Item No
	The contractor was reminded to implement the following preventive measures:	202
70802-R18	 B. Air Quality Provide watering for rock breaking activity at STR14 (NA). 	C16
70802-R17	D. Waste / Chemical Management Remove C&D waste near STR12 (SA).	E4ii

		Name of	
Tantatina	Completion	data	Proposed
rentative	Complement.	uate	LIUDUSCU

Def No	Tentative Completion date Proposed by the Contractor for Reminders	Completion Date	Remarks
Ref. No. 70517-O03	24 May 2007	2 August 2007	Refer to 70525-O03
	31 May 2007	2 August 2007	Refer to 70531-O03
70525-O03 70531-O03	7 June 2007	2 August 2007	Refer to 70613-O03
	7 June 2007	2 Hugust 2007	Refer to 70608-O04
70531-004	7 June 2007		Refer to 70613-O26
70531-006	7 June 2007		Refer to 70608-O05
70531-007	13 June 2007		Refer to 70613-O03
70608-O04			Refer to 70613-O23
70608-O05	13 June 2007 13 June 2007		Refer to 70613-O27
70608-O16	SPECIAL PLANTS OF THE SECOND S	2 August 2007	Refer to 70621-003
70613-003	21 June 2007	2 August 2007	Refer to 70621-005
70613-O17	21 June 2007		Refer to 70621-006
70613-O26	21 June 2007		Refer to 70621-R18
70613-R31	21 June 2007	2.4+ 2007	Refer to 70628-005
70621-O03	28 June 2007	2 August 2007	Refer to 70628-007
70621-006	28 June 2007		Refer to 70028-007
70621-016	28 June 2007		Refer to 70628-010
70621-R18	28 June 2007		Refer to 70028-001
70628-O01	5 July 2007		
70628-O02	5 July 2007		Refer to 70705-O02
70628-O03	5 July 2007		Refer to 70705-O03
70628-O05	5 July 2007	2 August 2007	Refer to 70705-O05
70628-O07	5 July 2007		Refer to 70705-O07
70628-O10	5 July 2007	2 August 2007	Refer to 70705-O10
70705-O01	11 July 2007		Refer to 70711-O01
70705-O02	11 July 2007		Refer to 70711-O02
70705-O03	11 July 2007		Refer to 70711-O03
70705-O05	11 July 2007	2 August 2007	Refer to 70711-005
70705-O07	11 July 2007		Refer to 70711-007
70705-O10	11 July 2007	2 August 2007	Refer to 70711-O09
70705-O14	11 July 2007		Refer to 70711-O11
70711-O01	19 July 2007		Refer to 70719-001
70711-O02			Refer to 70719-O02
70711-O03		1	Refer to 70719-O03
70711-O05		2 August 2007	Refer to 70719-O05
70711-O07			Refer to 70719-O07
70711-O09		2 August 2007	Refer to 70719-008
70711-O11			Refer to 70719-O11
70711-O14			Refer to 70719-O14
70711-O14		2 August 2007	Refer to 70719-O15
70719-O01	-		Refer to 70726-O01
70719-O01		Total Control	Refer to 70726-O02
70719-O02			Refer to 70726-O03
70719-003			Refer to 70726-O04

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

Weekly Site Inspection Record Summary

Tentative	Completion	date Proposed
rentative	Completion	i date Propose

Ref. No.	by the Contractor for Reminders	Completion Date	Remarks
70719-005	26 July 2007	2 August 2007	Refer to 70726-O14
70719-007	26 July 2007		Refer to 70726-O07
70719-O08	26 July 2007	2 August 2007	Refer to 70726-O10
70719-O10	26 July 2007		Refer to 70726-O09
70719-O11	26 July 2007		Refer to 70726-O12
70719-014	26 July 2007		Refer to 70726-O05
70719-O15	26 July 2007	2 August 2007	Refer to 70726-O06
70719-R18	26 July 2007		Refer to 70726-O13
70726-O01	2 August 2007		Refer to 70802-O01
70726-O02	2 August 2007		Refer to 70802-O02
70726-O03	2 August 2007		Refer to 70802-O03
70726-O04	2 August 2007		Refer to 70802-O04
70726-O05	2 August 2007		Refer to 70802-O05
70726-O06	2 August 2007	2 August 2007	
70726-O07	2 August 2007		Refer to 70802-O07
70726-O08	2 August 2007	2 August 2007	
70726-O09	2 August 2007		Refer to 70802-O09
70726-O10	2 August 2007	2 August 2007	THE RESERVE OF THE PARTY OF THE
70726-O11	2 August 2007		Refer to 70802-O11
70726-O12	2 August 2007		Refer to 70802-O12
70726-O13	2 August 2007	Figure Control of the	Refer to 70802-O13
70726-O14	2 August 2007	2 August 2007	n heindler Kill Contail medies
70726-O15	2 August 2007		Considered inapplicable on 2 August 2007
70726-O16	2 August 2007		Refer to 70802-O16
70726-O17	2 August 2007	A PARTIE AND THE PROPERTY OF THE PARTIES.	Refer to 70802-O10
70726-R18	2 August 2007	2 August 2007	
70726-R19	2 August 2007		Refer to 70802-O17
70802-O01	8 August 2007		
70802-O02	8 August 2007		
70802-O03	8 August 2007		
70802-O04	8 August 2007		
70802-O05	8 August 2007		THE RESERVE OF THE PARTY OF THE
70802-O06	8 August 2007		
70802-O07	8 August 2007	militarinosod ilini	at we are present to head one ats
70802-O08	8 August 2007		
70802-O09	8 August 2007		
70802-O10	8 August 2007	devocas vants	e pmahonymistarus:
70802-O11	8 August 2007		
70802-O12	8 August 2007		
70802-O13	8 August 2007		
70802-O14	8 August 2007		
70802-O15	8 August 2007		
70802-O16	8 August 2007		
70802-O17	8 August 2007		
70802-R18	8 August 2007		HI THE
70802-R19	8 August 2007		A CONTRACTOR OF THE CONTRACTOR

	Name	Signature	Date
Recorded by	Edmond Wu	w	3 August 2007
Checked by	Dr. Priscilla Choy	Charle	3 August 2007

Inspection Information

Checklist Reference Number	70808	The State Con-
Date	8 August 2007 (Wednesday)	
Time	09:00 - 11:45	

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	1

Def M.	Demonto/Observations	Related Item No
Ref. No.	Remarks/Observations	Item No
70000 001	A. Water Quality The Contractor was recommended to cover it	В8
70808-O01	• Exposed slope was observed near STR 9. The Contractor was recommended to cover it.	B8
0808-O02	• Exposed slope was observed near STR 10(NA). The Contractor was recommended to cover it.	
0808-O03	• Exposed slope was observed near STR 11(NA). The Contractor was recommended to cover it.	B8
70808-O04	 Exposed slope was observed near RW22. The Contractor was recommended to cover it. 	B8
0808-O05	 Exposed slope was observed near RW20. The Contractor was recommended to cover it. 	B8
0808-O06	 Exposed slope was observed near RW27. The Contractor was recommended to cover it. 	B8
0808-O07	• Exposed slope was observed near RW16. The Contractor was recommended to cover it.	B8
70808-O08	 Accumulated silt and mud was observed at sedimentation tank near RW22. The Contractor was recommended to clear the accumulated silt and mud. 	B5iii
70808-O09	 Accumulated silt and mud was observed at sedimentation tank near Stream 30. The Contractor was recommended to clear the accumulated silt and mud. 	B5iii
70808-O10	Stockpile without covering was observed near RW19. The Contractor was recommended to cover it.	В8
70808-O11	Exposed soil surface was observed on the platform of STR14. The Contractor was recommended to provide shotcrete on it.	В8
70808-O12	Insufficient temporary drainage system was observed at STR 12 (SA). The Contractor was recommended to improve it.	В1
70808-O13	 Insufficient temporary drainage system was observed at STR 5. The Contractor was recommended to improve it. 	Bl
70808-O14	Insufficient temporary drainage system was observed at STR 12 (NA). The Contractor was recommended to improve it.	B1
70808-O15	Insufficient temporary drainage system was observed at STR 10 (Pier). The Contractor was recommended to improve it.	B1
70808-O16	Silt and mud on the platform near Stream 27 was observed. The Contractor was recommended to provide sorting on the source of rock to prevent the silt mixed with rock.	B1
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	E. Ecology	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (70802-O01, 70802-O02, 70802-O03, 70802-O05, 70802-O06, 70802-O07, 70802-O09, 70802-O10, 70802-O11, 70802-O12, 70802-O13 and 70802-O14).	72
	Follow-up action is needed for the outstanding items. • Item 70802-O16 was considered not applicable to the current situation because no rock breaking	
	activity was observed at STR14 (NA).	

	Reminders	Related Item No.
	The contractor was reminded to implement the following preventive measures:	
70808-R18	 B. Air Quality Provide watering for rock breaking activity at STR12 (NA). 	C6
70808-R17	D. Waste / Chemical Management Remove general refuse on Stream 28 .	E1iii

Tentative Completion date Proposed **Completion Date** Remarks by the Contractor for Reminders Ref. No. Refer to 70608-O04 7 June 2007 70531-004 7 June 2007 Refer to 70613-O26 70531-O06 7 June 2007 Refer to 70608-O05 70531-O07 Refer to 70613-O03 13 June 2007 70608-O04 13 June 2007 Refer to 70613-O23 70608-O05 13 June 2007 Refer to 70613-O27 70608-O16 21 June 2007 Refer to 70621-O05 70613-O17 Refer to 70621-O06 21 June 2007 70613-026 Refer to 70621-R18 21 June 2007 70613-R31 Refer to 70628-O07 28 June 2007 70621-O06 Refer to 70628-O16 28 June 2007 70621-016 Refer to 70628-O01 70621-R18 28 June 2007 Refer to 70705-O01 70628-O01 5 July 2007 Refer to 70705-O02 70628-O02 5 July 2007 Refer to 70705-O03 70628-O03 5 July 2007 Refer to 70705-O07 70628-O07 5 July 2007 Refer to 70711-001 11 July 2007 70705-O01 Refer to 70711-O02 11 July 2007 70705-O02 Refer to 70711-O03 11 July 2007 70705-O03 Refer to 70711-007 11 July 2007 70705-O07 Refer to 70711-O11 11 July 2007 70705-O14 Refer to 70719-O01 19 July 2007 70711-O01 Refer to 70719-O02 19 July 2007 70711-O02 Refer to 70719-O03 19 July 2007 70711-O03 Refer to 70719-O07 19 July 2007 70711-O07 Refer to 70719-O11 19 July 2007 70711-O11 Refer to 70719-O14 19 July 2007 70711-014 Refer to 70726-O01 26 July 2007 70719-001 Refer to 70726-O02 70719-O02 26 July 2007 Refer to 70726-O03 26 July 2007 70719-003 Refer to 70726-O04 8 August 2007 26 July 2007 70719-004 Refer to 70726-O07 26 July 2007 70719-007 Refer to 70726-009 26 July 2007 70719-010 Refer to 70726-O12 26 July 2007 70719-011 Refer to 70726-O05 26 July 2007 70719-014 Refer to 70726-O13 26 July 2007 70719-R18 Refer to 70802-O01 2 August 2007 70726-O01 Refer to 70802-O02 2 August 2007 70726-O02 Refer to 70802-O03 2 August 2007 70726-O03 Refer to 70802-O04 2 August 2007 8 August 2007 70726-O04 Refer to 70802-O05 2 August 2007 70726-O05

Refer to 70802-O07

2 August 2007

70726-O07

Tentative Completion date Proposed

Ref. No.	by the Contractor for Reminders	Completion Date	Remarks
70726-O09	2 August 2007		Refer to 70802-O09
70726-O11	2 August 2007		Refer to 70802-O11
70726-O12	2 August 2007		Refer to 70802-O12
70726-O13	2 August 2007		Refer to 70802-O13
70726-O16	2 August 2007	8 August 2007	Refer to 70802-O16
70726-O17	2 August 2007		Refer to 70802-O10
70726-R19	2 August 2007		Refer to 70802-O17
70802-O01	8 August 2007		Refer to 70808-O15
70802-O02	8 August 2007		Refer to 70808-O02
70802-O03	8 August 2007		Refer to 70808-O03
70802-O04	8 August 2007	8 August 2007	
70802-O05	8 August 2007		Refer to 70808-O04
70802-O06	8 August 2007		Refer to 70808-O05
70802-O07	8 August 2007		Refer to 70808-O06
70802-O08	8 August 2007	8 August 2007	19-1
70802-009	8 August 2007		Refer to 70808-O07
70802-O10	8 August 2007		Refer to 70808-O10
70802-O11	8 August 2007		Refer to 70808-O11
70802-O12	8 August 2007		Refer to 70808-O12
70802-O13	8 August 2007		Refer to 70808-O13
70802-O14	8 August 2007		Refer to 70808-O14
70802-O15	8 August 2007	8 August 2007	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
70802-O16	8 August 2007	8 August 2007	
70802-R17	8 August 2007	8 August 2007	
70802-R18	8 August 2007	-	Considered inapplicable on 8 August 2007
70808-O01	16 August 2007		
70808-O02	16 August 2007		
70808-O03	16 August 2007		
70808-O04	16 August 2007		
70808-O05	16 August 2007		
70808-O06	16 August 2007		
70808-O07	16 August 2007		
70808-O08	16 August 2007		
70808-O09	16 August 2007		
70808-O10	16 August 2007		
70808-O11	16 August 2007		
70808-O12	16 August 2007		
70808-O13	16 August 2007		
70808-O14	16 August 2007		
70808-O15	16 August 2007		
70808-O16	16 August 2007		
70808-R17	16 August 2007		
70808-R18	16 August 2007		

	Name	Signature	Date
Recorded by	Edmond Wu	Ber	9 August 2007
Checked by	Dr. Priscilla Choy	Charle	9 August 2007

Inspection Information

Checklist Reference Number	70816	
Date	16 August 2007 (Thursday)	
Time	09:00 – 11:15	

		Related
Ref. No.	Non-Compliance	Item No.
1 -	None identified	parating and Start name of the Clark

Ref. No.	Remarks/Observations	Related Item No.
101.110.	A. Water Quality	
70816-O01	• Exposed slope was observed near STR 9. The Contractor was recommended to cover it.	B8
70816-O02	• Exposed slope was observed near STR 10(NA). The Contractor was recommended to cover it.	B8
70816-O03	• Exposed slope was observed near RW22. The Contractor was recommended to cover it.	B8
70816-O03	• Exposed slope was observed near RW27. The Contractor was recommended to cover it.	B8
70816-O05	Discharge of site runoff without treatment was observed at STR12 (SA). The Contractor was recommended to provide treatment of site runoff before discharge.	B1
70816-O06	Accumulated silt and mud was observed at sedimentation tank near Stream 30 . The Contractor was recommended to clear the accumulated silt and mud.	B5iii
70816-O07	Exposed soil surface was observed on the platform near STR14. The Contractor was recommended to provide shotcrete on it.	В8
70816-O08	Insufficient temporary drainage system was observed at STR 12 (SA). The Contractor was recommended to improve it.	B1
70816-O09	 Insufficient temporary drainage system was observed at STR 5. The Contractor was recommended to improve it. 	В1
70816 - O10	 Insufficient temporary drainage system was observed at STR 12 (NA). The Contractor was recommended to improve it. 	B1
70816-O11	 Insufficient temporary drainage system was observed at STR 10 (Pier). The Contractor was recommended to improve it. 	B1
70816-O12	Insufficient temporary drainage system was observed at STR 14 (NA). The Contractor was recommended to improve it.	В1
70816-O14	Poor efficiency of sedimentation tank was observed near RW15. The Contractor was recommended to add coagulant in the sedimentation tank to improve the silt removal efficiency.	B5iv
	B. Air Quality Fugitive dust emitted from soil nailing works was observed at RW06. The Contractor was	
70816-O13	recommended to implement more dust mitigation measure on soil nailing works.	C6
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	E. Ecology	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	 All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (70816-O01, 70816-O02, 70816-O04, 70816-O06, 70816-O09, 70816-O11, 70816-O12, 70816-O13, 70816-O14 and 70816-O15). Follow-up action is needed for the outstanding items. 	
	Item 70816-O07 was considered not applicable to the current situation because construction activity was being carried out at RW16. The Contractor was reminded to cover the slope when construction activity was not carried out there.	
	 Item 70816-O10 was considered not applicable to the current situation because construction activity was being carried out at RW19. 	

Ī	70816-O10 was considered not applicable to the current situation because no rock breaking	
ı	ty was observed at STR12 (NA)	

	Reminders	Related Item No.
	The contractor was reminded to implement the following preventive measures: B. Air Quality	
70816-R15	Review and provide proper maintenance for backhoe to prevent emission of black smoke	C15

Ref. No.	Tentative Completion date Proposed by the Contractor for Reminders	Completion Date	Remarks
70531-O04	7 June 2007		Refer to 70608-O04
70531-O06	7 June 2007		Refer to 70613-O26
70531-007	7 June 2007		Refer to 70608-O05
70608-O04	13 June 2007		Refer to 70613-O03
70608-O05	13 June 2007		Refer to 70613-O23
70608-O16	13 June 2007		Refer to 70613-O27
70613-O17	21 June 2007		Refer to 70621-O05
70613-O26	21 June 2007		Refer to 70621-O06
70613-R31	21 June 2007		Refer to 70621-R18
70621-O06	28 June 2007		Refer to 70628-O07
70621-016	28 June 2007		Refer to 70628-O16
70621-R18	28 June 2007		Refer to 70628-001
70628-O01	5 July 2007		Refer to 70705-001
70628-O02	5 July 2007		Refer to 70705-O02
70628-O03	5 July 2007	16 August 2007	Refer to 70705-003
70628-O07	5 July 2007	To regular 2007	Refer to 70705-007
70705-O01	11 July 2007		Refer to 70711-001
70705-O02	11 July 2007		Refer to 70711-O02
70705-O03	11 July 2007	16 August 2007	Refer to 70711-003
70705-O07	11 July 2007	To Hugust 2007	Refer to 70711-007
70705-O14	11 July 2007		Refer to 70711-O11
70711-O01	19 July 2007		Refer to 70719-001
70711-O02	19 July 2007		Refer to 70719-O02
70711-O03	19 July 2007	16 August 2007	Refer to 70719-O03
70711-O07	19 July 2007	101111811111111111111111111111111111111	Refer to 70719-007
70711-O11	19 July 2007		Refer to 70719-O11
70711-O14	19 July 2007		Refer to 70719-O14
70719-O01	26 July 2007		Refer to 70726-O01
70719-O02	26 July 2007		Refer to 70726-O02
70719-O03	26 July 2007	16 August 2007	Refer to 70726-O03
70719-O07	26 July 2007	To the gast zoon	Refer to 70726-O07
70719-O10	26 July 2007	-	Refer to 70726-O09
70719-O11	26 July 2007		Refer to 70726-O12
70719-O14	26 July 2007		Refer to 70726-O05
70719-R18	26 July 2007		Refer to 70726-O13
70726-O01	2 August 2007		Refer to 70802-O01
70726-O02	2 August 2007		Refer to 70802-O02
70726-O03	2 August 2007	16 August 2007	Refer to 70802-O03
70726-O05	2 August 2007		Refer to 70802-O05
70726-O07	2 August 2007		Refer to 70802-007
70726-O09	2 August 2007	-	Refer to 70802-009
70726-O11	2 August 2007		Refer to 70802-011
70726-O12	2 August 2007		Refer to 70802-O12
70726-O13	2 August 2007		Refer to 70802-O13

Tentative Completion date	Proposed
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Ref. No.	by the Contractor for Reminders	Completion Date	Remarks
70726-O17	2 August 2007	- Completion Date	Refer to 70802-O10
70726-R19	2 August 2007		Refer to 70802-010
70802-O01	8 August 2007		Refer to 70808-015
70802-O02	8 August 2007		Refer to 70808-O13
70802-O03	8 August 2007	16 August 2007	Refer to 70808-002
70802-O05	8 August 2007	10 / tagast 2007	Refer to 70808-003
70802-O06	8 August 2007	16 August 2007	
70802-O07	8 August 2007	10 August 2007	Refer to 70808-O05 Refer to 70808-O06
70802-O09	8 August 2007		
70802-O10	8 August 2007	-	Refer to 70808-O07 Refer to 70808-O10
70802-O11	8 August 2007	75%	
70802-O12	8 August 2007		Refer to 70808-O11
70802-O13	8 August 2007		Refer to 70808-O12
70802-O14	8 August 2007		Refer to 70808-O13
70808-O01	16 August 2007		Refer to 70808-014
70808-O02	16 August 2007		Refer to 70816-001
70808-O03	16 August 2007	16 August 2007	Refer to 70816-O02
70808-O04	16 August 2007	10 August 2007	D.C. + 70016 002
70808-O05	16 August 2007	16 August 2007	Refer to 70816-O03
70808-O06	16 August 2007	10 August 2007	D. C 7001 C. 004
70808-O07	16 August 2007		Refer to 70816-004
70808-O08	16 August 2007	16 August 2007	Considered inapplicable on 16 August 2007
70808-O09	16 August 2007	10 August 2007	D-6 70016 006
70808-O10	16 August 2007	-	Refer to 70816-006
70808-O11	16 August 2007		Considered inapplicable on 16 August 2007
70808-O12	16 August 2007		Refer to 70816-007
70808-O13	16 August 2007		Refer to 70816-008
70808-O14	16 August 2007		Refer to 70816-009
70808-O15	16 August 2007		Refer to 70816-010
70808-O16	16 August 2007	16 August 2007	Refer to 70816-O11
70808-R17	16 August 2007	16 August 2007	
70808-R18	16 August 2007	10 August 2007	Considered insurling the second second
70816-O01	23 August 2007		Considered inapplicable on 16 August 2007
70816-O02	23 August 2007		
70816-O03	23 August 2007	-	
70816-004	23 August 2007		
70816-O05	23 August 2007		
70816-O06	23 August 2007		
70816-O07	23 August 2007		
70816-O08	23 August 2007		
70816-O09	23 August 2007	, , , , , , , , , , , , , , , , , , , ,	
70816-O10	23 August 2007		
70816-O11	23 August 2007		
70816-O12	23 August 2007		
70816-O13	23 August 2007		
70816-O14	23 August 2007		1
70816-R15	23 August 2007		

	Name	Signature	Date
Recorded by	Edmond Wu	200	16 August 2007
Checked by	Dr. Priscilla Choy	ChynL	16 August 2007

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

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70823
Date	23 August 2007 (Thursday)
Time	09:00 - 11:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
70823-O01	• Exposed slope was observed near STR 9. The Contractor was recommended to cover it.	B8
70823-O02	• Exposed slope was observed near RW02. The Contractor was recommended to cover it.	B8
70823-003	• Exposed slope was observed near RW22. The Contractor was recommended to cover it.	В8
70823-004		B8
70823-005	Stockpile of soil without covering was observed near RW15. The Contractor was recommended	В8
70823-O06	 Oil spillage was observed on the haul road near STR8. The Contractor was recommended to clear the oil. 	B22
70823-O07	 Exposed soil surface was observed on the platform near STR14. The Contractor was recommended to provide shotcrete on it. 	В8
70823-O08	 Exposed soil surface was observed on the platform near STR12(SA). The Contractor was recommended to provide shotcrete on it. 	В8
70823-O09	Insufficient temporary drainage system was observed at STR 5. The Contractor was recommended to improve it.	В1
70823-O10	Insufficient temporary drainage system was observed at STR 10 (Pier). The Contractor was recommended to improve it.	В1
70823-O11	 Insufficient temporary drainage system was observed at STR 14 (NA). The Contractor was recommended to improve it. 	В1
70823-O12	Poor efficiency of sedimentation tank was observed near RW15. The Contractor was recommended to add coagulant in the sedimentation tank to improve the silt removal efficiency.	B5iv
70823-O13	Muddy haul road was observed near STR9. The Contractor was recommended to clear the mud there.	В1
70823-014	Insufficient temporary drainage system was observed near Wong Ka Wai. The Contractor was recommended to improve it.	В1
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	No environmental deficiency was identified during site inspection.	
	D. Waste / Chemical Management No environmental deficiency was identified during site inspection.	
	E. Ecology No environmental deficiency was identified during site inspection.	
	 F. Others All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (70823-O01, 70823-O03, 70823-O04, 70823-O02, 70823-O07, 70823-O08, 70823-O09, 70823-O11, 70823-O12 and 70823-O14). Follow-up action is needed for the outstanding items. 	

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

Weekly Site Inspection Record Summary

	Reminders	Related Item No.
	The contractor was reminded to implement the following preventive measures: D. Waste / Chemical Management	
70823-R15	Remove the C&D waste on Stream 34.	E4ii

Ref. No.	Tentative Completion date Proposed by the Contractor for Reminders	Completion Date	Remarks
70531-006	7 June 2007	Completion Date	Refer to 70613-O26
70613-026	21 June 2007		Refer to 70621-O06
70613-R31	21 June 2007		Refer to 70621-R18
70621-006	28 June 2007		Refer to 70628-007
70621-R18	28 June 2007		Refer to 70628-007
70628-001	5 July 2007		Refer to 70705-001
70628-O02	5 July 2007	23 August 2007	Refer to 70705-002
70628-007	5 July 2007	25 / Kugust 2007	Refer to 70705-002
70705-001	11 July 2007		Refer to 70701-001
70705-O02	11 July 2007	23 August 2007	Refer to 70711-002
70705-O07	11 July 2007	25 / tugust 2007	Refer to 70711-002
70705-O14	11 July 2007		Refer to 70711-007
70711-001	19 July 2007		Refer to 70711-011
70711-002	19 July 2007	23 August 2007	Refer to 70719-002
70711-O07	19 July 2007	25 August 2007	Refer to 70719-002
70711-O11	19 July 2007		Refer to 70719-011
70711-O14	19 July 2007		Refer to 70719-011
70719-001	26 July 2007		
70719-002	26 July 2007	23 August 2007	Refer to 70726-O01 Refer to 70726-O02
70719-002	26 July 2007 26 July 2007	23 August 2007	Refer to 70726-002
70719-O07	26 July 2007 26 July 2007		
70719-011	26 July 2007 26 July 2007		Refer to 70726-012
70719-R18	26 July 2007 26 July 2007		Refer to 70726-O05 Refer to 70726-O13
70726-001	2 August 2007		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
70726-O02	2 August 2007 2 August 2007	23 August 2007	Refer to 70802-O01 Refer to 70802-O02
70726-O05	2 August 2007 2 August 2007	23 August 2007	
70726-O07	2 August 2007 2 August 2007		Refer to 70802-005
70726-O11	2 August 2007 2 August 2007		Refer to 70802-007
70726-O12	2 August 2007 2 August 2007		Refer to 70802-011
70726-O13	2 August 2007 2 August 2007		Refer to 70802-012
70726-R19	2 August 2007 2 August 2007		Refer to 70802-O13
70802-O01	8 August 2007		Refer to 70802-O17
70802-O01	8 August 2007	23 August 2007	Refer to 70808-015
70802-O02	8 August 2007	23 August 2007	Refer to 70808-002
70802-O07	8 August 2007		Refer to 70808-004
70802-O11	8 August 2007		Refer to 70808-006
70802-O11	8 August 2007		Refer to 70808-011
70802-O12	8 August 2007		Refer to 70808-O12
70802-O13	8 August 2007	23 August 2007	Refer to 70808-013
70808-O01	16 August 2007	23 August 2007	Refer to 70808-O14
70808-O01	16 August 2007 16 August 2007	23 August 2007	Refer to 70816-001
70808-O02	16 August 2007	23 August 2007	Refer to 70816-002
70808-O04	16 August 2007	7,	Refer to 70816-003
70808-O09	16 August 2007	23 August 2007	Refer to 70816-004
70808-O11	16 August 2007 16 August 2007	23 August 2007	Refer to 70816-006
70808-O11	16 August 2007 16 August 2007		Refer to 70816-007
70808-O12	16 August 2007 16 August 2007		Refer to 70816-008
70000-013	10 August 2007		Refer to 70816-O09

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

Weekly Site Inspection Record Summary

Tentative Completion date Proposed

Ref. No.	by the Contractor for Reminders	Completion Date	Remarks
70808-O14	16 August 2007	23 August 2007	Refer to 70816-O10
70808-O15	16 August 2007	25 / Ingust 2007	Refer to 70816-011
70816-O01	23 August 2007		Refer to 70010-011
70816-O02	23 August 2007	23 August 2007	
70816-O03	23 August 2007	25 Hugust 2007	
70816-O04	23 August 2007		
70816-O05	23 August 2007	23 August 2007	
70816-O06	23 August 2007	23 August 2007	
70816-O07	23 August 2007	20111181112007	
70816-O08	23 August 2007		
70816-O09	23 August 2007		
70816-O10	23 August 2007	23 August 2007	
70816-O11	23 August 2007		
70816-O12	23 August 2007		
70816-O13	23 August 2007	23 August 2007	
70816-O14	23 August 2007		
70816-R15	23 August 2007	23 August 2007	
70823-O01	30 August 2007		
70823-O02	30 August 2007		
70823-O03	30 August 2007		
70823-O04	30 August 2007		
70823-O05	30 August 2007		
70823-O06	30 August 2007		
70823-O07	30 August 2007		
70823-O08	30 August 2007		
70823-009	30 August 2007		
70823-O10	30 August 2007		
70823-O11	30 August 2007		
70823-O12	30 August 2007		
70823-O13	30 August 2007		
70823-O14	30 August 2007		
70823-R15	30 August 2007		

	Name	Signature	Date
Recorded by	Edmond Wu	W	23 August 2007
Checked by	Dr. Priscilla Choy	WIL	23 August 2007

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

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70830	
Date	30 August 2007 (Thursday)	
Time	09:00 - 11:45	

Ref. No.	Non-Compliance	Related
Rei. No.	Non-Comphance	Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
70830-O01	• Insufficient temporary drainage system was observed near Wong Ka Wai . The Contractor was recommended to improve it.	В1
70830-O02	Exposed slope was observed near RW16. The Contractor was recommended to cover it.	B8
70830-O03	Stagnant water was observed near STR20. The Contractor was recommended to clear it.	B11
70830-O05	Stockpile without covering was observed near STR13 (SA). The Contractor was recommended to cover it	В8
	B. Air Quality	
70830-O04	Rock breaking without watering was observed near CH3600 and Shek Mun Kap. The Contractor was recommended to provide watering for rock breaking activity.	C6
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	E. Ecology	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	All environmental deficiencies identified in previous audit session were improved/rectified by	
	the Contractor except items (70823-O14). Follow-up action is needed for the outstanding items	

Tentative Completion date Proposed

Ref. No.	by the Contractor for Reminders	Completion Date	Remarks
70531-006	7 June 2007	30 August 2007	Refer to 70613-O26
70613-O26	21 June 2007	30 August 2007	Refer to 70621-O06
70613-R31	21 June 2007	30 August 2007	Refer to 70621-R18
70621-O06	28 June 2007	30 August 2007	Refer to 70628-O07
70621-R18	28 June 2007	30 August 2007	Refer to 70628-001
70628-001	5 July 2007	30 August 2007	Refer to 70705-O01
70628-O07	5 July 2007	30 August 2007	Refer to 70705-O07
70705-001	11 July 2007	30 August 2007	Refer to 70711-001
70705-O07	11 July 2007	30 August 2007	Refer to 70711-O07
70705-O14	11 July 2007	30 August 2007	Refer to 70711-O11
70711-001	19 July 2007	30 August 2007	Refer to 70719-001
70711-007	19 July 2007	30 August 2007	Refer to 70719-O07
70711-011	19 July 2007	30 August 2007	Refer to 70719-O11
70711-014	19 July 2007	30 August 2007	Refer to 70719-O14
70719-001	26 July 2007	30 August 2007	Refer to 70726-001
70719-007	26 July 2007	30 August 2007	Refer to 70726-O07
70719-011	26 July 2007	30 August 2007	Refer to 70726-O12
70719-014	26 July 2007	30 August 2007	Refer to 70726-O05
70719-R18	26 July 2007	30 August 2007	Refer to 70726-O13

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

Weekly Site Inspection Record Summary

Tentative	Compl	etion o	date	Pro	posed
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Ref. No.	by the Contractor for Reminders	Completion Date	Remarks
70726-001	2 August 2007	30 August 2007	Refer to 70802-001
70726-O05	2 August 2007	30 August 2007	Refer to 70802-O05
70726-O07	2 August 2007	30 August 2007	Refer to 70802-O07
70726-O11	2 August 2007	30 August 2007	Refer to 70802-O11
70726-O12	2 August 2007	30 August 2007	Refer to 70802-O12
70726-O13	2 August 2007	30 August 2007	Refer to 70802-O13
70726-R19	2 August 2007	30 August 2007	Refer to 70802-O17
70802-001	8 August 2007	30 August 2007	Refer to 70808-O15
70802-O05	8 August 2007	30 August 2007	Refer to 70808-O04
70802-O07	8 August 2007	30 August 2007	Refer to 70808-O06
70802-O11	8 August 2007	30 August 2007	Refer to 70808-O11
70802-O12	8 August 2007	30 August 2007	Refer to 70808-O12
70802-O13	8 August 2007	30 August 2007	Refer to 70808-O13
70808-O01	16 August 2007	30 August 2007	Refer to 70816-O01
70808-O04	16 August 2007	30 August 2007	Refer to 70816-O03
70808-O06	16 August 2007	30 August 2007	Refer to 70816-O04
70808-O11	16 August 2007	30 August 2007	Refer to 70816-O07
70808-O12	16 August 2007	30 August 2007	Refer to 70816-O08
70808-O13	16 August 2007	30 August 2007	Refer to 70816-O09
70808-015	16 August 2007	30 August 2007	Refer to 70816-011
70816-O01	23 August 2007	30 August 2007	Refer to 70823-O01
70816-O03	23 August 2007	30 August 2007	Refer to 70823-O03
70816-O04	23 August 2007	30 August 2007	Refer to 70823-O04
70816-O07	23 August 2007	30 August 2007	Refer to 70823-O07
70816-O08	23 August 2007	30 August 2007	Refer to 70823-O08
70816-009	23 August 2007	30 August 2007	Refer to 70823-O09
70816-011	23 August 2007	30 August 2007	Refer to 70823-O10
70816-O12	23 August 2007	30 August 2007	Refer to 70823-O11
70816-O14	23 August 2007	30 August 2007	Refer to 70823-O12
70823-O01	30 August 2007	30 August 2007	
70823-O02	30 August 2007	30 August 2007	
70823-O03	30 August 2007	30 August 2007	
70823-O04	30 August 2007	30 August 2007	
70823-O05	30 August 2007	30 August 2007	
70823-O06	30 August 2007	30 August 2007	
70823-O07	30 August 2007	30 August 2007	
70823-O08	30 August 2007	30 August 2007	
70823-O09	30 August 2007	30 August 2007	
70823-O10	30 August 2007	30 August 2007	
70823-O11	30 August 2007	30 August 2007	
70823-O12	30 August 2007	30 August 2007	
70823-O13	30 August 2007	30 August 2007	B. 6
70823-014	30 August 2007		Refer to 70830-O01
70823-R15	30 August 2007	30 August 2007	
70830-O01	6 September 2007		140
70830-O02	6 September 2007		
70830-O03	6 September 2007		
70830-O04	6 September 2007		
70830-O05	6 September 2007		

	Name	Signature	Date
Recorded by	Edmond Wu	4M	30 August 2007
Checked by	Dr. Priscilla Choy	びえ	30 August 2007

APPENDIX J ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Appendix J - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures	Status
	 A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones. 	^
	Vehicle washing facilities should be provided at every exit point.	^
	• 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.	^
	• 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
	• Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet.	^
	• 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.	^
	During cement debagging or concrete batching operation in an area sheltered on top and 3 sides.	^
	 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. 	^
	• Every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site.	^
	• 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.	^
	 Proper enclosures and water spraying should be implemented for the main dust-generating activities, such as soil nailing or piling works. 	*
	Proper plant maintenance should be provided to avoid black smoke emission from plants/equipment.	*

Types of Impacts	Mitigation Measures	Status
	 Only well-maintained plant should be operated on –site and plant should be serviced regularly during the construction works. Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. 	^
	 Plant know to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS. Mobile plant should be sited as far away from NSRs as possible. 	^ ^
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. Construct temporary and movable noise barriers 	N/A
W (O P)		
Water Quality	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.	٨
	• 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.	*
	 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.	^
	 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
	 Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks. 	^
	 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
	• 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.	*
	 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. 	٨
	Tunnelling Work	
	 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. 	N/A
	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.	N/A
	 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. 	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).	٨
	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.	٨
	 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. 	
		N/A

Types of Impacts	Mitigation Measures	Status			
Waste /	General				
Chemical	 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. 	^			
	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. 	^			
	 Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits. 	^			
	Waste shall be removed on a daily basis.	^			
	Waste storage area shall be maintained and cleaned on a daily basis.	^			
	 Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers. 	^			
	Obtain necessary waste disposal permits from the appropriate authorities if they are required.	^			
	Wastes shall be disposed of at licensed waste disposal facilities.	^			
	• 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.	^			
	Maintain records of the quantities of wastes generated, recycled and disposed.	^			
	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				
	 Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts. 	^			
	• The handling and disposal of bentonite slurries shall be undertaken in accordance with Practice Note for Professional Persons – Construction Site Drainage (ProPECC PN 1/94) on construction site drainage.	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.	۸			
	Chemical Waste				
	 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. 	۸			

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

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	٨
Ecology	Construction activities in the stream and other disturbances to it should be avoided.	^

Remarks: ^ Compliance of mitigation measure; N/A Not Applicable; * Recommendation was made during site audit but improved/rectified by the contractor.	X • #	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 K EVENT ACTION PLANS

Appendix K – Event Action Plans

Event /Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	Contractor
Action Level				
Excee dance for one sample	 Inform the IEC and the Contractor about the exceedance within 24 hou of identification of exceedance; Identify the source, investigate the causes of exceedance and propose remedial measures; Report the results of the investigation to the Contractor; Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance. Repeat measurement to confirm finding. If exceedance is indicated due to the Project construction works, increase 24-hour TSP monitoring frequency to hour monitoring with 3 times every six days until no exceedance is recorded. 	regarding the action and/or limit level exceedance during the impact monitoring; 3. Check Contractor's working method.	 Confirm receipt of NOE in writing. Notify EPD and other relevant Government departments within 24 hours of identification of exceedance. 	 Inform IEC and ER within 24 hours of identification of exceedance; Submit proposals for remedial to ER within 3 working days of notification ET if exceedance is due to the Project construction works; Rectify any unacceptable practice; Amend working methods if appropriate and within reasonable time scale if exceedance is due to the Project construction works.

EVENT	ACTION					
	ET	IEC	ER	Contractor		
Action Level						
2. Excee dance for two or more consecutive samples	 Inform the IEC and the Contractor about the exceedance within 24 hours of identification of exceedance; Identify the source. Supervise implementation of remedial measures; Report the results of the investigation to the Contractor; Advise the ER on the effectiveness of the proposed remedial measures; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with the IEC and the Contractor on remedial actions required; If exceedance continues, arrange meeting with the IEC and the ER. If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by the ET; Check the Contractor's working method; Discuss with the ET and the Contractor on possible remedial measures; A dvise the ER on the effectiveness of the proposed remedial measures; Supervisor implementation of remedial measures. 	 Confirm receipt of NOE in writing. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance; Ensure remedial measures properly implemented. 	 Inform IEC and ER within 24 hours of identification of exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate. 		

EVENT	ACTION			
	ET	IEC	ER	Contractor
LimitLevel				
1. Exceedance for one sample	 Notify the IEC and the Contractor within 24 hours of identification of exceedance; Identify the source, investigate the causes of exceedance and propose remedial measures; Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance. Repeat measurement to confirm finding. If exceedance is indicated due to the Project construction works, increase 24-hour TSP monitoring frequency to 1-hour monitoring with 3 times every six days until no exceedance is recorded; Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results. 	measures. 5. Supervise implementation of remedial measures.	 Confirm receipt of notification of exceedance in writing; Notify EPD and other relevant Government departments within 24 hours of identification of exceedance; Ensure remedial measures are properly implemented. 	 Inform ER and IEC within 24 hours of identification of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial actions to ER and IEC within 3 working days of notification by ET; Implement the agreed proposals; Report effectiveness of remedial actions to IEC and ER; Amend proposal if appropriate.

EVENT	ACTION			
	ET	IEC	ER	Contractor
2. Exceedance for two or more consecutive samples	 Notify the IEC and the Contractor within 24 hours of identification of exceedance; Identify the source; Repeat measurements to confirm findings if the exceedance is due to the Project construction works; Increase monitoring frequency to daily; Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with the IEC and the ER to discuss the remedial actions to be taken; Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results; If exceedance stops, cease additional monitoring. 	 Discuss amongst the ER, ET and the Contractor on the potential remedial actions; Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify the EPD and other relevant Government departments within 24 hours of identification of excee dance; In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures are properly implemented; If excee dance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the excee dance is abated. 	 Inform ER and IEC within 24 hours of identification of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification by ET; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Implement the agreed proposals; Resubmit proposals if problem still not under control; Report effectiveness of remedial actions to IEC and ER; Stop the relevant activity of works as determined by the ER until the exceedance is abated.

Note: ET - Environmental Team, IEC - Independent Environmental Checker, ER - Engineer's Representative

Event Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	Contractor
Action Level	 Notify the IEC and the Contractor within 24 hours of identification of exceedance. Carry out investigation. Report the results of investigation to the IEC and the Contractor. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance. Discuss with the Contractor and formulate remedial measures. Increase monitoring frequency to check mitigation effectiveness. 	1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of NOE in writing. 2. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented.	Submit noise mitigation proposals to IEC Implement noise mitigation proposals

EVENT	ACTION				
	ET	IEC	ER	Contractor	
Limit Level	 Notify the IEC and the Contractor within 24 hours of identification of exceedance. Identify the source. Repeat measurement to confirm findings. Increase monitoring frequency. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. Inform the IEC, the ER and the DEP the causes & actions taken for the exceedances. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results. If exceedance stops, cease additional monitoring. 	 Discuss amongst the ER, the ET and the Contractor on the potential remedial actions. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. Supervise the implementation of remedial measures. 	1. Confirm receipt of NOE in writing. 2. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	 Take immediate action to avoid further exceedance Submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed proposals Resubmit proposals if problem still not under control Stop the relevant activity of works as determined by the ER until the exceedance is abated. 	

 $Note: \quad ET-Environmental\ Team, IEC-Independent\ Environmental\ Checker, ER-Engineer's\ Representative$

Event / Action Plan for Water Quality

EVENT	ACTION			
	ET	IEC	ER	Contractor
Action Level being excee ded by one sampling day	 Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform the IEC and the Contractor; Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD with 24 hours of identification of exceedance. Check monitoring data, all plant, equipment and the Contractor's working methods; Discuss mitigation measures with the IEC and the Contractor; Repeat measurement on next day of exceedance. 	1. Discuss with the ET and the Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly; 3. Access the effectiveness of the implemented mitigation measures.	1. Discuss with the IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented.	1. Inform the ER and confirm notification of the noncompliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with the ET and the IEC and propose mitigation measures to the IEC and the ER, 6. Implement the agreed mitigation measures.
Action Level being exceeded by more than one consecutive sampling days	 Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform the IEC and the Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with the IEC and the Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; 	1. Discuss with the ET and the Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly; 3. Access the	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Access the effectiveness of the implemented mitigation measures.	 Inform the ER and confirm notification of the noncompliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with the ET and the IEC and propose mitigation measures to the IEC and ER within 3 working days; Implement the agreed mitigation measures.

EVENT	ACTION			
	ET	IEC	ER	Contractor
T T	Repeat measurement on next day of exceedance.	effectiveness of the implemented mitigation measures.		
Limit Level being exceeded by one consecutive sampling day	 Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform the IEC and the Contractor; Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD with 24 hours of identification of exceedance. Check monitoring data, all plant, equipment and the Contractor's working methods; Discuss mitigation measures with the IEC, the ER and the Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit Level. 	1. Discuss with the ET and the Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly; 3. Access the effectiveness of the implemented mitigation measures.	1. Discuss with the IEC, the ET and the Contractor on the proposed mitigation measures; 2. Request the Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Access the effectiveness of the implemented mitigation measures.	 Inform the Engineer and confirm notification of the noncompliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with the ET, the IEC and the ER and propose mitigation measures to the IEC and the ER within 3 working days; Implement the agreed mitigation measures.

EVENT	ACTION			
	ET	IEC	ER	Contractor
Limit Level being exceeded by more than one consecutive sampling days	 Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform the IEC, the Contractor and DEP; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with the IEC, the ER and the Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days. 	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly; 3. Access the effectiveness of the implemented mitigation measures.	 Discuss with the IEC, the ET and the Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Access the effectiveness of the implemented mitigation measures; Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the works until no exceedance of Limit Level. 	 Inform the ER and confirm notification of the noncompliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with the ET, the IEC and the ER and propose mitigation measures to the IEC and the ER within 3 working days; Implement the agreed mitigation measures; As directed by the ER, slow down or stop all or part of the construction activities.

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 rd November 2006, was raised by a resident living Lantau Island on 17 th October 2006 concerning the Tung Chung Road condition on 16 th 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 th 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 rd November 2006, was received by the Integrated Complaint Centre (ICC) on 26 th 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 rd November 2006, was raised by a resident living at Cheung Sha on 24 th 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 st November 2006. The Resident Site Staff (RSS) subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 24 th 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 21 st 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 st 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
S76	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 rd 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 rd 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 rd 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 th 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 th 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 th 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 th 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 rd 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 rd 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
S82	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 th 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 rd 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
S86	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 th May 2007.	According to the Contractor, construction works were undertaken near STR 14 in the morning of 27 th 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.	The complaint investigation report was commented

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 th 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	Tung Chung Road and Tung Chung Au near AFCD's Office	6 August 07	The complaint was lodged by Mr. Ho on 6 th August 2007 regarding soil and muddy water from construction site flowing to catchwater at Tung Chung Road and Ting Chung Au near AFCD's Office.		In progress

APPENDIX M SUMMARY OF WARNING / 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	 -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. -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 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. - 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.
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.

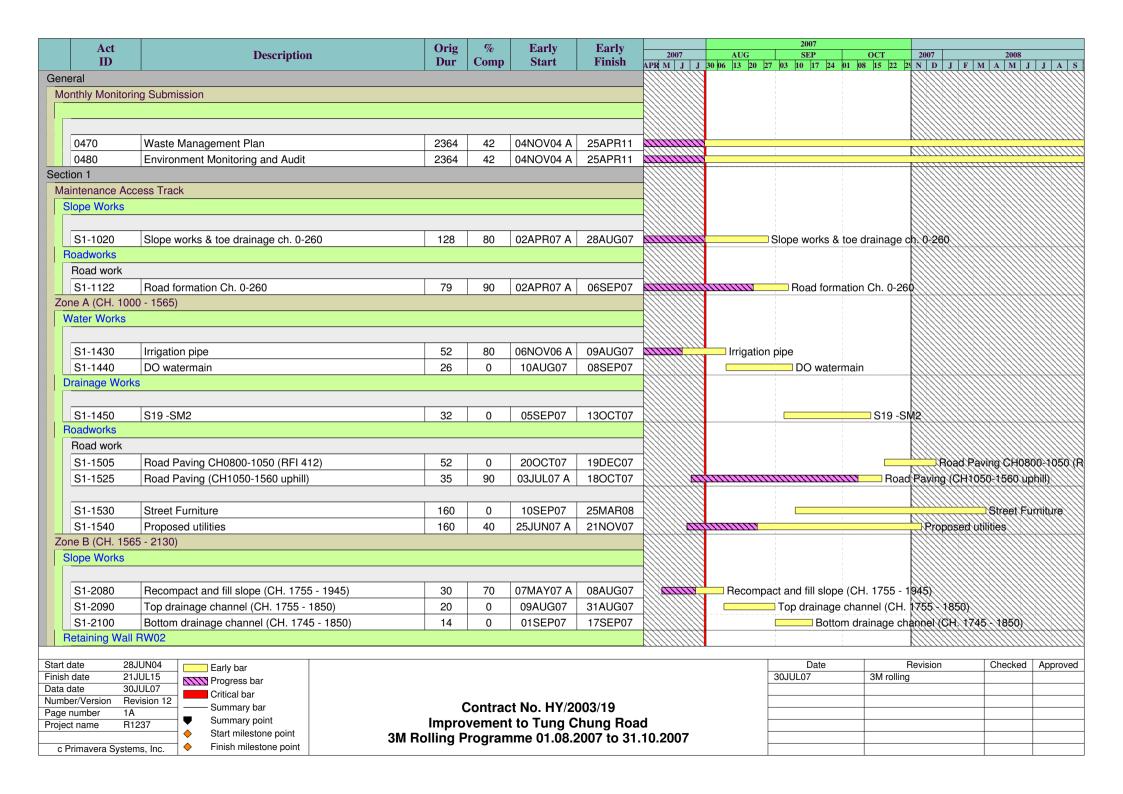
Summary of Notification of Summons

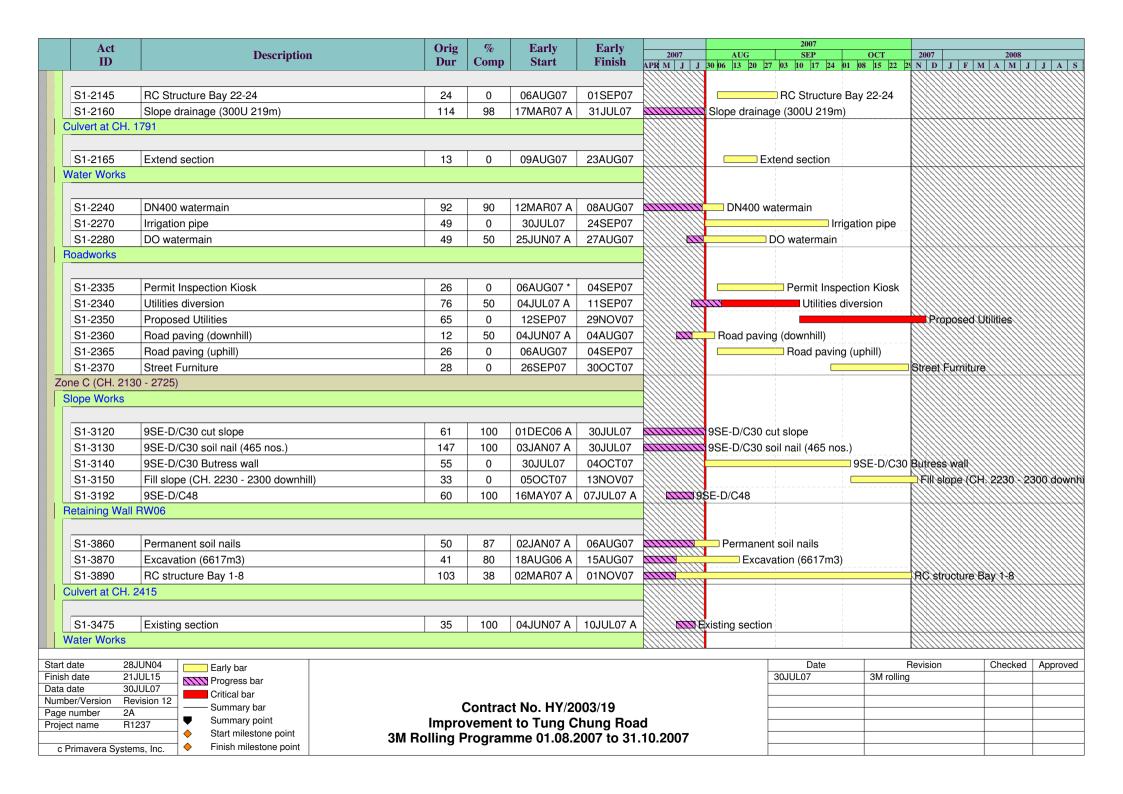
Date of Summons	Details of the Summons	Status
25 January 2007	January 2007 Construction works at a slope next to Stream no. 28	
	along Tung Chung Road, Cheung Sha, Lantau Island	EPD
	which contrary to EP Condition 3.9 concerning works at	
	Stream 28 on 26 July 2006	
16 February 2007	Construction works 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	

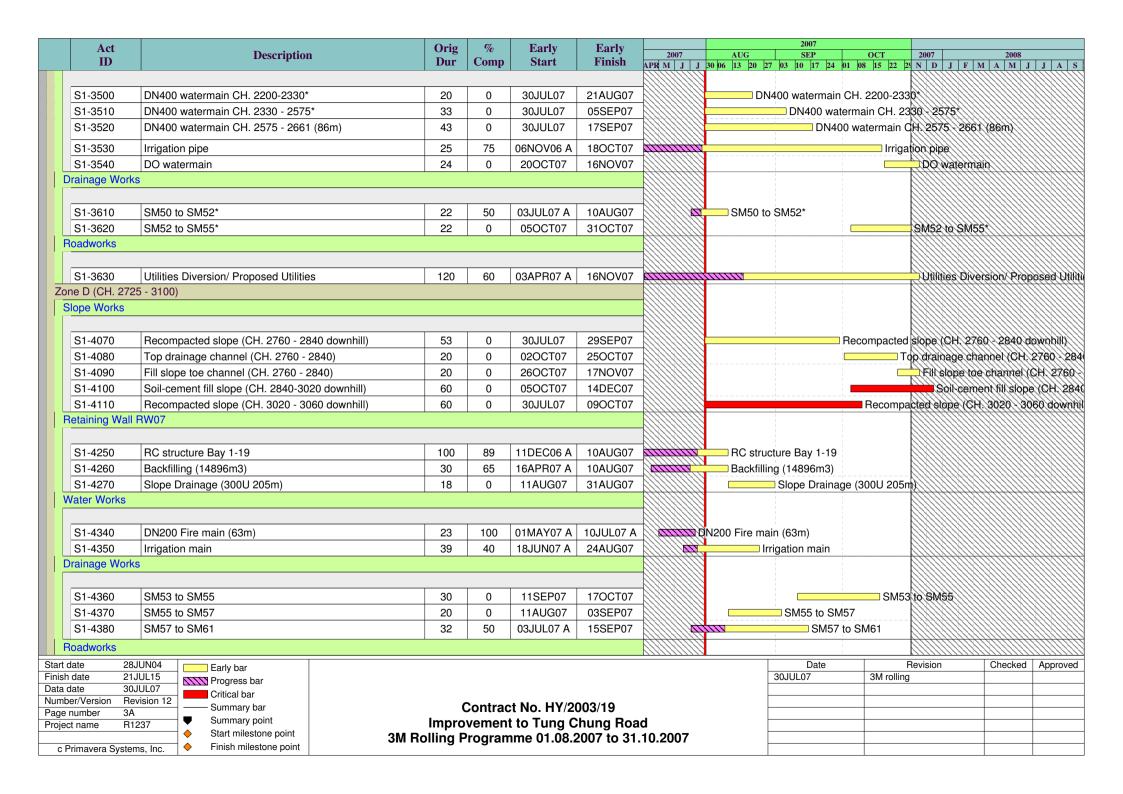
Summary of Notification of Successful Prosecution

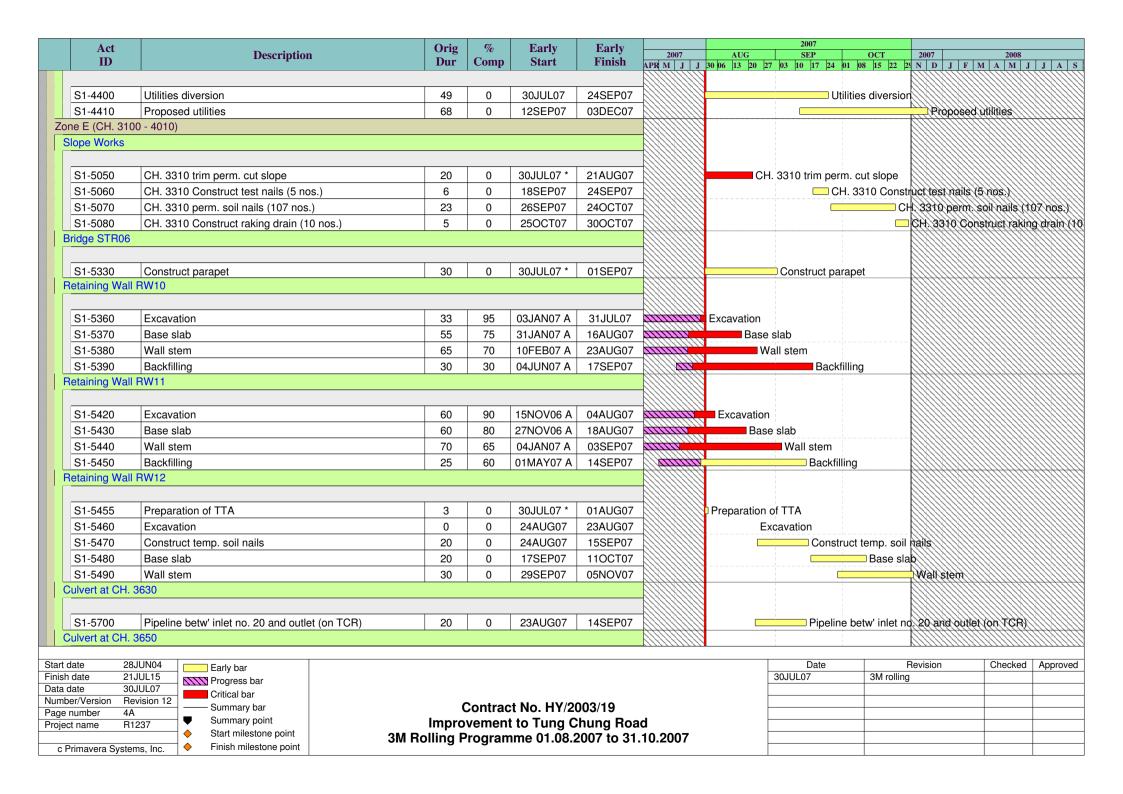
Date of Successful	Details of the Successful Prosecution	Status
Prosecution		
4 June 2007	Construction works near Stream no. 8 along Tung Chung Road, Cheung Sha, Lantau Island which contrary to EP Condition 2.4 by discharging runoff during construction into Tung Chung Stream on 16 August 2006	The Contractor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

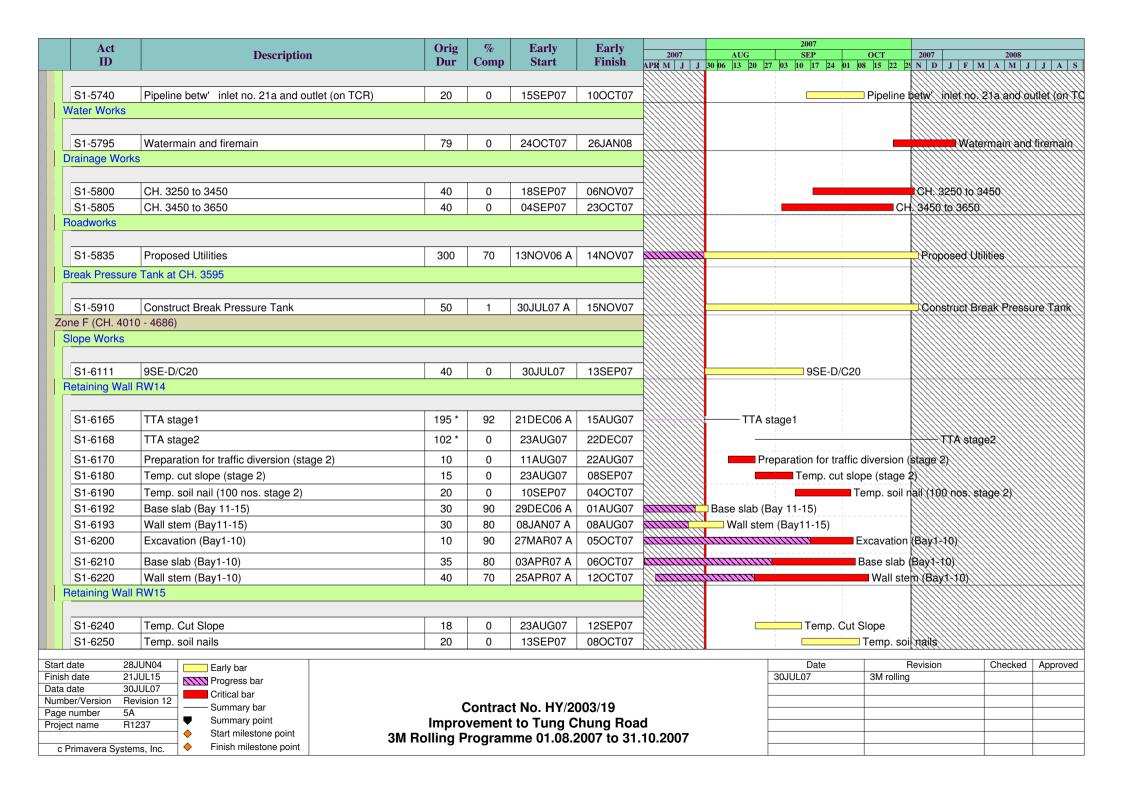
APPENDIX N CONSTRUCTION PROGRAMME

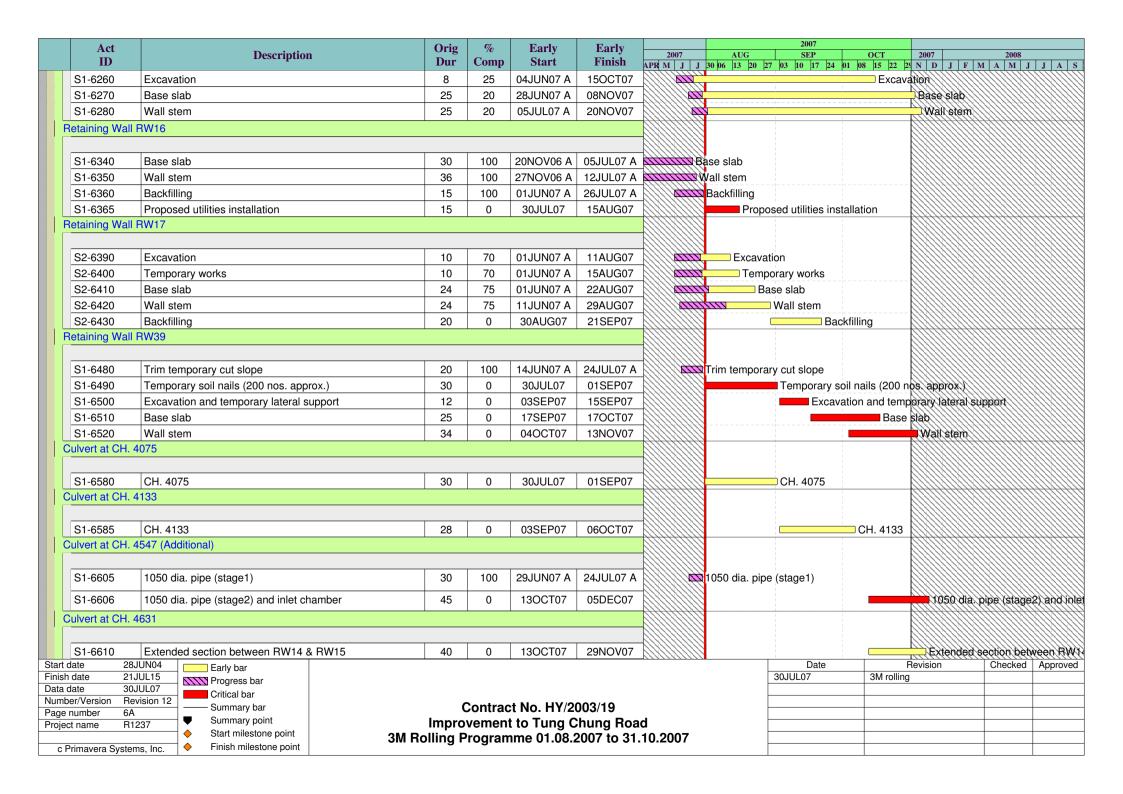


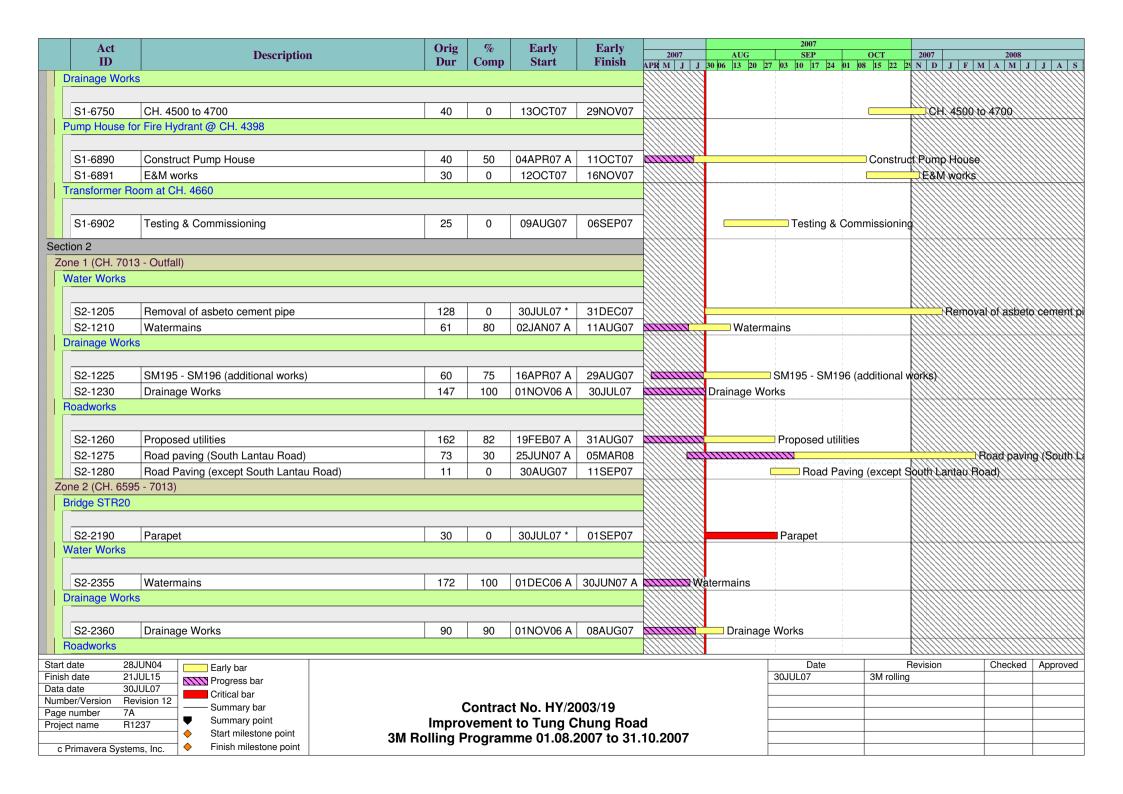


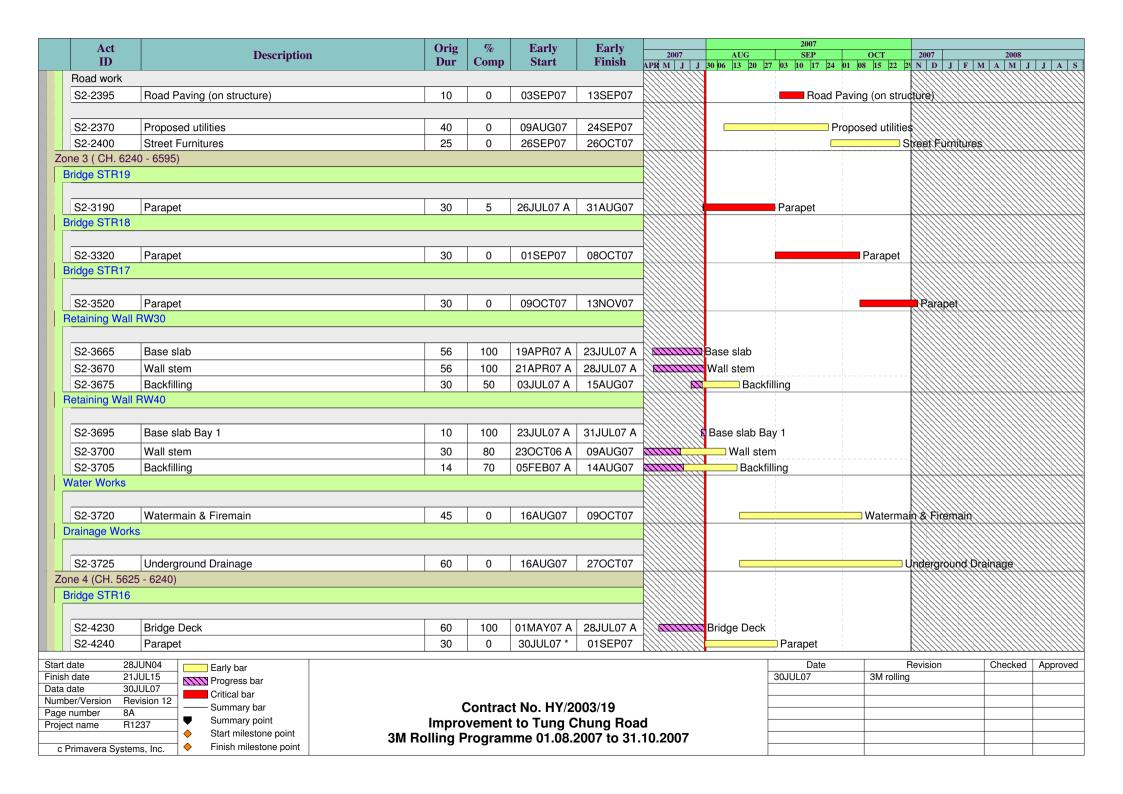


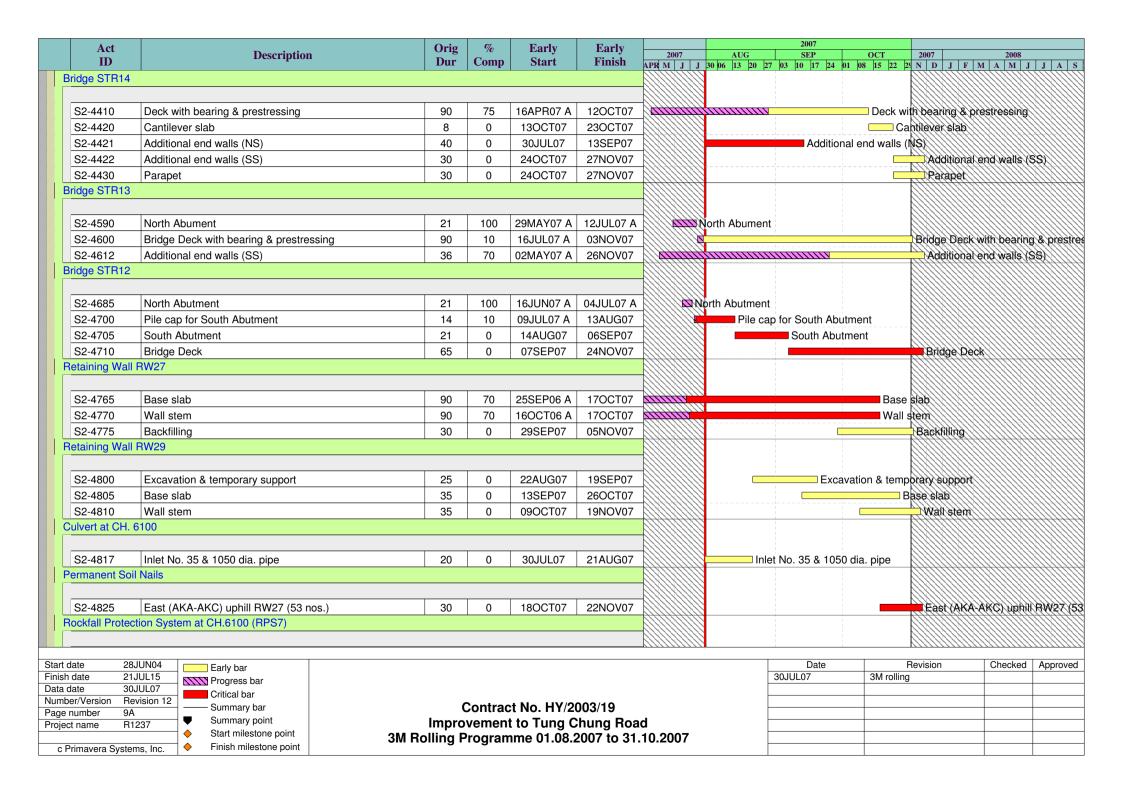


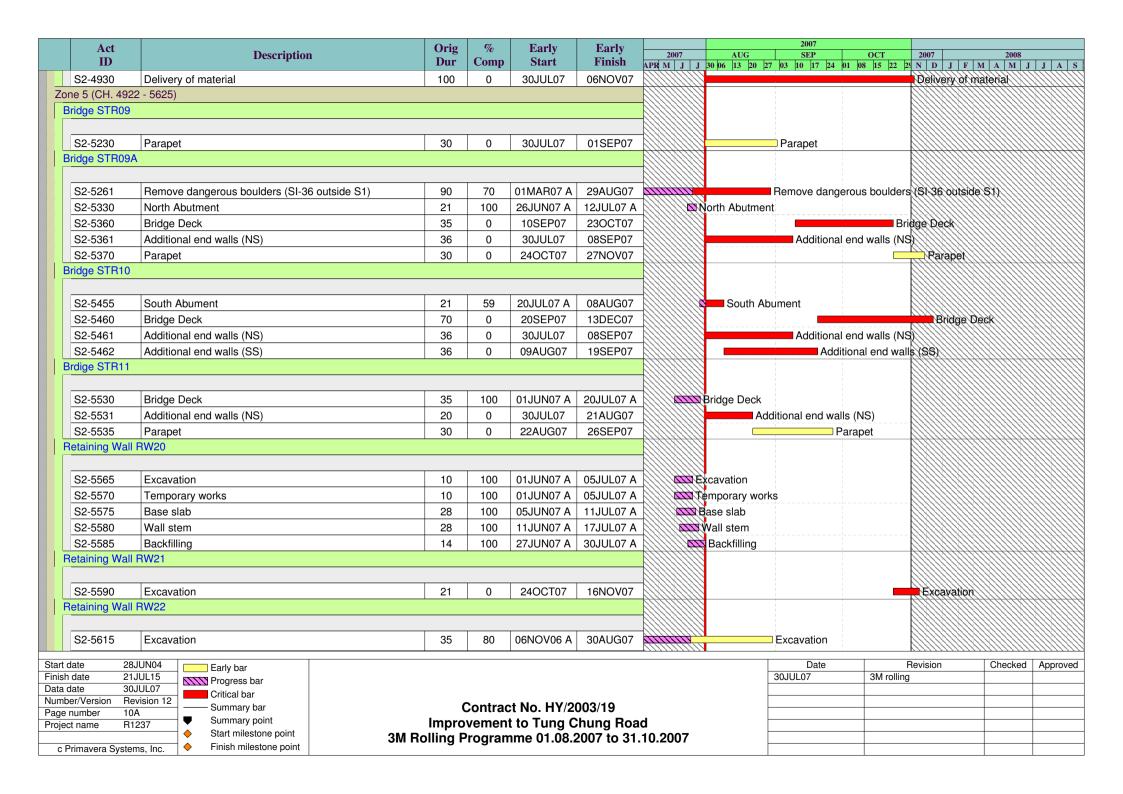


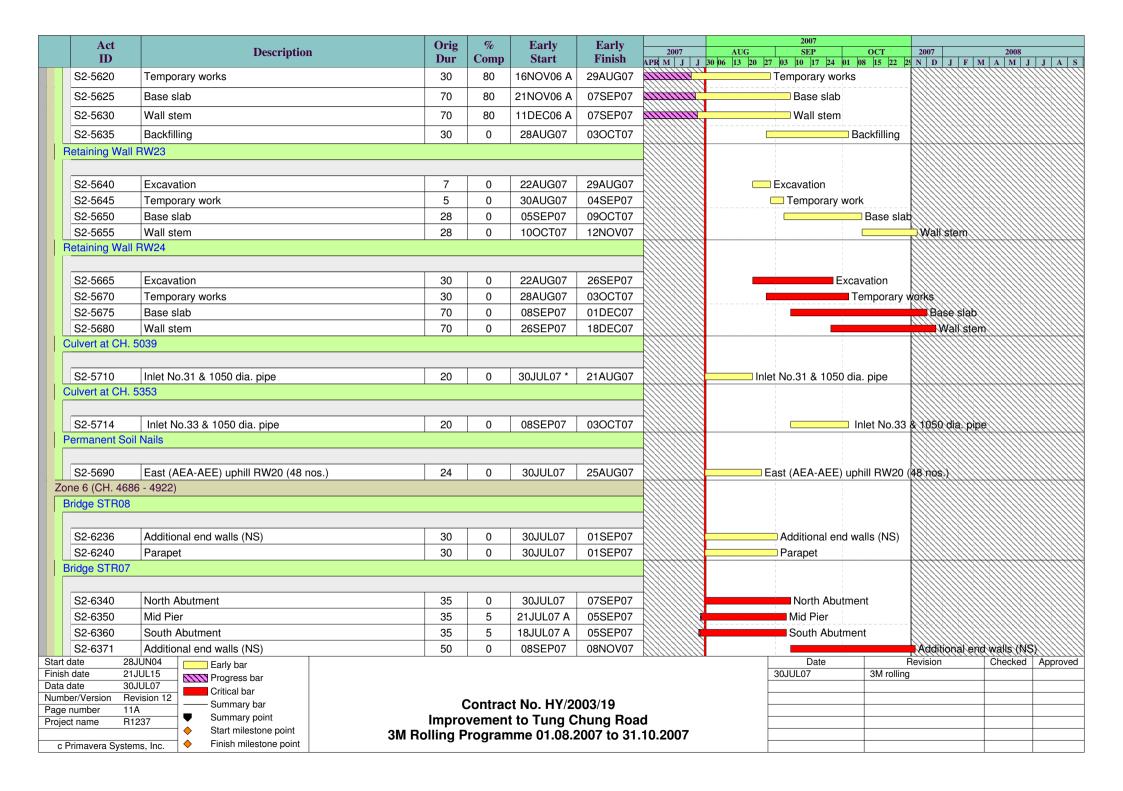


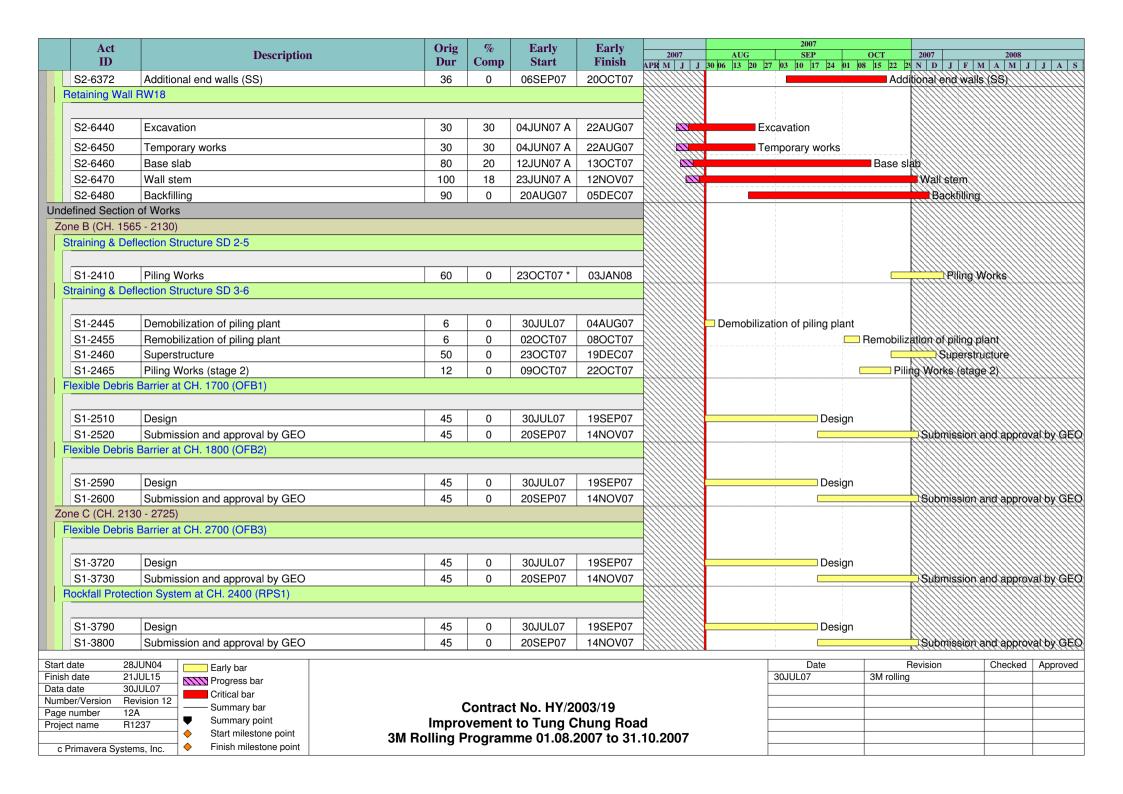












Act			%	Early	Early			2007			
	Description	Orig	1.7			2007	AUG	SEP	OCT	2007	2008
ID		Dur	Comp	Start	Finish	APR M J J	30 06 13 20 27	03 10 17 24	01 08 15 22 2	9 N D	J F M A M J J A
ne D (CH. 27	² 25 - 3100)										
Flexible Debri	s Barrier at CH. 2800 (OFB4)										
S1-4530	Design	45	0	30JUL07	19SEP07			Des	ign		
S1-4540	Submission and approval by GEO	45	0	20SEP07	14NOV07					Subr	nission and approval by G
one F (CH. 40	10 - 4686)										
Flexible Debris	s Barrier at CH. 4600 (OFB5)										
S1-6820	Design	45	0	30JUL07	19SEP07			Des	ign		
S1-6830	Submission and approval by GEO	45	0	20SEP07	14NOV07					Subr	nission and approval by C
one 4 (CH. 56)									1		
Permanent So	pil Nails										
S2-4830	East (AMA-AMF) uphill RW29 (107 nos.)	60	0	30JUL07	09OCT07				East (AM	A-AME	uphill RW29 (107 nos.)
one 5 (CH. 49)	22 - 5625)	<u> </u>	•								
Permanent So	pil Nails										
S2-5695	West (AGA-AGD) downhill RW22 (136 nos.)	70	0	10OCT07	03JAN08					(/////	West (AGA-AGD) downhi
Rockfall Prote	ection System at CH. 5320 (RPS3)	, i		'							
S2-5885	Design	45	0	30JUL07	19SEP07			Des	ign		
S2-5890	Submission & approval by GEO	45	0	20SEP07	14NOV07				1		hission & approval by GE

Start date	28JUN04	Early bar
Finish date	21JUL15	Progress bar
Data date	30JUL07	Critical bar
Number/Version	Revision 12	Summary bar
Page number	13A	,
Project name	R1237	Summary point
		Start milestone point
c Primavera Sy	ystems, Inc.	Finish milestone point

Contract No. HY/2003/19 Improvement to Tung Chung Road 3M Rolling Programme 01.08.2007 to 31.10.2007

30JUL07	3M rolling	

Revision

Checked Approved

Date

APPENDIX O 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 2007

Approved Project Cost: \$688.5 Million

Monthly Summary Waste Flow Table for Year 2007

	summer y v		Tuble for a											
Year	Actual Quantities of inert C&D Materials (in 10 ³ m ³)					Actual Quantities of C&D Wastes (in 10 ³ Kg)								
	Total Quantity Generated	Broken Concrete ⁽¹⁾	Reused Soil Fill (internal & external	Reused Rock Fill (internal & external	Disposed as Public Fill	Metals			ardboard aging	Plastic ⁽²⁾		Chemical Waste	Site clearance waste ⁽³⁾	Others, e.g. general refuse
	(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal
Jan	16.457	0	15.06	0	1.397	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	73.61	1.5
Feb	13.802	0	10.06	2.226	1.496	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	34.21	1.5
Mar	17.263	0	11.58	1.958	2.975	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	173.27	2.0
Apr	10.661	0	9.01	0	0.911	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	84.83	2.2
May	12.585	0	10.156	0	1.555	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	101.24	1.3
Jun	19.608	0	11.02	0	8.588	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	52.51	1.7
Sub-Total	90.376	0	66.89	4.184	16.922	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	519.67	10.2
July	33.497	0	32.21	0	1.287	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	85.11	1.2
Aug	#	0	#	0	1.335	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	50.57	1.8
Sept														
Oct														
Nov														
Dec														
Total	128.873#	0	99.10#	4.184	19.544	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	655.35	13.2

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.

to be updated in the next WFT.

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 2007

Approved Project Cost: \$688.5 Million

Summary Table for Work Processes or Activities Requiring Timber for Temporary Works (Year 2007)

Item	Description of Works	Justification for Using Timber in	Estimate Quantities of Timber	Actual Qu	antities Used	Remarks
No.	Process or Activity	Temporary Construction Works	Used (m³)	(m ³)		
1	Formwork for drainage	Workable – easy to cut, set-up, assemble,	300	Jan	24	
	works	fix and dismantle.		Feb	18	
		Flexible – suit different type / size of		Mar	22	
2	Formwork for	structure.		Apr	15	
	retaining construction	Reusable – can be reused many times for		May	20	
		different structures.		Jun	17	
3	Formwork for bridge			Jul	13	
	construction			Aug	11	
				Sep		
4	Formwork for			Oct		
	temporary work			Nov		
				Dec		
	1	Total Estimated Quantity of Timber Used	300	Tota	l: 140	