-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 1.1)

October 2008

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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CINOTECH CONSULTANTS LTD

Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083

Fax: (852) 3107 1388 Email: info@cinotech.com.hk

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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 48th 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 October 2008.
- 2. The construction activities undertaken in the reporting month included:
 - Construction of rock fall fencing;
 - Construction of drainage and water pipe;
 - Drainage and slope works;
 - Construction of debris trap;
 - Installation of street furniture; and
 - Raising of watermain valve pit.

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	1 aktii	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 month. 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-RS0419-08, GW-RW0439-08, GW-RS0209-08 and GW-RS0698-08).

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 Taken	Status	Remark
Event	Number	Nature			
Complaint received	0		N.A.	N.A.	
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. No environmental complaint was received in the reporting month.
- 12. No warning and summon or notification of successful prosecution was received in the reporting month.

Future Key Issues

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

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 48th monthly EM&A report summarizing the EM&A works for the Project in October 2008.

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

- Drainage works at Zone A;
- Debris trap construction and slope works at Zone B;
- Rock fall fencing construction and slope works at Zone C;
- Installation of street furniture at Zone D;
- Slope and drainage works at Zone E; and
- Rock fall fencing, water pipe construction and drainage works at Zone F.

Southern Section

- Raising of watermain valve pit at Zone 1 and Zone 2;
- Installation of street furniture at Zone 3;
- Drainage construction and slope works at Zone 4 and Zone 5; and
- Drainage works 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	3

⁽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 L_{10} and L_{90} 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⁾	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	5
Calibrator	B&K 4231	3
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	$L_{10}(30 \text{ min.})dB(A)$ $L_{90}(30 \text{ min.})dB(A)$	(b) 1900-2300 hrs. on weekdays	Once every 6 working	Façade ⁽¹⁾
NM5	$L_{eq}(30 \text{ min.})dB(A)$	(c) 0700-2300 hrs. on holidays (d) 2300-0700 hrs on any days	days	Façade ⁽¹⁾
NM6		(d) 2300-0700 Hrs on 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	2

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 Sucam	Impact	811601	813716
Chaung Sha Straam	Reference	812525	811980
Cheung Sha Stream	Impact	812447	811165
Stream 15	Reference	811853	813289
Sueam 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
Stream 23	Impact	812324	812017
Stream 26	Reference	812525	811980
Sueam 20	Impact	812456	811895
Stream 27	Reference	812658	811770
Stream 27	Impact	812604	811747
Stream 32	Reference	812980	811410
Stream 32	Impact	812988	811327
Straam 25	Reference	813231	811275
Stream 35	Impact	813218	811218
Stroom 10	Reference	813686	811311
Stream 40	Impact	813690	811211
Tuna Chuna Day	Reference	810679	816038
Tung Chung Bay	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 was conducted as scheduled at designated monitoring stations (Streams 15, 18, 21, 23, 26, 27, 40, Cheung Sha Stream, Tung Chung Stream and Tung Chung Bay), which are under the influence of the works, in the reporting month. 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. 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	D	0	pН	Turb	oidity	S	S
No.	Action	Limit	Limit	Action	Limit	Action	Limit
15_I	0	0	0	0	0	0	0
18_I	0	0	0	0	0	0	0
19_I*	0	0	0	0	0	0	0
21_I	0	0	0	0	0	0	0
23_I	0	0	0	0	0	0	0
25-I*	0	0	0	0	0	0	0
26_I	0	0	0	0	0	0	0
27_I	0	0	0	0	0	14	0
32_I*	0	0	0	0	0	0	0
35_I*	0	0	0	0	0	0	0
40_I	0	0	0	0	0	0	0
CSS_I	0	0	0	0	0	0	0
TCB_I	0	0	0	0	0	0	0
TCS_I	0	0	0	0	0	0	0

Remarks: * indicates the stream was not sampled in the reporting 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.
- 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 2nd, 8th, 16th, 23rd and 30th October 2008 in the reporting month. IEC site inspection was conducted on 8th October 2008. 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

D	Valid	Period	D.4-9-	C4 - 4
Permit No.	From	To	Details	Status
Environmental Peri	mit (EP)			
EP-170/2003/C	31/7/07	N/A	Construction of (a) Widening and realignment of an approximate 3.6 kilometre long section of Tung Chung Road between Lung Tseng Tau and Pak Kung Au from a single-lane road for two-way traffic to a single two-lane road with footpath; (b) Construction of an approximate 2.6 kilometre long single two-lane road between Pak Kung Au and Cheung Sha with footpath and elevated highway structures; and © Provision of passing bays/bus lay-bys along Tung Chung Road.	Valid
Registration of Chemical Waste Producer				
WPN5214 – 950- C1213-01		N/A	Chemical waste types: spent Indication oil, surplus paint, spent diesel, spent thinner, mixing residue containing pesticides, spent mineral oil	Valid
Water Discharge Li	cense			
EP890/W7/XP089		N/A	Discharge from Sewage Treatment System (Northern Section)	Valid
EP890/W7/XP090		N/A	Industrial discharge (Northern Section)	Valid
EP890/W2/XG013		N/A	Industrial discharge (Southern Section)	Valid
Construction Noise	Permit (CN	P)		
GW-RS0419-08	25/06/08	24/12/08	Construction Noise Permit for Tung Chung Road between Lung Tseng Tau and Cheung Sha	Valid
GW-RW0439-08	20/09/08	19/03/09.	Construction Noise Permit for Cheung Tung Road near Sunny Bay Station, Lantau Island, H.K.	Valid
GW-RS0209-08	10/04/08	09/10/08	Construction Noise Permit for Construction Site for Roadworks between Pak Kung Au and Cheung Sha Sheung Tsuen	Expired
GW-RS0698-08	10/10/08	9/04/08	Construction Noise Permit for Construction Site for Roadworks between Pak Kung Au and Cheung Sha Sheung Tsuen	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 October 2008 are provided in Appendix O.

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	02/10/08	Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan . The Contractor was reminded to clear the silt and sediment regularly.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear standing water in the drip tray at the entrance of STR7 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear stagnant water at pit at STR7 and the discarded tank at Shek Mun Kap .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Stagnant water was observed at paved road near STR9a and near STR10. The Contractor was reminded to dry them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Oily waste water was observed at culvert at STR8. The Contractor was reminded to clear them with licensed collector.	Rectification/improvement was observed during the follow-up audit session.
	02/10/08	The Contractor was reminded of the followings: - Oil stains were observed at paved road at STR8 . The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Properly cover the catchment channel at underneath STR16 and STR17.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at the paved road along existing TCR.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Re-arrange the stream diversion at Stream 6 , Stream 7 and Stream 13 .(in- progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Keep clear the culvert near Stream 11 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding

Parameters	Date	Observations and Recommendations	Follow-up
			item.
	02/10/08	The Contractor was reminded of the followings: - Clear the sediment at the public road near Stream 7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear sediment and debris in U- Channel at STR17 and opposite to RW11.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear sediment and debris in gullies near Stream 19 (downstream) and near STR9a .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan . The Contractor was reminded to clear the silt and sediment, especially after rainstorm.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear standing water in the drip tray at the entrance of STR7 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Provide drip tray for the plant equipment at STR7and STR12.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear stagnant water on uneven paved road near STR9a and near STR10.	Rectification/improvement was observed during the follow-up audit session.
	08/10/08	The Contractor was reminded of the followings: - Clear oil stains at paved road at STR8 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Properly cover the catchment channel at underneath STR16 and STR17.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at the paved road	Rectification/improvement was observed during the follow-up audit session.

Parameters	Date	Observations and Recommendations	Follow-up
		along existing TCR.	
	08/10/08	The Contractor was reminded of the followings: - Re-arrange the stream diversion at Stream 6 , Stream 7 and Stream 13 .(in- progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Keep clear the culvert near Stream 11 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear the sediment at the public road near Stream 7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear sediment and debris in gullies near Stream 19 (downstream) and near STR9a .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan . The Contractor was reminded to clear the silt and sediment regularly.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear standing water in the drip tray at the entrance of STR7 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Provide drip tray for the plant equipments at STR8 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear sediment underneath STR8 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Properly cover the exposed slope at STR11 , STR12 , STR13 and at opposite to RW7 . (in progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Properly cover the catchment channel at underneath STR16 and STR17.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings:	This item was not rectified during the follow-up audit session. Follow-up

Parameters	Date	Observations and Recommendations	Follow-up
		- Clear stagnant water in the discarded tank at between STR16 and STR17 .	action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear the sediment in U channel near STR17 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Re-arrange the stream diversion at Stream 6 , Stream 7 , Stream 12 and Stream 13 . (inprogress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Keep clear the culvert near Stream 11 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear the sediment at the public road near Stream 7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at gullies near STR9a and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear stagnant water at discarded tank at Shek Mun Kap .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	L - Properly cover the stockhile at Pak Kilng Ali	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan . The Contractor was reminded to clear the silt and sediment regularly.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	Stagnant water was observed at construction site at Stream 13 . The Contractor was reminded to clear it to prevent mosquito breeding.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear standing water in the drip tray at the entrance of STR7 .	Rectification/improvement was observed during the follow-up audit session.
	23/10/08	The Contractor was reminded of the followings: - Provide drip tray for the plant equipments at STR7, near STR11 and near Stream 12.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear sediment underneath STR8 .	This item was not rectified during the follow-up audit session. Follow-up

Parameters	Date	Observations and Recommendations	Follow-up
			action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear oil stains underneath the plant equipment at between STR7 and STR8 . (in progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Properly cover the catchment channel at underneath STR16 and STR17.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear stagnant water in the discarded tank at between STR16 and STR17 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear the sediment in U channel near STR17 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Re-arrange the stream diversion at Stream 6 , Stream 7 , Stream 12 and Stream 13 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Keep clear the culvert near Stream 11 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear the sediment at the public road near Stream 7 and at the entrance of haul road underneath STR7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at gullies near STR9a and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear stagnant water at discarded tank at Shek Mun Kap.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	Sediment was observed accumulate at the	This item was not rectified during the follow-up audit session. Follow-up

Parameters	Date	Observations and Recommendations	Follow-up
		sedimentation tanks at Shan Shek Wan. The Contractor was reminded to clear the silt and sediment regularly.	action was needed for the outstanding item.
	30/10/08	Stagnant water was observed at construction site at Stream 13 . The Contractor was reminded to clear it to prevent mosquito breeding.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	Sediment was observed accumulate in culvert at Stream 11 . The Contractor was reminded to seal the drainage channel connected to the culvert to prevent any silty runoff from entering the streams.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Provide drip tray for the plant equipments at STR12 and near Stream 12.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear sediment underneath STR8 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear oil stains underneath the plant equipment at between STR7 and STR8 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	I he Contractor was reminded of the followings:	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear stagnant water in the discarded tank at between STR16 and STR17 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear the sediment in U channel near STR17 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Re-arrange the stream diversion at Stream 6 , Stream 7 , Stream 12 and Stream 13 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	- Keep clear the culvert near Stream 11 .	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
	30/10/08	The Contractor was reminded of the followings: - Clear the sediment at the public road near Stream 7 and at the entrance of haul road underneath STR7.	Rectification/improvement was observed during the follow-up audit session.
	30/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at gullies near STR9a and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear stagnant water at discarded tank at Shek Mun Kap.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover the culvert at between STR14 and STR16.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Air Quality	02/10/08	Sediment was observed on the public road at underneath STR7 and haul road from existing TCR to Zone 6 . The Contractor was reminded to cover the exposed surface to prevent any silty runoff.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	Soil nailing work was observed at near STR12. The Contractor was reminded to spray water regularly and provide proper enclosure to prevent dust generation.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Properly cover the stockpile at Pak Kung Au near existing TCR and between STR13-14 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	TCR to Zone 6. The Contractor was reminded to	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	Oil leakage was observed at plant equipment at STR7. The Contractor was advised to clear the oil leakage. (in progress)	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
	08/10/08	The Contractor was reminded of the followings: - Provide proper enclosure for soil nailing work at STR12.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Properly cover the stockpile at Pak Kung Au near existing TCR and between STR13-14 . (in progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Hydroseed/cover the exposed surface at STR6 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	Sediment was observed on the public road at underneath STR7 and from haul road at existing TCR to Zone 6. The Contractor was reminded to cover the exposed surface to prevent any silty runoff. (in progress)	Rectification/improvement was observed during the follow-up audit session.
	16/10/08	Stagnant water was observed at construction site at Stream 13 . The Contractor was reminded to clear it to prevent mosquito breeding.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Water spray dust emission activity at STR14 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Properly cover the stockpile near STR8 and near STR12 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	- Properly cover/ hydroseed the exposed slope at underneath STR9 , underneath STR16 and at	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	23/10/08	The Contractor was reminded of the followings: - Properly cover the exposed slope at STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Properly cover the stockpile at Pak Kung Au near existing TCR .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Provide 3-side enclosure for the soil nailing work at near STR12.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover the stockpile near STR8 and near STR12 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover the exposed slope at STR11, STR12 and STR13.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Properly cover the stockpile at Pak Kung Au near existing TCR .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
Waste / Chemical Management	02/10/08	The Contractor was reminded of the followings: - Provide drip tray for the plant equipment at STR7and STR12.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear C&D waste at Stream 29 , Stream 34 , Stream 35 and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear C&D waste at underneath STR12 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Clear C&D waste and sediment in culvert at Stream 11, Stream 12, Stream 19, STR9a, STR10 and between STR8-9.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear C&D waste at Stream 29 , Stream 34 , Stream 35 and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding

Parameters	Date	Observations and Recommendations	Follow-up
			item.
	08/10/08	The Contractor was reminded of the followings: - Clear C&D waste at underneath STR12 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	- Oil containers should be provided with drip tray	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear C&D waste at Stream 29 , Stream 34 , Stream 35 and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear C&D waste at underneath STR12 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream).	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear C&D waste at underneath STR12 and near Stream 28 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Properly store the chemical waste at STR11 and near Stream 12 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear C&D waste at underneath STR7, STR12 and near Stream 28.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
General	02/10/08	The Contractor was reminded of the followings: - Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road to prevent any sediment from carrying out.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	02/10/08	The Contractor was reminded of the followings: - Regularly water spray on dusty paved road is necessary.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings:	This item was not rectified during the

Parameters	Date	Observations and Recommendations	Follow-up
		- Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially near RW7 and RW12, to prevent any sediment from carrying out.	follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Regularly water spray on dusty paved road is necessary. (in progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	08/10/08	The Contractor was reminded of the followings: - Clear stagnant water at pits and the discarded tank at Shek Mun Kap . (in progress)	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at drainage system (U channels, gullies and culverts), especially U channels underneath STR8, at between STR14 and STR16 and culvert at STR8.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	The Contractor was reminded of the followings: - Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08		This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	16/10/08	road under construction is necessary. (in	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	- Clear sediments on the paved road regularly.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Regularly water spray on dusty paved road and road under construction is necessary.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at drainage system (U	This item was not rectified during the follow-up audit session. Follow-up

Parameters	Date	Observations and Recommendations	Follow-up
		channels, gullies and culverts), especially U channels underneath STR8, culvert at STR8 and U channel at between STR14 and STR16.	action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially at construction area near Stream 11.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/10/08	The Contractor was reminded of the followings: - Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear sediments on the paved road regularly.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Regularly water spray on dusty paved road and road under construction is necessary.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Clear sediment and debris at drainage system (U channels, gullies and culverts), especially U channels underneath STR7, STR8, between STR14 and STR16 and culvert at STR8.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially at construction area near Stream 11 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	30/10/08	The Contractor was reminded of the followings: - Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31 .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

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) Oily waste water was observed at culvert at STR8. The Contractor was reminded to clear them with licensed collector.
- (2) Clear stagnant water on uneven paved road near STR9a and near STR10.
- (3) Clear sediment and debris at the paved road along existing TCR.
- (4) Clear standing water in the drip tray at the entrance of STR7.
- (5) Clear the sediment at the public road near Stream 7 and at the entrance of haul road underneath STR7.

Air Quality

- (6) Sediment was observed on the public road at underneath STR7 and from haul road at existing TCR to Zone 6. The Contractor was reminded to cover the exposed surface to prevent any silty runoff.
- 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.
- 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 No environmental complaint was received in the reporting month.
- 5.20 No warning and summon or notification of successful prosecution was received in the reporting month.
- 5.21 There were a total of 51 environmental complaints, 12 warnings, 3 summons and 2 successful prosecutions received since the commencement of the Project.
- 5.22 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:
 - Regular removal of silt, mud and sand along u-channels and sedimentation tanks;
 - Review and implementation of temporary drainage system for the surface runoff;
 - Proper storage of construction materials near streams;
 - Runoff from exposed slope;
 - Wastewater and runoff discharge from site;
 - Dust generation from stockpiles of dusty materials, exposed retain wall, excavation works and rock breaking activities;
 - Storage of chemicals/fuel and chemical waste/waste oil on site;
 - Noise from operation of the equipment, especially for rock-breaking activities and machinery on-site;
 - Watering for rock breaking activity, soil nailing and on haul road; and
 - Accumulation of general and construction waste near stream and on site.

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

- Installation of street furniture at Zone A to C;
- Slope work slope drainage and street furniture at Zone D;
- Slope work at Zone E; and
- Slope work and street furniture at Zone F.

Southern Section

- Construction of footpath at Zone 1 to 3;
- Erection of rock fall protection fence at Zone 4; and
- Slope works at Zone 5 and 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.
- 7.5 No valid Action/Limit Level exceedance for water quality was recorded in the reporting month.
- 7.6 No environmental complaint was received in the reporting month.
- 7.7 No warning and summon and notification of successful prosecution was received in the reporting month.

Recommendations

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

Dust Impact

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

Noise Impact

• To implement appropriate mitigation measures, such as cover the tip of the hammer,

in order to minimize the noise emitted during rock-breaking activities.

- To review the works sequence of site activities so as to reduce the number of noisy equipment in concurrent operation.
- To follow up any exceedance caused by the construction works.
- To employ quiet powered mechanical equipment if possible.
- To ensure compliance of CNP conditions during restricted-hour works.
- To space out noisy equipment and position as far away as possible from sensitive receivers.

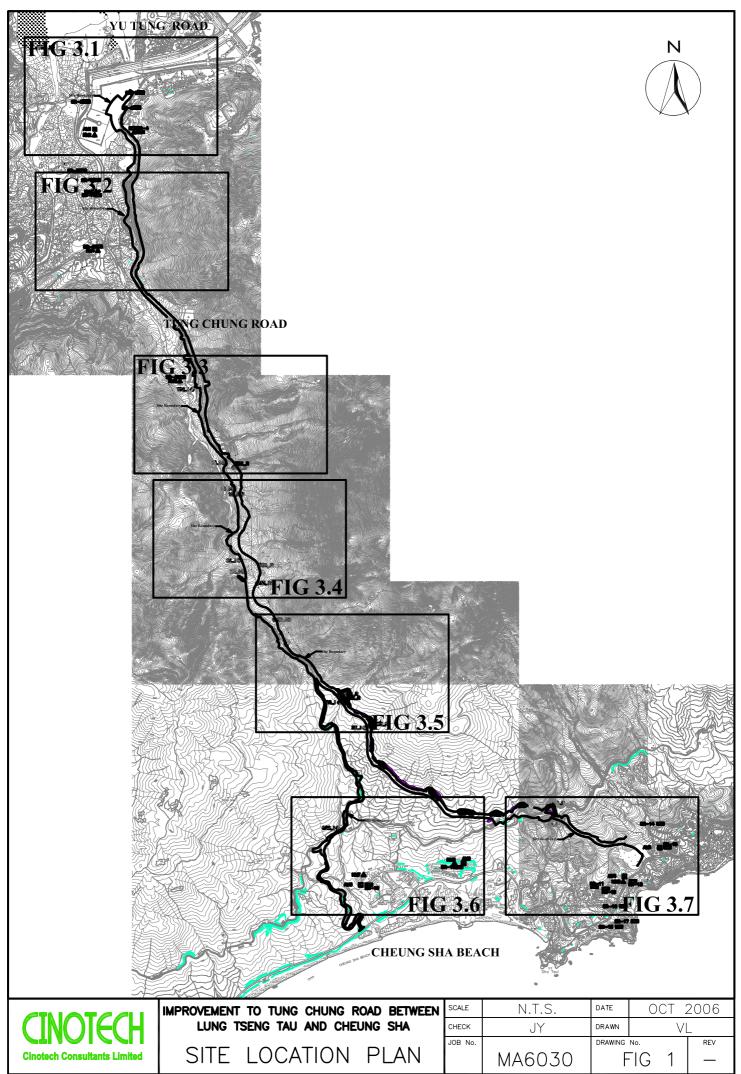
Water Quality Impact

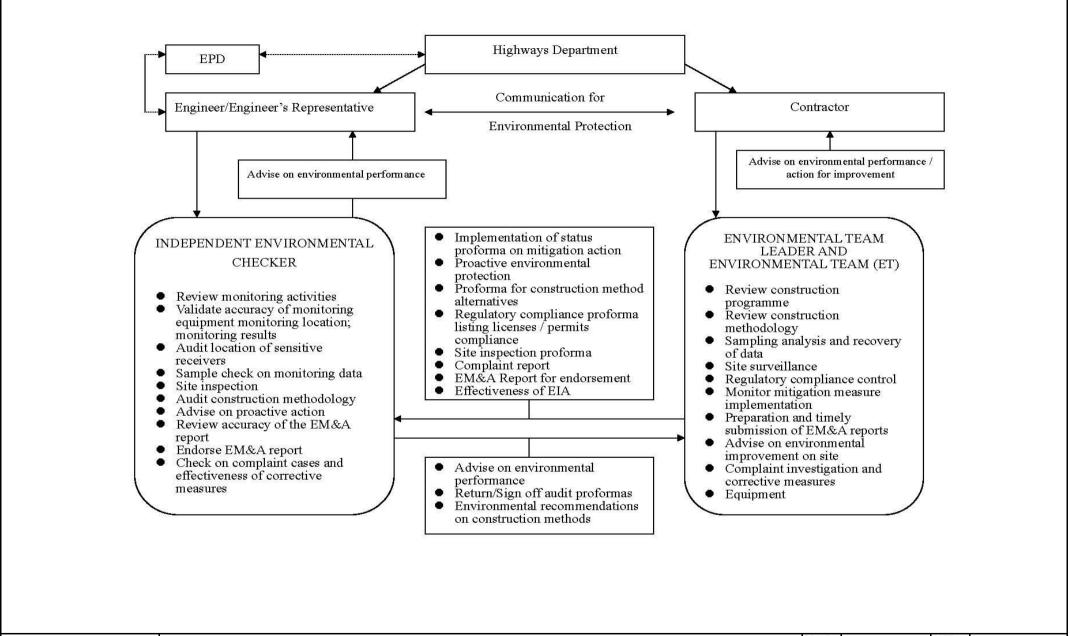
- To prevent any surface runoff discharge into any stream course.
- To avoid accumulation of stagnant and ponding water on site.
- To clear the silt and sediment in the sedimentation tanks.
- To ensure properly maintenance for de-silting facilities.
- To divert all the water generated from construction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

Waste / Chemical Management

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

FIGURES



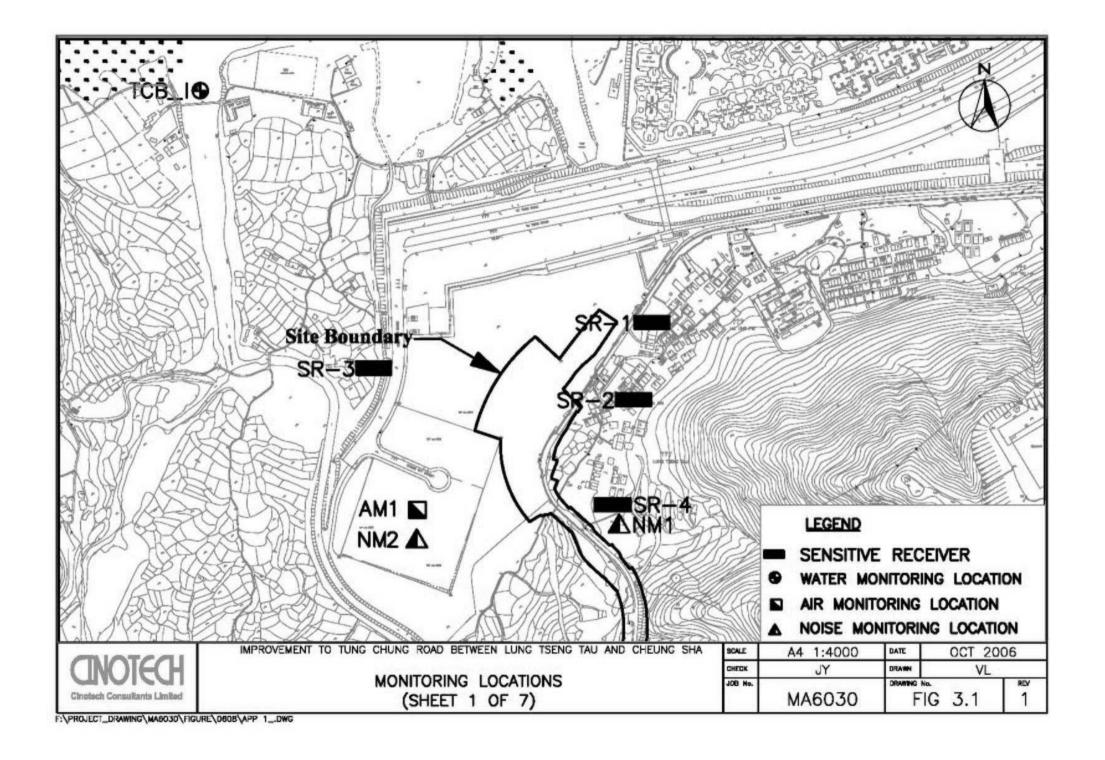


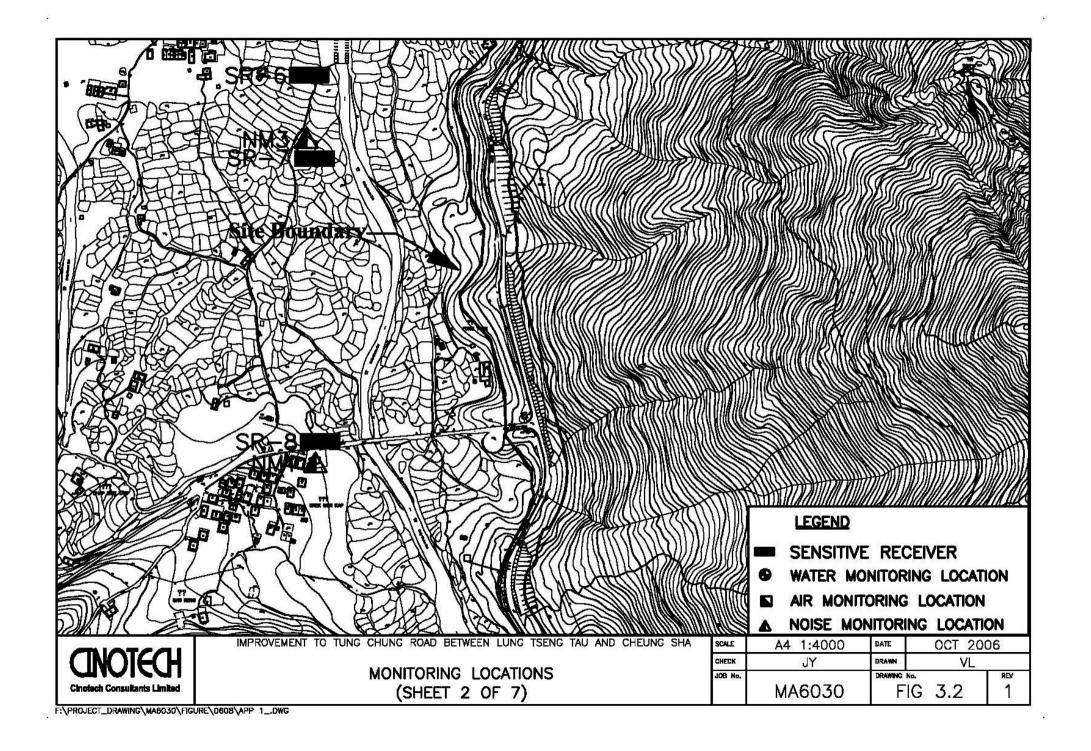


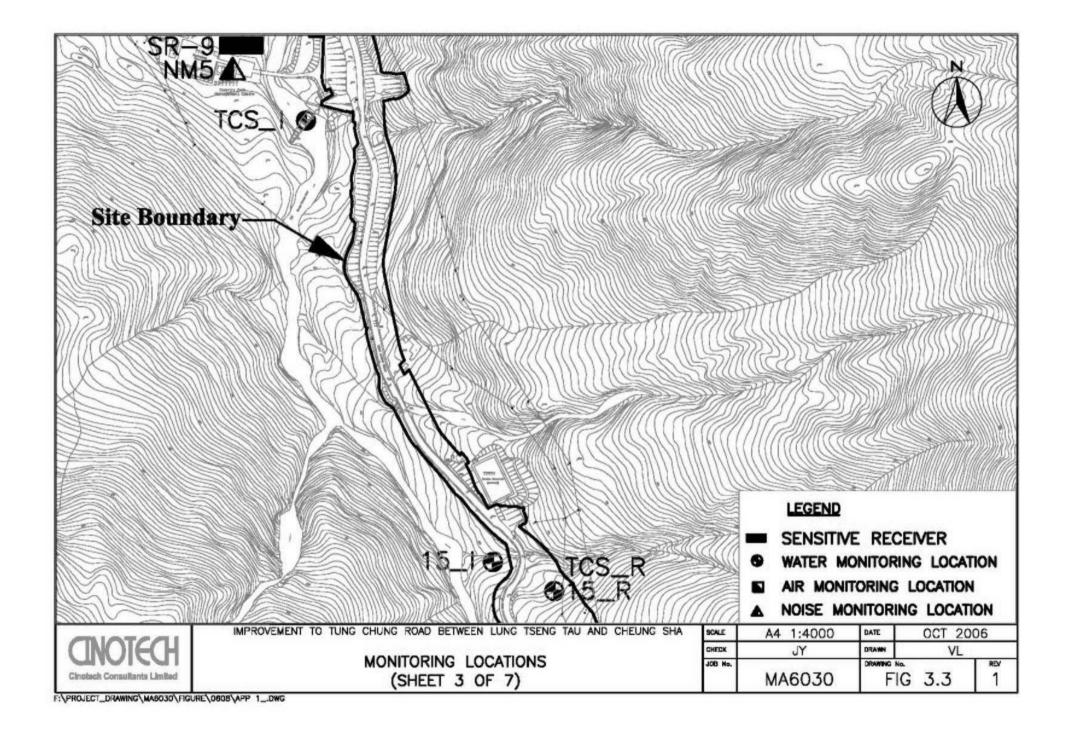
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

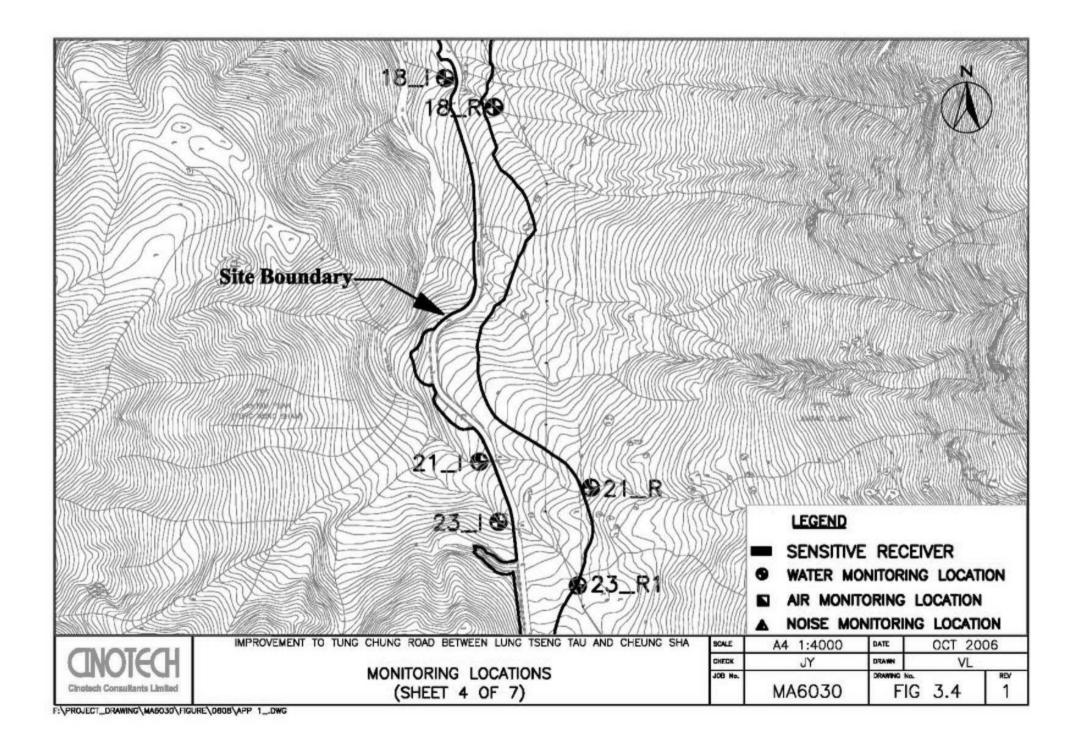
Organization Chart

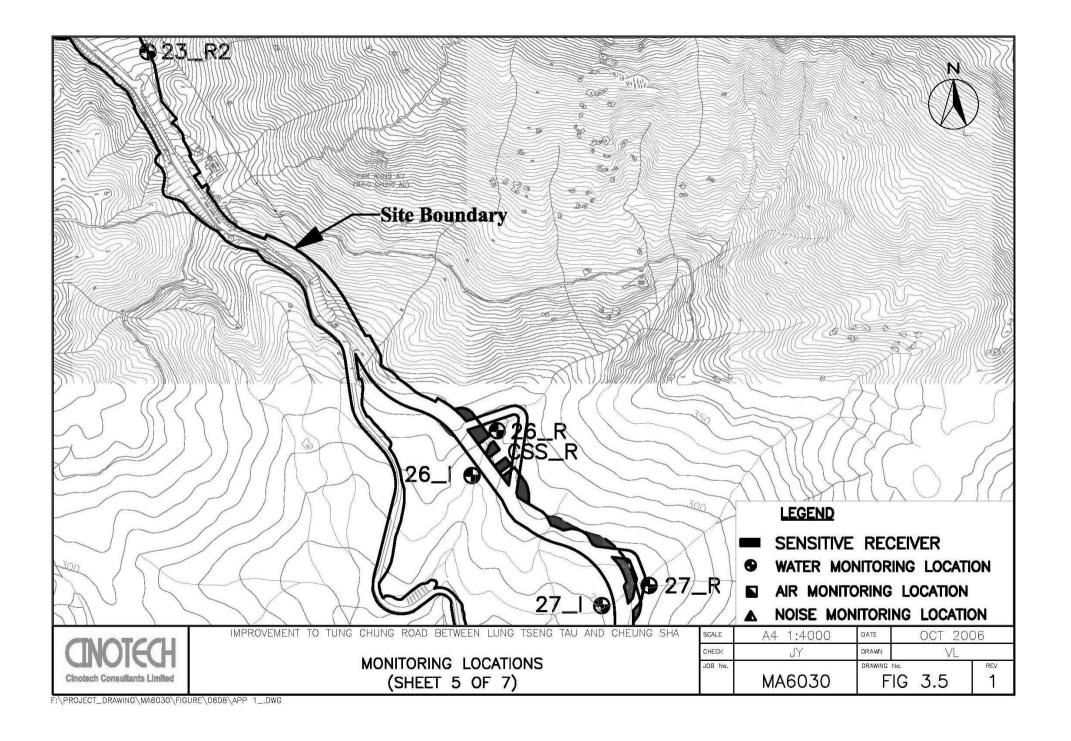
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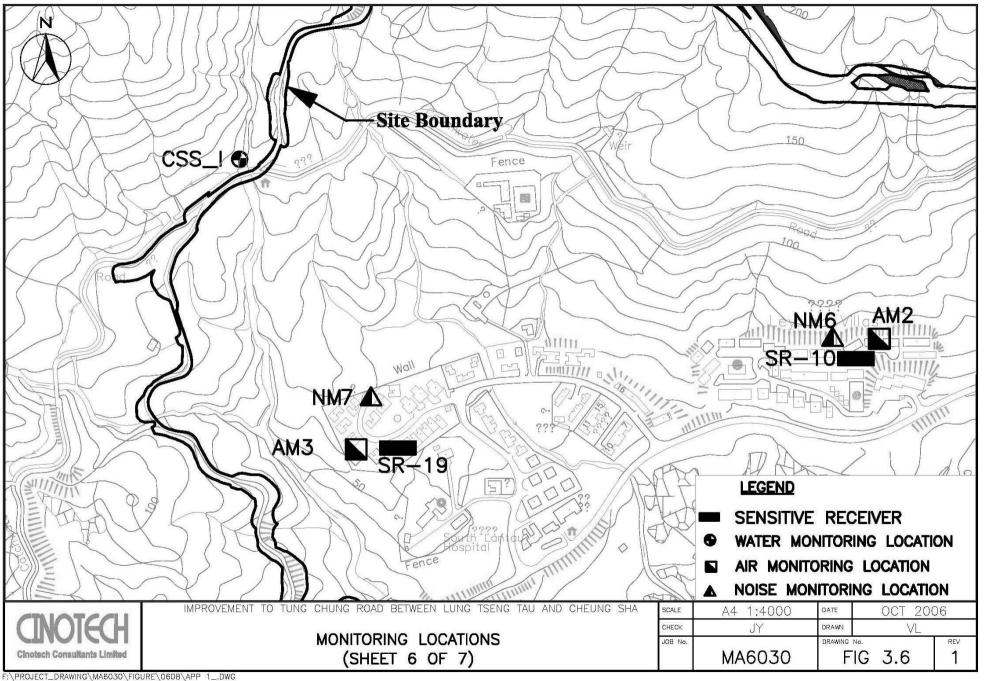


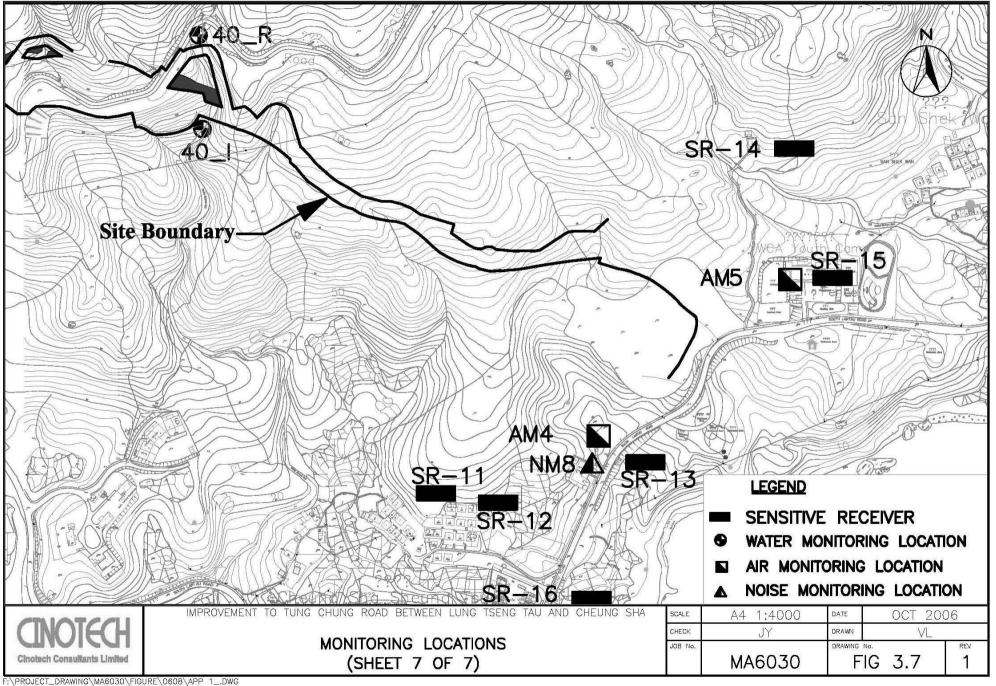












APPENDIX A
ACTION AND LIMIT LEVELS FOR AIR
QUALITY, NOISE AND WATER
QUALITY

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/m ³
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

	Tuble 12-4 Compliance Devertor Water Quarty											
Monitoring	DO, 1	mg/L		рН		Turbidit	ty, NTU			SS, r	ng/L	
Stations	Action	Limit	Action	Limit	A	Action]	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	ı	<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	ı	<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	ı	<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	ı	<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

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA6030/46/0012 WK AM1 - YMCA of HK Christian College Operator: Station 7-Oct-08 Next Due Date: Date: 8-Aug-08 1315 Serial No. Equipment No.: A-01-46 **Ambient Condition** 756.6 Temperature, Ta (K) 298.2 Pressure, Pa (mmHg) Orifice Transfer Standard Information 0.0395 0.0575 Intercept, bc Equipment No.: A-04-06 Slope, mc me x Qstd + be = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 10-Mar-08 Ostd = $\{|\Delta H \times (Pa/760) \times (298/Ta)\}^{1/2} - bc\} / mc$ 9-Mar-09 Next Calibration Date: Calibration of TSP Sampler HVS Orfice Calibration [AW x (Pa/760) x (298/Ta)]1/2 Y-Qstd (CFM) ΔW ΔH (orifice), $[\Delta H \times (Pa/760) \times (298/\Gamma a)]^{1/2}$ Point in. of water X - axis (HVS), in. of oil 2.96 11,4 3.37 57.88 1 2.66 7.1 10.0 3.15 54.17 2 2.27 2.73 46.82 5.2 7.5 2.21 37.71 3.3 1.81 4,9 4 1.37 1.76 29.85 1.9 5 3.I By Linear Regression of Y on X Slope, mw = _____0.0549 Intercept, bw : ____-0.2722 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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.39 Remarks: Signature: Conducted by: M. K. TANA Signature: Date: Date:

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

CINOTECH

Station	AM1 - YMCA o	of HK Christian	College	Operator:	CH	File No	. MA6030/46/0013
Date:	8-Oct-08				7-Dec-08		
quipment No.:				Serial No.	1315	WA HUMBER	-
n -v. wa			Ambient	Condition		22 200	7/A 2/B
Temperatur	ra Ta (K)	300	Pressure, Pr	19878	100	762.4	
1 cmpcratu	ic, 14 (ix)	300					
		Or	ifice Transfer St	andard Inform			4,0
Equipme	ent No.;	A-04-06	Slope, mc	0.0575	Intercept		0.0395
Last Calibra	ation Date:	10-Mar-08		mc x Qstd + l	$oc = [\Delta H \times (Pa/76)]$	0) x (298/T	(a) ^{1/2}
Next Calibr	ation Date:	9-Mar-09		$Qstd = \{[\Delta H$	x (Pa/760) x (298.	/Ta)[1/2 -bc]) / me
- DAME TO CO.	18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		C. III	CTCD Complex		(40 0 - 2 50)	301 3488 TRO II, N
200	I	0		f TSP Sampler	· ·	HVS	
Calibration	ΔH (orifice),	Ori	2.394	Qstd (CFM)	ΔW		/760) x (298/Ta)] ^{1/2} Y
Point	in. of water	[ΔH x (Pa/760	0) x (298/Ta)] ^{1/2}	X - axis	(HVS), in. of oil	[2111.15]	axis
1	11,5	3	.39	58.19	8.9		2.98
2	10.2	3	.19	54.76	7.2	The London II	2.68
3	7.4	2	72	46.54	5.2		2.28
4	5.1	2	.25	38.52	3.3	U 953 00	1.81
5	3.0		.73	29.38	1.9		1.38
Slope, mw = Correlation o	,	0.9		-	-0.250	80	_
0123				Calculation	- 1885 - 17 - 1554 - 15	71	
	ield Calibration C						
rom the Regree	ssion Equation, th	e "Y" value acco	rding to		*		
		mw x ($Qstd + bw = [\Delta W$	/ x (Pa/760) x (2	298/Ta)] ^{1/2}		
		· · · · · · · · · · · · · · · · · · ·	-Sec - 149	200 204			
Therefore, S	Set Point; W = (m	w x Qstd + bw)	'x (760 / Pa) x ((Ta/298) =	4.38	<u> </u>	
			CIO 300 CE AVE	- I - 10 1			
Remarks:							
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		- 1		- 10 - 12 - 13 - 13 		650	
Conducted by	ZAD CHING HATH	7 Signature:	lan			Date:	8/10/08
conducted by.	PUN CACHINOL - OND	1	- 1		52	Date:	

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA6030/11/0012 AM2 - Leyburn Villas WK Station Operator: 7-Oct-08 Date: 8-Aug-08 Next Due Date: 1805 Equipment No.: A-01-11 Serial No. **Ambient Condition** Pressure, Pa (mmHg) 756.6 Temperature, Ta (K) 298,2 Orifice Transfer Standard Information 0.0575 Intercept, bc 0.0395 A-04-06 Slope, mc Equipment No.: me x Qstd + be = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 10-Mar-08 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc \} / mc$ Next Calibration Date: 9-Mar-09 Calibration of TSP Sampler Orfice Calibration [ΔW x (Pa/760) x (298/Ta)]^{1/2} Y-ΔH (orifice), Qstd (CFM) ΔW [ΔH x (Pa/760) x (298/Ta)]^{1/2} Point (HVS), in. of oil in, of water X - axis axis 2.98 59.15 8.9 11.9 3.44 1 7.5 2,73 3.20 54.98 10.3 5.4 2.32 47,13 3 7.6 2.75 1.78 38.87 3.2 5.2 2.27 1.73 29.36 2.0 1.41 5 3.0 By Linear Regression of Y on X Slope, mw = 0.0536 Intercept, bw = -0.2163 Correlation coefficient* = 0.9970*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: 8 Aug. 8 Conducted by: W. Tark Signature: Signature: Signature:

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

CINOTECH

							MA6030/11/0013
Station					CH		
Date:			Next Due Date:				
Equipment No.:	A-01-11			Serial No.	1805	550	
	975 WATER		Ambient	Condition			
Temperatu	re, Ta (K)	300	Pressure, Pr	a (mmHg)		762.4	
		150 P50			· · · · · ·		
			fice Transfer St	The second second		102	0.0005
Equipm	300 Marin 11/00 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10	A-04-06	Slope, mc	0.0575	Intercept	t, bc	0.0395
Last Calibr		10-Mar-08			bc = [ΔH x (Pa/76 x (Pa/760) x (298/		
Next Calibr	ration Date:	9-Mar-09	- 2000	$Qstd = \{ \Delta H \}$	X (Pa//60) X (298/	(Tajj -De)	mc
	- 140	•	Calibration of	f TSP Sampler		a 2 f	
9)		Ori				HVS	
Calibration Point	ΔH (orifice), in. of water)) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of oil		760) x (298/Ta)] 1/2 Y- axis
I	12.2	3	.49	59.95	8.4		2.89
2	10.5	3	.23	55,57	6.9		2.62
3	7.4	2	.72	46.54	5.1		2.25
4	5.5	2	.34	40.03	3.3		1.81
5	3.1	1	.76	29.88	1.8	<u> </u>	1.34
Slope, mw =	ression of Y on X 0.0515 coefficient* = _ Coefficient < 0.99	0.9	977 Ilibrate.	Intercept, bw	-0.206	54	
			Set Point	Calculation			
From the TSP F	Field Calibration C	Curve, take Qstd =	43 CFM				
From the Regre	ssion Equation, th	e "Y" value acco	rding to				
		mw x ()std + bw = [ΔW	x (Pa/760) x (2	298/Ta)] ^{1/2}		
Therefore,	Set Point; W = (m				4.05		
Remarks:	20.0	200	700	1994	15%		
	700			1870 18-400 18-400			
Conducted by: Checked by	TBO CUING UIMA ::_ HZ	ASignature: Signature:	Jan		-	Date:	8 Oct 08

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



MA6030/AM4/0012 File No. Station No. 31 South Lantau Road (AM4) Operator: WK Date: Next Due Date: 7-Oct-08 Equipment No.: A-01-06 10576 Serial No. **Ambient Condition** Temperature, Ta (K) 298.2 Pressure, Pa (mmHg) 756.6 Orifice Transfer Standard Information Equipment No.: A-04-06 Slope, mc 0.0575 Intercept, bc 0.0395 mc x Qstd + be = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 10-Mar-08 Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc\} / mc$ Next Calibration Date: 9-Mar-09 Calibration of TSP Sampler Orfice HVS Calibration [ΔW x (Pa/760) x (298/Ta)]^{1/2} Qstd (CFM) ΔH (orifice), ΔW [AH x (Pa/760) x (298/Ta)]1/2 Point in. of water X - axis (HVS), in. of oil Y-axis 11.3 3.35 2.80 1 57.62 7.9 9.9 3.14 53.89 6,8 2.60 2 3 7.0 2.64 45.21 5.0 2.23 4 4.9 3.2 1.78 2.21 37.71 5 2.9 28.85 1.7 1.30 1.70 By Linear Regression of Y on X Intercept, bw :______ -0.1749 Slope, mw = 0.0519 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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.26 Remarks:

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

CINOTECH

Date:

MA6030/AM4/0013 File No. Operator: CH Station No. 31 South Lantau Road (AM4) 7-Dec-08 Date: 8-Oct-08 Next Due Date: 10576 Equipment No.: A-01-06 Serial No. **Ambient Condition** 762.4 Temperature, Ta (K) 300 Pressure, Pa (mmHg) Orifice Transfer Standard Information A-04-06 0.0575 Intercept, be Slope, mc Equipment No.: me x Qstd + be = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 10-Mar-08 Last Calibration Date: Qstd = $\{ [\Delta H \times (Pa/760) \times (298/\Gamma a)]^{1/2} -bc \} / mc$ Next Calibration Date: 9-Mar-09 Calibration of TSP Sampler HVS Orfice Calibration Qstd (CFM) [ΔW x (Pa/760) x (298/Ta)]^{1/2} ΔH (orifice). [ΔH x (Pa/760) x (298/Ta)]^{1/2} Point X - axis (HVS), in. of oil Y-axis in, of water 2.81 7.9 3.34 57.41 11.2 6.8 2.60 53.66 3.12 2 9.8 45.57 4.8 2.19 7.1 2,66 3 1.67 2.8 36.14 4 4.5 2.12 29.38 1.9 1.38 1.73 3.0 By Linear Regression of Y on X Intercept, bw :______ -0.1620 Slope , mw = 0.0515 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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = 4.24$ Remarks: Conducted by: Uso CHING UMCISignature:

Checked by: Signature: Date:



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

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/07/80502
Date of Issue:	2008-05-03
Date Received:	2008-05-02
Date Tested:	2008-05-02
Date Completed:	2008-05-03
Next Due Date:	2009-05-02

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:

The second secon	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

Laboratory Manager

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TISCH ENVIROMENTAL, INC. 145 SOUTH MIAMI AVE. VILLAGE OF CLEVES, 0H 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 - M Operator		8 Rootsmeter Orifice I.		833640 0999	Ta (K) - Pa (mm)	295 - 746.76
PLATE OR Run #	VOLUME START	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H20 (in.)
1 2 3 4	NA NA NA NA	NA NA NA NA	1.00 1.00 1.00 1.00	1.3890 0.9850 0.8810 0.8410	3.2 6.3 7.8 8.6	2.00 4.00 5.00 5.50
5	AN	ДИ	1.00	0.6950	12.5	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
Ostd slo intercep coeffici y axis =	t (b) = ent (r) = 	2.03154 -0.03970 0.99999	[a]	Qa slop intercep coeffici y axis =	t (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

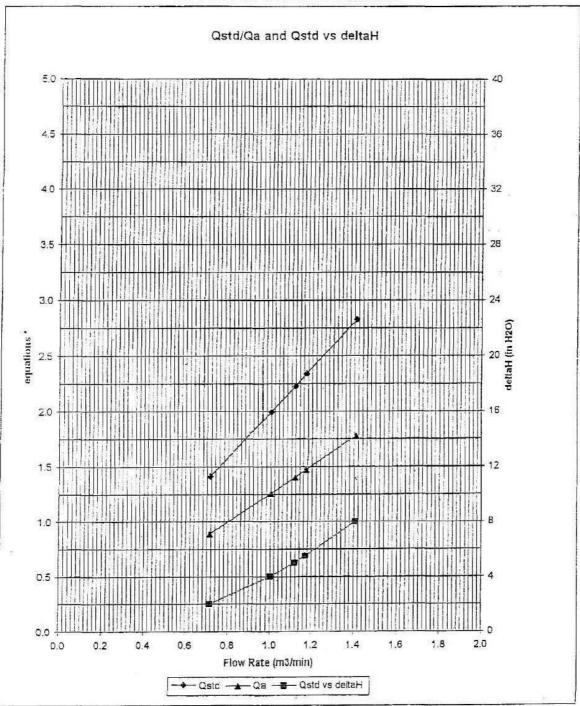
For subsequent flow rate calculations:

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



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AIR POLLUTION MONITORING EQUIPMENT



* y-axis equations:

Qstd series:

$$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$$

Qa series:

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



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

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/71213/1
Date of Issue: 2007-12-14
Date Received: 2007-12-13
Date Tested: 2007-12-14
Date Completed: 2007-12-14
Next Due Date: 2008-12-13

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer Model No.

: Brüel & Kjær : B&K 2238

Serial No. Microphone No. : 2337665 : 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	197

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist



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

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/71116/1
Date of Issue: 2007-11-16
Date Received: 2007-11-15
Date Tested: 2007-11-15
Date Completed: 2007-11-16
Next Due Date: 2008-11-15

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer Model No. : Brüel & Kjær : B&K 2238

Serial No.

: 2337666

Microphone No. Equipment No.

: 2289750 : 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 Senior Chemist

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TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/80903-1

Date of Issue: 2008-09-03

Date Received: 2008-09-02 Date Tested: 2008-09-02

Date Tested: 2008-09-02

Date Completed: 2008-09-03

Next Due Date:

2008-09-03

ATTN:

Mr. Henry Leung

Page:

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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

: 21 degree Celsius

Relative Humidity

: 61%

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

Laboratory Manager



TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/80903-2

Date of Issue: 2008-09-03 Date Received: 2008-09-02

Date Tested: 2008-09-02

Date Completed: 2008-09-03

Next Due Date:

2009-09-02

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer

: Brüel & Kjær

Model No.

: B&K 2238 : 2359303

Serial No. Equipment No.

: N-01-04

Test conditions:

Room Temperatre

: 21 degree Celsius

Relative Humidity

: 61%

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

Laboratory Manager



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TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/71015/1
Date of Issue: 2007-10-15
Date Received: 2007-10-13
Date Tested: 2007-10-13
Date Completed: 2007-10-15
Next Due Date: 2008-10-14

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer Model No.

: Brüel & Kjær : B&K 2238

Serial No. Microphone No.

: 2394976 : 2407349

Equipment No.

: 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

Senior Chemist

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TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/81013/1
Date of Issue:	2007-10-15
Date Received:	2008-10-13
Date Tested:	2008-10-13
Date Completed:	2008-10-14
Next Due Date:	2009-10-14

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

: Integrating Sound Level Meter Description

: Brüel & Kjær Manufacturer : B&K 2238 Model No. : 2394976 Serial No. Microphone No. : 2407349 Equipment No. : N-01-05

Test conditions:

: 21 degree Celsius Room Temperatre

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 94.0	
94		
114	114.0	

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

Laboratory Manager

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TEST REPORT

APPLICANT: Cinotech Consultants Limited

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Test Report No.:	C/N/71116/2	
Date of Issue:	2007-11-16	
Date Received:	2007-11-15	
Date Tested:	2007-11-15	
Date Completed:	2007-11-16	
Next Due Date:	2008-11-15	

ATTN:

Mr. Henry Leung

Page:

1 of 1

Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No. Serial No. : 4231 : 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 ± 0.1 dB

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE Senior Chemist

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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

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/06/80305
Date of Issue:	2008-03-05
Date Received:	2008-03-03
Date Tested:	2008-03-03
Date Completed:	2008-03-05
Next Due Date:	2009-03-04

ATTN:

Mr. Henry Leung

Page:

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Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No. Serial No. : 4231

Serial No.

: 2343007 : C13

Project No. 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

Laboratory Manager



TEST REPORT

APPLICANT:

Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/80903-3	
Date of Issue:	2008-09-03	
Date Received:	2008-09-02	
Date Tested:	2008-09-02	
Date Completed:	2008-09-03	
Next Due Date:	2009-09-02	

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

: 21 degree Celsius

Relative Humidity

: 61%

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

Laboratory Manager

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Room 1516 & 816, Technology Park 18 On Lai Street, Shatin, N.T., Hong Kong Tel: 2895 7388 Fax: 2895 7076 Website: http://www.wellab.com.hk B-mail: wellab@wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/W/80805-1
Date of Issue: 2008-08-06
Date Received: 2008-08-05
Date Tested: 2008-08-05
Date Completed: 2008-08-06
Next Due Date: 2008-11-05

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

: 23 degree Celsius

Relative Humidity

: 63%

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

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TEST REPORT

Test Report No.: C/W/80805-1
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Page:

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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	NO. 2
1421	1420	2	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	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



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TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/W/80805-2
Date of Issue: 2008-08-06
Date Received: 2008-08-05
Date Tested: 2008-08-05
Date Completed: 2008-08-06

Next Due Date:

2008-08-06

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. Equipment No.

: 02D0293AA : W.03.02

Project No.

: C013

Test conditions:

Room Temperature

: 23 degree Celsius

Relative Humidity

: 63%

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

Laboratory Manager

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TEST REPORT

Test Report No.: C/W/80805-2
Date of Issue: 2008-08-06
Date Received: 2008-08-05
Date Tested: 2008-08-05
Date Completed: 2008-08-06
Next Due Date: 2008-11-05

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	1 20 80%	
1420	1420	0	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	9.0	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 Air, Noise and Water Quality Monitoring Schedule for October 2008

Sunday	Monday	Tuesday	Wednesday		Thursday	Friday	Saturday
28-Sep	29-Sep	30-Sep	1	-Oct	2-Oct	3-Oct	4-Oct
	Water Quality	24 hr TSP			Water Quality Noise	Water Quality	
5-Oct	6-Oct	7-Oct	8	3-Oct	9-Oct	10-Oct	11-Oct
	Water Quality 24 hr TSP		Water Quality Noise			Water Quality	24 hr TSP
12-Oct	13-Oct	14-Oct	15	5-Oct	16-Oct	17-Oct	18-Oct
	Water Quality		Water Quality Noise			Water Quality 24 hr TSP	
19-Oct	20-Oct	21-Oct	22	2-Oct	23-Oct	24-Oct	25-Oct
	Water Quality		Water Quality Noise		24 hr TSP	Water Quality	
26-Oct	27-Oct	28-Oct	29	Oct	30-Oct	31-Oct	1-Nov
	Water Quality		Water Quality Noise 24 hr TSP			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 November 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov
	Water Quality	24 hr TSP	Water Quality Noise		Water Quality	
9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov
	Water Quality		Water Quality <u>Noise</u> Day Time (07:00-19:00) &		Water Quality	
	24 hr TSP		Evening Time* (19:00-23:00)			24 hr TSP
16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov
	Water Quality		Water Quality Noise Day Time (07:00-19:00) & Evening Time* (19:00-23:00)		Water Quality 24 hr TSP	
23-Nov	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov
	Water Quality		Water Quality <u>Noise</u> Day Time (07:00-19:00) & Evening Time* (19:00-23:00)	24 hr TSP	Water Quality	
30-Nov	1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec
	Water Quality		Water Quality 24 hr TSP Noise Day Time (07:00-19:00) & Evening Time* (19:00-23:00)		Water Quality	

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

Remarks: * Construction Noise Levels will be monitored when construction works perform at 19:00 - 23:00 and within a radius of 300m from the noise monitoring locaitons.

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.)	$(\mu g/m^3)$	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)
6-Oct-08	2.8368	2.9945	1.22	1.22	4205.7	4229.7	24.0	89.7	Cloudy	300.3	765.3	0.1577	1.22	1758.5
11-Oct-08	2.7831	2.8585	1.22	1.22	4229.7	4253.7	24.0	43.0	Cloudy	301.6	765.6	0.0754	1.22	1754.5
17-Oct-08	2.8484	2.9056	1.22	1.22	4253.7	4277.7	24.0	32.7	Sunshine	302.1	762.3	0.0572	1.22	1749.8
23-Oct-08	2.8209	2.9692	1.22	1.22	4277.7	4301.7	24.0	84.4	Sunshine	299.9	763.8	0.1483	1.22	1757.1
29-Oct-08	2.7763	2.9535	1.22	1.22	4301.7	4325.7	24.0	100.8	Cloudy	299.9	764.5	0.1772	1.22	1757.8
	-		-				Min	32.7						
							Max	100.8						
							Average	70.1						

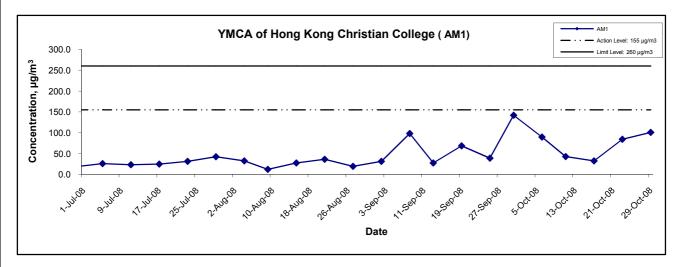
Location AM2 - House in Leyburn Villas

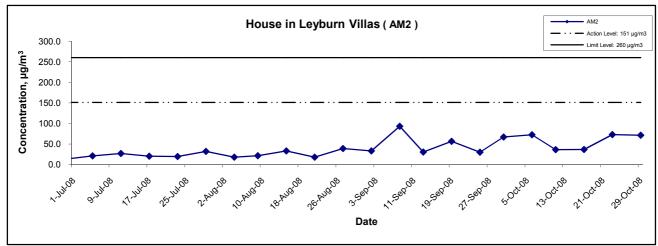
Date	Filter W	eight (g)	Flow Rate	e (m³/min.)	Elaps	se Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m^3)
6-Oct-08	2.8445	2.9716	1.22	1.22	8999.3	9023.3	24.0	72.3	Cloudy	300.3	765.3	0.1271	1.22	1758.6
11-Oct-08	2.8235	2.8875	1.22	1.22	9023.3	9047.3	24.0	36.3	Cloudy	301.6	765.6	0.0640	1.22	1761.8
17-Oct-08	2.8480	2.9121	1.22	1.22	9047.3	9071.3	24.0	36.5	Sunshine	302.1	762.3	0.0641	1.22	1757.0
23-Oct-08	2.9069	3.0351	1.23	1.23	9071.3	9095.3	24.0	72.7	Sunshine	299.9	763.8	0.1282	1.23	1764.4
29-Oct-08	2.7868	2.9124	1.23	0.23	9095.3	9119.3	24.0	71.2	Cloudy	299.9	764.5	0.1256	0.73	1765.2
							Min	36.3						
							Max	72.7						
							Average	57.8						

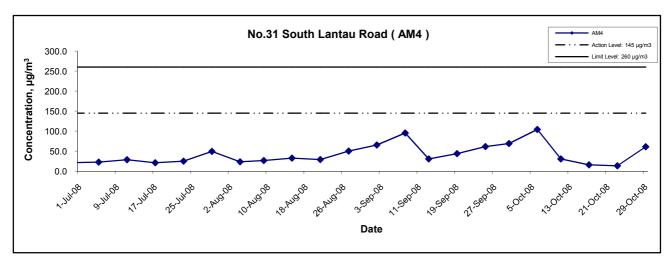
Location AM4 - No.31 South Lantau Road

Date	Filter W	eight (g)	Flow Rate	(m³/min.)	Elaps	se Time	Sampling	Conc.	Weather	Air	Atmospheric	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	$(\mu g/m^3)$	Condition	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)
6-Oct-08	2.8357	3.0195	1.23	1.23	8854.5	8878.5	24.0	104.1	Sunshine	300.3	765.3	0.1838	1.23	1764.9
11-Oct-08	2.8269	2.8797	1.21	1.21	8878.5	8902.5	24.0	30.2	Cloudy	301.6	765.6	0.0528	1.21	1746.0
17-Oct-08	2.8111	2.8385	1.21	1.21	8902.5	8926.5	24.0	15.7	Sunshine	302.1	762.3	0.0274	1.21	1741.2
23-Oct-08	2.8157	2.8388	1.21	1.21	8926.5	8950.5	24.0	13.2	Sunshine	299.9	763.8	0.0231	1.21	1748.7
29-Oct-08	2.7647	2.8713	1.22	1.21	8950.5	8974.5	24.0	60.9	Sunshine	299.9	764.5	0.1066	1.22	1749.5
	-		-				Min	13.2						
							Max	104.1						
							Average	44.9						

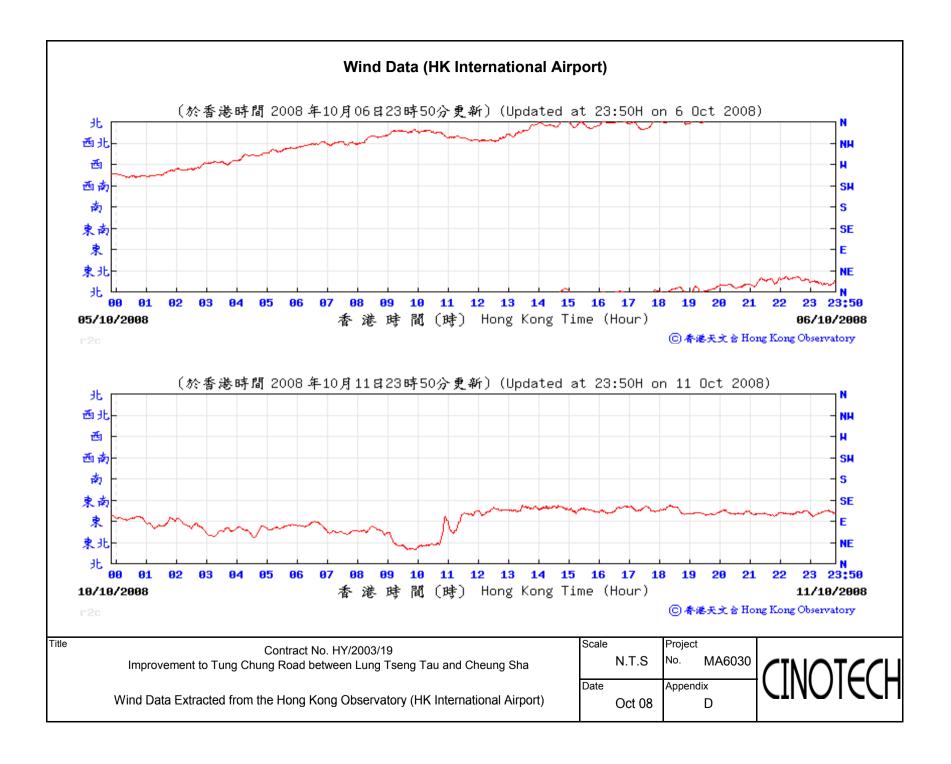
24-hour TSP Levels

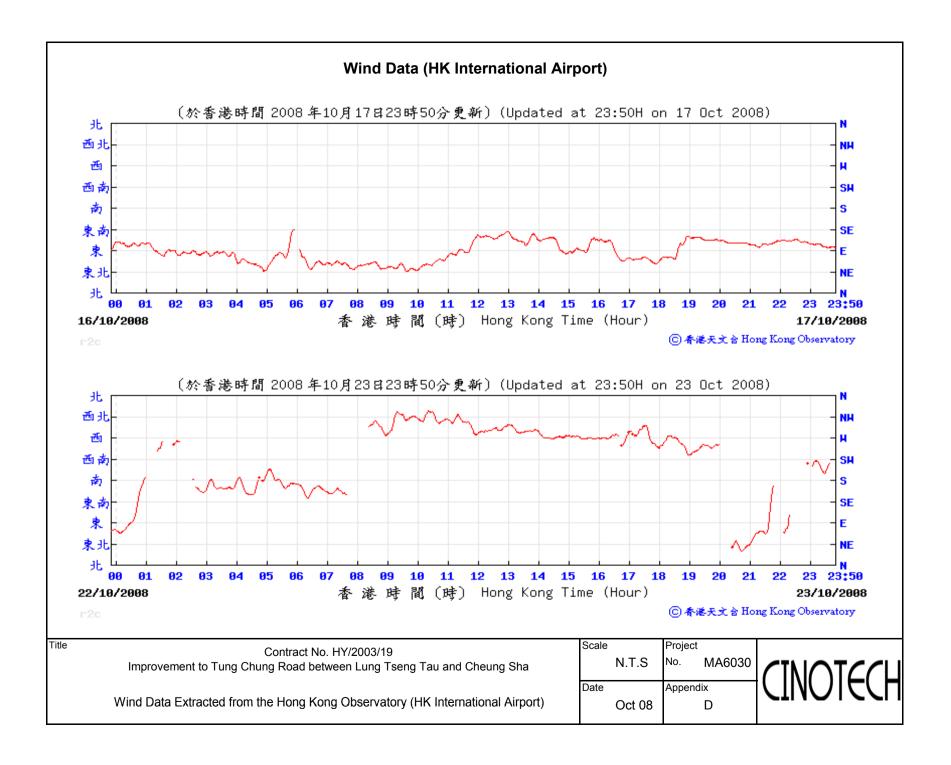






Title	Improvement to Tung Chung Road between Lung Tseng Tau and	Scale		Project		
	Cheung Sha	Date		No. Appen	MA6030 dix	CINOTECH
	Graphical Presentation of 24-hour TSP Monitoring Results		Oct 08		D	





Wind Data (HK International Airport)



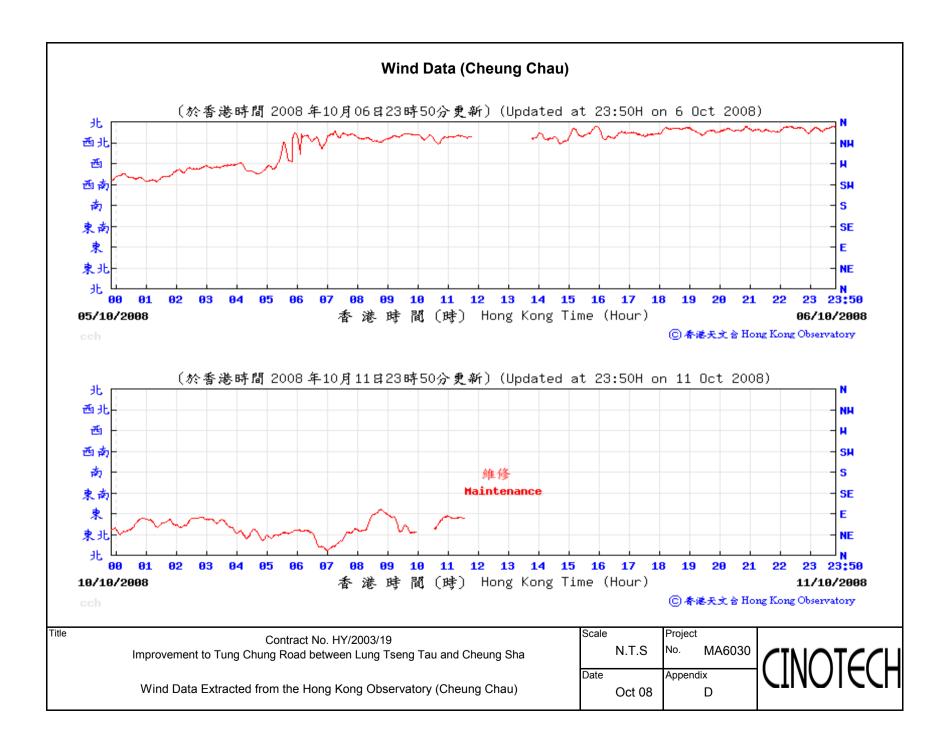
Title

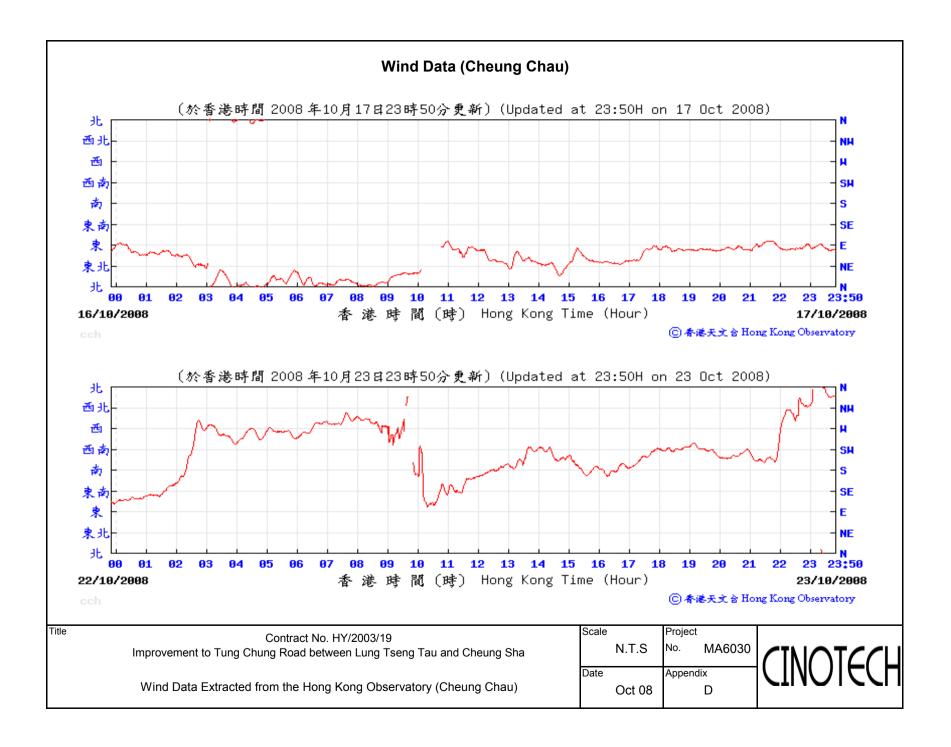
Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

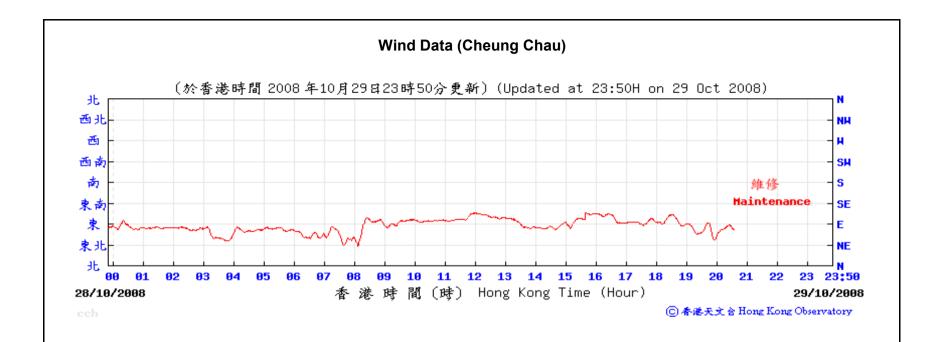
Wind Data Extracted from the Hong Kong Observatory (HK International Airport)

Scale		Project	
	N.T.S	No.	MA6030
Date		Append	ix
	Oct 08		D
		1	









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
		Oct 08		D



APPENDIX E NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - Noise Monitoring Results

Location NM1	Location NM1 - No. 28 Lung Tseng Tau									
Data	Times	Time Weether dB (A) (30-min)								
Date	Time	Weather	L _{eq}	L ₁₀	L 90					
8-Oct-08	09:40	Fine	64.5	66.5	61.5					
15-Oct-08	09:40	Cloudy	63.7	66.5	60.5					
22-Oct-08	09:40	Sunny	63.7	65.5	60.5					
29-Oct-08	09:40	Cloudy	65.3	67.0	61.5					
		Average	64.4	66.4	61.0					
		Minimum	63.7	65.5	60.5					
		Maximum	65.3	67.0	61.5					

Location NM2	Location NM2 - YMCA of HK Christian College								
Dete	Time	\A/a ath ar	dB (A) (30-min)						
Date	Time	Weather	L _{eq}	L ₁₀	L 90				
8-Oct-08	09:00	Fine	52.6	55.0	49.5				
15-Oct-08	09:00	Cloudy	53.2	55.5	50.5				
22-Oct-08	09:00	Sunny	52.2	54.5	49.5				
29-Oct-08	09:00	Cloudy	52.1	54.5	49.5				
		Average	52.5	54.9	49.8				
		Minimum	52.1	54.5	49.5				
		Maximum	53.2	55.5	50.5				

Location NM3	Location NM3 - No. 37 Shek Lau Po									
Data	Ti	\A/a atla a u	dB (A) (30-min)							
Date	Time	Weather	L _{eq}	L ₁₀	L 90					
8-Oct-08	10:20	Fine	39.8	40.5	38.5					
15-Oct-08	10:20	Cloudy	39.7	40.5	38.5					
22-Oct-08	10:20	Sunny	39.8	40.5	38.5					
29-Oct-08	10:20	Cloudy	40.3	41.5	39.5					
		Average	39.9	40.8	38.8					
		Minimum	39.7	40.5	38.5					
		Maximum	40.3	41.5	39.5					

Location NM4	Location NM4 - No.1 Shek Mun Kap									
Data	Ti	\\/a atla an	dE	dB (A) (30-min)						
Date	Time	Weather	L _{eq}	L ₁₀	L ₉₀					
8-Oct-08	11:00	Fine	49.6	52.5	48.5					
15-Oct-08	11:00	Cloudy	52.6	54.5	49.5					
22-Oct-08	11:00	Sunny	51.6	53.5	48.5					
29-Oct-08	11:00	Cloudy	51.2	53.5	48.5					
		Average	51.4	53.6	48.8					
		Minimum	49.6	52.5	48.5					
		Maximum	52.6	54.5	49.5					

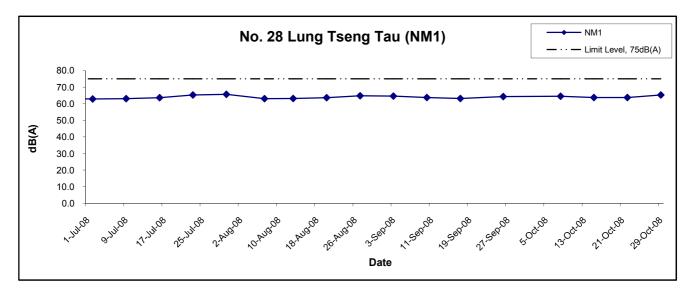
Appendix E - Noise Monitoring Results

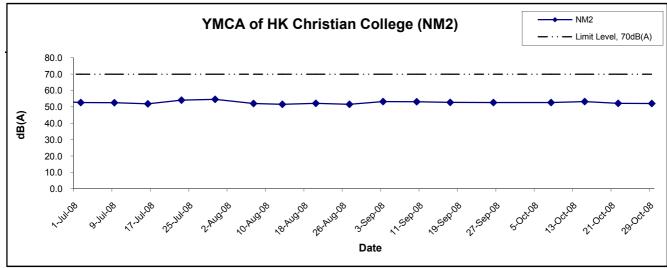
Location NM5	- Tung Chui	ng Au Country	Parks Manag	ement Centı	re
Data	Time	\A/a ath ar	dB	3 (A) (30-min))
Date	Time	Weather	L _{eq}	L ₁₀	L 90
8-Oct-08	13:00	Fine	48.3	51.5	47.5
15-Oct-08	13:00	Cloudy	49.6	51.5	48.5
22-Oct-08	13:00	Sunny	48.6	52.5	47.5
29-Oct-08	13:00	Cloudy	49.7	51.5	47.5
		Average	49.1	51.8	47.8
		Minimum	48.3	51.5	47.5
		Maximum	49.7	52.5	48.5

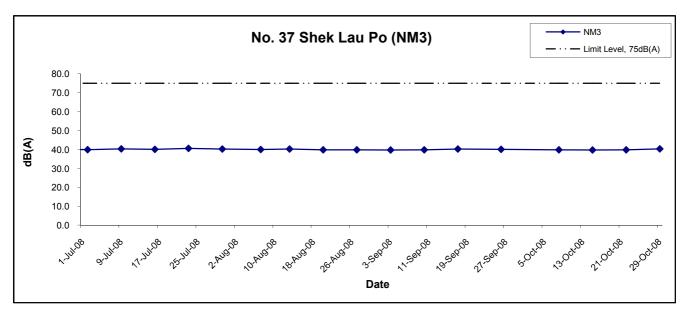
Location NM6	- D75 Leybu	ırn Villa			
Data	Time	\A/a atla a u	dB	3 (A) (30-min))
Date	Time	Weather	L _{eq}	L ₁₀	L 90
8-Oct-08	13:45	Fine	39.7	40.5	38.0
15-Oct-08	13:45	Cloudy	40.1	39.5	
22-Oct-08	13:45	Sunny	40.0	41.0	39.0
29-Oct-08	13:45	Cloudy	40.1	41.5	39.0
		Average	40.0	41.0	38.9
		Minimum	39.7	40.5	38.0
		Maximum	40.1	41.5	39.5

Location NM8	- No. 31 Sou	ıth Lantau Roa	ad		
Data	Time	\\/ +l	dE	3 (A) (30-min))
Date	Time	Weather	L _{eq}	L ₁₀	L 90
8-Oct-08	14:25	Fine	61.3	63.5	58.5
15-Oct-08	14:25	Cloudy	61.2	63.5	59.5
22-Oct-08	14:25	Sunny	61.4	64.5	58.5
29-Oct-08	14:25	Cloudy	62.3	64.5	59.5
		Average	61.6	64.0	59.0
		Minimum	61.2	63.5	58.5
		Maximum	62.3	64.5	59.5

Noise Levels







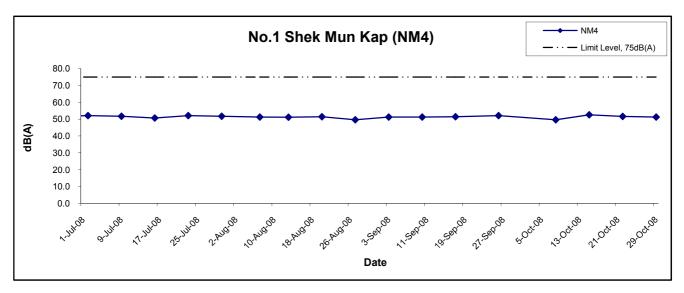
Title	Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha
	Graphical Presentation of Construction Noise Manitoring

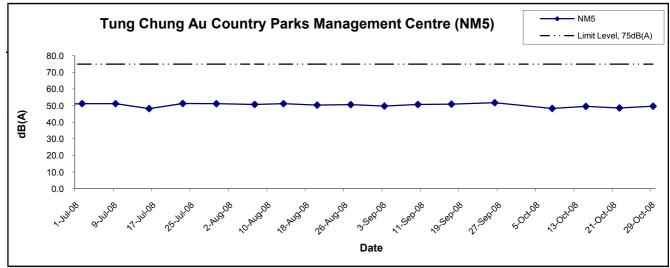
Results

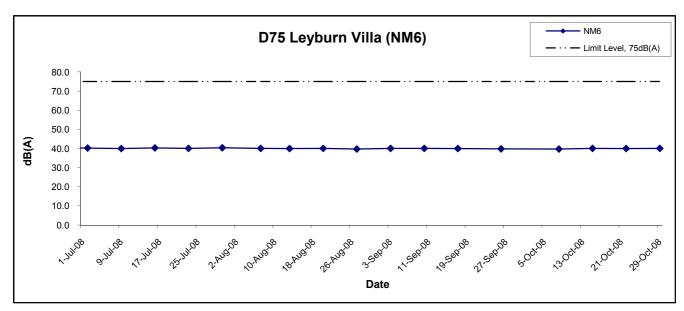
Scale		Project	
	N.T.S	No.	MA6030
Date		Appendi	Х
	Oct 08		E



Noise Levels







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

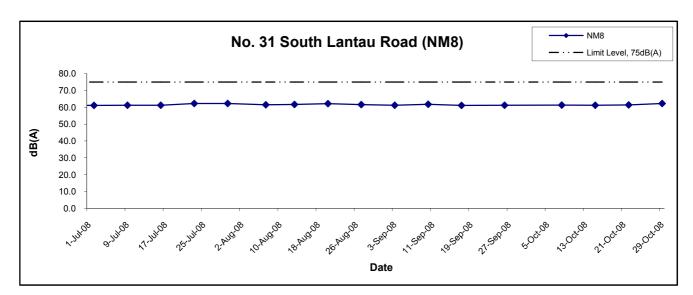
Results

Scale		Project	
	N.T.S	No. MA	A6030
Date		Annendix	

Oct 08



Noise Levels



Title Contract No. HY/2003/19

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

Graphical Presentation of Construction Noise Monitoring Results

Scale Project No. MA6030

Date Appendix
Oct 08 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	Вері	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:28	Middle	0.09	22.0 22.0	22	7.5 7.5	7.5	0.02 0.02	0.02	90.9 90.7	90.8	7.5 7.4	7.5	1.5 1.5	1.5	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	12:06	Middle	0.09	22.0 22.0	22	7.5 7.5	7.5	0.02 0.02	0.02	92.5 92.3	92.4	7.8 7.8	7.8	1.7 1.7	1.7	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:29	Middle	0.09	21.9 21.9	21.9	7.5 7.5	7.5	0.02 0.02	0.02	92.1 91.9	92	7.7 7.7	7.7	1.5 1.5	1.5	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:29	Middle	0.09	21.1 21.1	21.1	7.5 7.5	7.5	0.02 0.02	0.02	91.4 91.2	91.3	7.5 7.5	7.5	1.8 1.8	1.8	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:36	Middle	0.09	21.0 21.1	21.1	7.5 7.5	7.5	0.02 0.02	0.02	90.6 90.4	90.5	7.2 7.2	7.2	1.7 1.7	1.7	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	11:16	Middle	0.09	21.0 21.1	21.1	7.6 7.6	7.6	0.02 0.02	0.02	92.5 92.3	92.4	7.6 7.6	7.6	1.8 1.8	1.8	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:40	Middle	0.09	21.1 21.1	21.1	7.5 7.5	7.5	0.02 0.02	0.02	93.2 93.0	93.1	7.7 7.7	7.7	1.5 1.5	1.5	4.0 4.0	4
17-Oct-08	Sunny	Calm	13:17	Middle	0.09	21.1 21.1	21.1	7.6 7.6	7.6	0.02 0.02	0.02	94.1 93.9	94	7.9 7.8	7.9	1.8 1.8	1.8	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:21	Middle	0.09	21.0 21.1	21.1	7.6 7.6	7.6	0.02 0.02	0.02	92.2 92.0	92.1	7.4 7.4	7.4	1.7 1.7	1.7	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:35	Middle	0.09	21.0 21.0	21	7.6 7.5	7.6	0.02 0.02	0.02	90.3 90.1	90.2	7.3 7.3	7.3	1.5 1.5	1.5	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:48	Middle	0.09	21.0 21.0	21	7.6 7.6	7.6	0.02 0.02	0.02	91.4 91.2	91.3	7.4 7.3	7.4	1.6 1.6	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	11:15	Middle	0.09	21.0 21.0	21	7.6 7.6	7.6	0.02 0.02	0.02	92.1 91.9	92	7.4 7.4	7.4	1.8 1.8	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:38	Middle	0.09	21.0 21.0	21	7.7 7.7	7.7	0.02 0.02	0.02	90.5 90.3	90.4	7.3 7.3	7.3	1.9 1.9	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:43	Middle	0.09	20.9 21.0	21	7.6 7.6	7.6	0.02 0.02	0.02	89.9 89.7	89.8	7.3 7.3	7.3	1.9 1.9	1.9	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 15_R

Date	Weather	Sea	Sampling	Dent	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved Ox	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
2-Oct-08	Sunny	Calm	12:21	Middle	0.08	22.0 22.0	22	7.4 7.4	7.4	0.02 0.02	0.02	91.4 91.2	91.3	7.5 7.5	7.5	1.7 1.6	1.7	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:59	Middle	0.08	21.9 21.9	21.9	7.4 7.4	7.4	0.02 0.02	0.02	93.0 92.8	92.9	7.8 7.8	7.8	1.9 1.8	1.9	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:22	Middle	0.08	21.9 21.9	21.9	7.4 7.4	7.4	0.02 0.02	0.02	92.6 92.4	92.5	7.7 7.7	7.7	1.7 1.6	1.7	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:22	Middle	0.08	21.1 21.1	21.1	7.5 7.5	7.5	0.02 0.02	0.02	91.9 91.7	91.8	7.5 7.5	7.5	2.0 1.9	2	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:29	Middle	0.08	21.0 21.0	21	7.5 7.5	7.5	0.02 0.02	0.02	91.1 90.9	91	7.3 7.3	7.3	1.9 1.8	1.9	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	11:10	Middle	0.08	21.0 21.0	21	7.5 7.5	7.5	0.02 0.02	0.02	93.0 92.8	92.9	7.7 7.7	7.7	1.8 1.9	1.9	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:33	Middle	0.08	21.0 21.0	21	7.5 7.5	7.5	0.02 0.02	0.02	93.7 93.5	93.6	7.8 7.8	7.8	1.5 1.6	1.6	4.0 4.0	4
17-Oct-08	Sunny	Calm	13:10	Middle	0.08	21.1 21.1	21.1	7.5 7.6	7.6	0.02 0.02	0.02	94.6 94.4	94.5	7.9 7.9	7.9	1.8 1.9	1.9	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:14	Middle	0.08	21.0 21.0	21	7.5 7.5	7.5	0.02 0.02	0.02	92.7 92.5	92.6	7.5 7.4	7.5	1.7 1.8	1.8	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:29	Middle	0.08	20.9 20.9	20.9	7.5 7.5	7.5	0.02 0.02	0.02	90.8 90.6	90.7	7.4 7.4	7.4	1.5 1.6	1.6	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:42	Middle	0.08	21.0 21.0	21	7.5 7.5	7.5	0.02 0.02	0.02	91.9 91.7	91.8	7.4 7.4	7.4	1.6 1.7	1.7	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	11:08	Middle	0.08	21.0 21.0	21	7.6 7.6	7.6	0.02 0.02	0.02	92.6 92.4	92.5	7.5 7.5	7.5	1.8 1.9	1.9	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:32	Middle	0.08	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	91.0 90.8	90.9	7.4 7.3	7.4	1.9 2.0	2	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:37	Middle	0.08	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	90.4 90.2	90.3	7.3 7.3	7.3	1.9 2.0	2	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 18_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
2-Oct-08	Sunny	Calm	12:13	Middle	0.1	21.8 21.8	21.8	7.6 7.6	7.6	0.02 0.02	0.02	90.6 90.5	90.6	7.5 7.5	7.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:51	Middle	0.1	21.8 21.8	21.8	7.6 7.6	7.6	0.02 0.02	0.02	92.2 92.1	92.2	7.8 7.8	7.8	1.8 1.8	1.8	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:14	Middle	0.1	21.7 21.7	21.7	7.6 7.6	7.6	0.02 0.02	0.02	91.8 91.7	91.8	7.7 7.7	7.7	1.6 1.6	1.6	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:14	Middle	0.1	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	91.1 91.0	91.1	7.5 7.5	7.5	1.9 1.9	1.9	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:21	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	90.3 90.2	90.3	7.2 7.2	7.2	1.9 1.9	1.9	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	11:01	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	92.2 92.1	92.2	7.6 7.6	7.6	1.9 1.9	1.9	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:25	Middle	0.1	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	92.9 92.8	92.9	7.7 7.7	7.7	1.6 1.6	1.6	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	13:02	Middle	0.1	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	93.8 93.7	93.8	7.9 7.9	7.9	1.9 1.9	1.9	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:06	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	91.9 91.8	91.9	7.4 7.4	7.4	1.8 1.8	1.8	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:21	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	90.0 89.9	90	7.3 7.3	7.3	1.6 1.6	1.6	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:34	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	91.1 91.0	91.1	7.4 7.3	7.4	1.7 1.7	1.7	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	11:00	Middle	0.1	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	91.8 91.7	91.8	7.4 7.4	7.4	1.9 1.9	1.9	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:24	Middle	0.1	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	90.2 90.1	90.2	7.3 7.3	7.3	2.0 2.0	2	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:28	Middle	0.1	20.7 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	89.6 89.5	89.6	7.3 7.3	7.3	1.8 1.8	1.8	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 18_R

Date	Weather	Sea	Sampling	Dent	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	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:09	Middle	0.175	21.8 21.8	21.8	7.6 7.6	7.6	0.02 0.02	0.02	90.9 90.5	90.7	7.5 7.5	7.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:47	Middle	0.175	21.7 21.7	21.7	7.7 7.7	7.7	0.02 0.02	0.02	92.5 92.1	92.3	7.8 7.8	7.8	1.8 1.8	1.8	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:10	Middle	0.175	21.7 21.7	21.7	7.6 7.6	7.6	0.02 0.02	0.02	92.1 91.7	91.9	7.7 7.7	7.7	1.6 1.6	1.6	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:10	Middle	0.175	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	91.4 91.0	91.2	7.5 7.5	7.5	1.9 1.9	1.9	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:17	Middle	0.175	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	90.6 90.2	90.4	7.3 7.2	7.3	1.9 1.9	1.9	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:58	Middle	0.175	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	92.5 92.1	92.3	7.7 7.6	7.7	1.9 1.9	1.9	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:21	Middle	0.175	20.8 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	93.2 92.8	93	7.8 7.7	7.8	1.6 1.6	1.6	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	12:58	Middle	0.175	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	94.1 93.7	93.9	7.9 7.9	7.9	1.9 1.9	1.9	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:02	Middle	0.175	20.8 20.8	20.8	7.8 7.7	7.8	0.02 0.02	0.02	92.2 91.8	92	7.4 7.4	7.4	1.8 1.8	1.8	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:17	Middle	0.175	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	90.3 89.9	90.1	7.4 7.3	7.4	1.6 1.6	1.6	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:30	Middle	0.175	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	91.4 91.0	91.2	7.4 7.3	7.4	1.7 1.7	1.7	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:56	Middle	0.175	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	92.1 91.7	91.9	7.5 7.4	7.5	1.9 1.9	1.9	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:20	Middle	0.175	20.7 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	90.5 90.1	90.3	7.3 7.3	7.3	2.0 2.0	2	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:25	Middle	0.175	20.7 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	89.9 89.5	89.7	7.3 7.3	7.3	1.8 1.8	1.8	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 21_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бери	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:05	Middle	0.14	21.8 21.8	21.8	7.6 7.7	7.7	0.02 0.02	0.02	91.0 91.3	91.2	7.6 7.6	7.6	1.4 1.4	1.4	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:43	Middle	0.14	21.7 21.7	21.7	7.7 7.7	7.7	0.02 0.02	0.02	92.6 92.9	92.8	7.9 7.9	7.9	1.6 1.6	1.6	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:06	Middle	0.14	21.6 21.6	21.6	7.6 7.7	7.7	0.02 0.02	0.02	92.2 92.5	92.4	7.8 7.8	7.8	1.4 1.4	1.4	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:06	Middle	0.14	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	91.5 91.8	91.7	7.6 7.6	7.6	1.7 1.7	1.7	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:13	Middle	0.14	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	90.7 91.0	90.9	7.3 7.3	7.3	1.7 1.7	1.7	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:54	Middle	0.14	20.8 20.8	20.8	7.7 7.8	7.8	0.02 0.02	0.02	92.6 92.9	92.8	7.7 7.7	7.7	1.7 1.7	1.7	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:17	Middle	0.14	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	93.3 93.6	93.5	7.8 7.8	7.8	1.4 1.4	1.4	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	12:54	Middle	0.14	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	94.2 94.5	94.4	8.0 8.0	8	1.7 1.7	1.7	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:58	Middle	0.14	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	92.3 92.6	92.5	7.5 7.5	7.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:13	Middle	0.14	20.7 20.7	20.7	7.7 7.7	7.7	0.02 0.02	0.02	90.4 90.7	90.6	7.4 7.4	7.4	1.4 1.4	1.4	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:26	Middle	0.14	20.7 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	91.5 91.8	91.7	7.4 7.5	7.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:52	Middle	0.14	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	92.2 92.5	92.4	7.5 7.5	7.5	1.8 1.8	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:16	Middle	0.14	20.7 20.7	20.7	7.8 7.9	7.9	0.02 0.02	0.02	90.6 90.9	90.8	7.4 7.4	7.4	1.9 1.9	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:21	Middle	0.14	20.7 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	90.0 90.3	90.2	7.4 7.4	7.4	1.7 1.7	1.7	<2.5 <2.5	<2.5

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	Вері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:01	Middle	0.1	21.7 21.7	21.7	7.7 7.6	7.7	0.02 0.02	0.02	92.1 91.5	91.8	7.7 7.6	7.7	1.4 1.4	1.4	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:38	Middle	0.1	21.7 21.7	21.7	7.7 7.7	7.7	0.02 0.02	0.02	93.7 93.1	93.4	8.0 7.9	8	1.6 1.6	1.6	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:02	Middle	0.1	21.6 21.6	21.6	7.7 7.6	7.7	0.02 0.02	0.02	93.3 92.7	93	7.9 7.8	7.9	1.4 1.4	1.4	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:02	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	92.6 92.0	92.3	7.7 7.6	7.7	1.7 1.7	1.7	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:09	Middle	0.1	20.7 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	91.8 91.2	91.5	7.4 7.4	7.4	1.7 1.7	1.7	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:49	Middle	0.1	20.7 20.8	20.8	7.8 7.7	7.8	0.02 0.02	0.02	93.7 93.1	93.4	7.8 7.7	7.8	1.7 1.7	1.7	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:13	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	94.4 93.8	94.1	7.9 7.9	7.9	1.4 1.4	1.4	5.0 5.0	5
17-Oct-08	Sunny	Calm	12:49	Middle	0.1	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	95.3 94.7	95	8.1 8.0	8.1	1.7 1.7	1.7	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:54	Middle	0.1	20.7 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	93.4 92.8	93.1	7.6 7.5	7.6	1.6 1.6	1.6	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:08	Middle	0.1	20.7 20.7	20.7	7.7 7.7	7.7	0.02 0.02	0.02	91.5 90.9	91.2	7.5 7.4	7.5	1.4 1.4	1.4	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:21	Middle	0.1	20.7 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	92.6 92.0	92.3	7.5 7.5	7.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:48	Middle	0.1	20.7 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	93.3 92.7	93	7.6 7.6	7.6	1.8 1.8	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:11	Middle	0.1	20.7 20.7	20.7	7.9 7.8	7.9	0.02 0.02	0.02	91.7 91.1	91.4	7.5 7.4	7.5	1.9 1.9	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:16	Middle	0.1	20.6 20.7	20.7	7.8 7.8	7.8	0.02 0.02	0.02	91.1 90.5	90.8	7.5 7.4	7.5	1.7 1.7	1.7	<2.5 <2.5	<2.5

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
2-Oct-08	Sunny	Calm	11:55	Middle	0.09	21.9 21.9	21.9	7.5 7.5	7.5	0.02 0.02	0.02	91.9 91.5	91.7	7.6 7.6	7.6	1.3 1.3	1.3	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:32	Middle	0.09	21.8 21.8	21.8	7.6 7.6	7.6	0.02 0.02	0.02	93.5 93.1	93.3	8.0 7.9	8	1.5 1.5	1.5	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:56	Middle	0.09	21.8 21.8	21.8	7.5 7.5	7.5	0.02 0.02	0.02	93.1 92.7	92.9	7.8 7.8	7.8	1.3 1.3	1.3	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:56	Middle	0.09	21.0 21.0	21	7.6 7.6	7.6	0.02 0.02	0.02	92.4 92.0	92.2	7.6 7.6	7.6	1.6 1.6	1.6	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:03	Middle	0.09	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	91.6 91.2	91.4	7.4 7.4	7.4	1.5 1.6	1.6	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:43	Middle	0.09	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	93.5 93.1	93.3	7.8 7.7	7.8	1.6 1.7	1.7	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:07	Middle	0.09	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	94.2 93.8	94	7.9 7.9	7.9	1.3 1.4	1.4	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	12:43	Middle	0.09	21.0 21.0	21	7.7 7.7	7.7	0.02 0.02	0.02	95.1 94.7	94.9	8.0 8.0	8	1.6 1.7	1.7	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:47	Middle	0.09	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	93.2 92.8	93	7.6 7.5	7.6	1.5 1.6	1.6	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:02	Middle	0.09	20.8 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	91.3 90.9	91.1	7.5 7.4	7.5	1.3 1.4	1.4	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:15	Middle	0.09	20.9 20.9	20.9	7.6 7.7	7.7	0.02 0.02	0.02	92.4 92.0	92.2	7.5 7.5	7.5	1.5 1.6	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:41	Middle	0.09	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	93.1 92.7	92.9	7.6 7.6	7.6	1.7 1.8	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:05	Middle	0.09	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	91.5 91.1	91.3	7.5 7.4	7.5	1.8 1.9	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:10	Middle	0.09	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	90.9 90.5	90.7	7.4 7.4	7.4	1.6 1.7	1.7	<2.5 <2.5	<2.5

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	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Вері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	11:42	Middle	0.09	21.8 21.8	21.8	7.5 7.5	7.5	0.02 0.02	0.02	93.9 93.0	93.5	7.8 7.7	7.8	1.4 1.5	1.5	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:19	Middle	0.09	21.7 21.8	21.8	7.6 7.6	7.6	0.02 0.02	0.02	95.5 94.6	95.1	8.2 8.1	8.2	1.6 1.7	1.7	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:43	Middle	0.09	21.7 21.7	21.7	7.5 7.5	7.5	0.02 0.02	0.02	95.1 94.2	94.7	8.0 8.0	8	1.4 1.5	1.5	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:43	Middle	0.09	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	94.4 93.5	94	7.8 7.8	7.8	1.7 1.8	1.8	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:50	Middle	0.09	20.8 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	93.6 92.7	93.2	7.6 7.5	7.6	1.7 1.8	1.8	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:30	Middle	0.09	20.8 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	95.5 94.6	95.1	8.0 7.9	8	1.8 1.9	1.9	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:54	Middle	0.09	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	96.2 95.3	95.8	8.1 8.0	8.1	1.5 1.6	1.6	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	12:30	Middle	0.09	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	97.1 96.2	96.7	8.2 8.1	8.2	1.8 1.9	1.9	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:34	Middle	0.09	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	95.2 94.3	94.8	7.8 7.7	7.8	1.7 1.8	1.8	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:49	Middle	0.09	20.8 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	93.3 92.4	92.9	7.7 7.6	7.7	1.5 1.6	1.6	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:02	Middle	0.09	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	94.4 93.5	94	7.7 7.6	7.7	1.7 1.8	1.8	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:28	Middle	0.09	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	95.1 94.2	94.7	7.8 7.7	7.8	1.9 2.0	2	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:52	Middle	0.09	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	93.5 92.6	93.1	7.7 7.6	7.7	2.0 2.1	2.1	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:57	Middle	0.09	20.7 20.7	20.7	7.7 7.7	7.7	0.02 0.02	0.02	92.9 92.0	92.5	7.6 7.6	7.6	1.8 1.9	1.9	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 23_R2

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	Вері	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	11:48	Middle	0.1	21.8 21.8	21.8	7.5 7.5	7.5	0.02 0.02	0.02	93.3 93.0	93.2	7.8 7.7	7.8	1.3 1.3	1.3	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:25	Middle	0.1	21.8 21.8	21.8	7.6 7.6	7.6	0.02 0.02	0.02	94.9 94.6	94.8	8.1 8.1	8.1	1.5 1.5	1.5	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:49	Middle	0.1	21.7 21.7	21.7	7.5 7.5	7.5	0.02 0.02	0.02	94.5 94.2	94.4	8.0 8.0	8	1.3 1.3	1.3	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:49	Middle	0.1	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	93.8 93.5	93.7	7.8 7.7	7.8	1.6 1.6	1.6	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:56	Middle	0.1	20.8 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	93.0 92.7	92.9	7.5 7.5	7.5	1.6 1.5	1.6	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:36	Middle	0.1	20.8 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	94.9 94.6	94.8	7.9 7.9	7.9	1.7 1.6	1.7	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:00	Middle	0.1	20.9 20.9	20.9	7.6 7.6	7.6	0.02 0.02	0.02	95.6 95.3	95.5	8.0 8.0	8	1.4 1.3	1.4	6.0 5.0	5.5
17-Oct-08	Sunny	Calm	12:36	Middle	0.1	20.9 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	96.5 96.2	96.4	8.2 8.1	8.2	1.7 1.6	1.7	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:40	Middle	0.1	20.8 20.9	20.9	7.7 7.7	7.7	0.02 0.02	0.02	94.6 94.3	94.5	7.7 7.7	7.7	1.6 1.5	1.6	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:55	Middle	0.1	20.8 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	92.7 92.4	92.6	7.6 7.6	7.6	1.4 1.3	1.4	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:08	Middle	0.1	20.8 20.8	20.8	7.7 7.6	7.7	0.02 0.02	0.02	93.8 93.5	93.7	7.6 7.6	7.6	1.6 1.5	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:34	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	94.5 94.2	94.4	7.7 7.7	7.7	1.8 1.7	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:58	Middle	0.1	20.8 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	92.9 92.6	92.8	7.6 7.6	7.6	1.9 1.8	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:03	Middle	0.1	20.7 20.8	20.8	7.7 7.7	7.7	0.02 0.02	0.02	92.3 92.0	92.2	7.6 7.6	7.6	1.7 1.6	1.7	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 26_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	р	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
2-Oct-08	Sunny	Calm	11:07	Middle	0.14	21.8 21.8	21.8	7.8 7.8	7.8	0.03 0.03	0.03	93.3 93.2	93.3	7.7 7.7	7.7	1.6 1.5	1.6	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	10:45	Middle	0.14	21.8 21.8	21.8	7.8 7.8	7.8	0.03 0.03	0.03	94.9 94.8	94.9	8.0 8.0	8	1.8 1.7	1.8	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:08	Middle	0.14	21.7 21.7	21.7	7.8 7.8	7.8	0.03 0.03	0.03	94.5 94.4	94.5	7.9 7.9	7.9	1.6 1.5	1.6	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:08	Middle	0.14	20.9 20.9	20.9	7.8 7.8	7.8	0.03 0.03	0.03	93.8 93.7	93.8	7.7 7.7	7.7	1.8 1.7	1.8	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:15	Middle	0.14	20.8 20.8	20.8	7.8 7.8	7.8	0.03 0.03	0.03	93.0 92.9	93	7.5 7.4	7.5	1.7 1.6	1.7	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	9:56	Middle	0.14	20.8 20.8	20.8	7.9 7.9	7.9	0.03 0.03	0.03	94.9 94.8	94.9	7.9 7.8	7.9	1.8 1.7	1.8	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:19	Middle	0.14	20.9 20.9	20.9	7.8 7.8	7.8	0.03 0.03	0.03	95.6 95.5	95.6	8.0 7.9	8	1.5 1.4	1.5	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	11:56	Middle	0.14	20.9 20.9	20.9	7.9 7.9	7.9	0.03 0.03	0.03	96.5 96.4	96.5	8.1 8.1	8.1	1.8 1.7	1.8	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:00	Middle	0.14	20.8 20.8	20.8	7.9 7.9	7.9	0.03 0.03	0.03	94.6 94.5	94.6	7.7 7.6	7.7	1.7 1.6	1.7	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:15	Middle	0.14	20.8 20.8	20.8	7.9 7.9	7.9	0.03 0.03	0.03	92.7 92.6	92.7	7.6 7.5	7.6	1.5 1.4	1.5	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:28	Middle	0.14	20.8 20.8	20.8	7.9 7.9	7.9	0.03 0.03	0.03	93.8 93.7	93.8	7.6 7.5	7.6	1.6 1.5	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	9:54	Middle	0.14	20.8 20.8	20.8	8.0 8.0	8	0.03 0.03	0.03	94.5 94.4	94.5	7.7 7.6	7.7	1.8 1.7	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:18	Middle	0.14	20.8 20.8	20.8	8.0 8.0	8	0.03 0.03	0.03	92.9 92.8	92.9	7.6 7.5	7.6	2.0 1.9	2	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:23	Middle	0.14	20.7 20.7	20.7	7.9 7.9	7.9	0.03 0.03	0.03	92.3 92.2	92.3	7.5 7.5	7.5	2.0 1.9	2	<2.5 <2.5	<2.5

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
2-Oct-08	Sunny	Calm	11:32	Middle	0.09	21.9 21.9	21.9	7.7 7.7	7.7	0.02 0.02	0.02	92.4 91.9	92.2	7.6 7.6	7.6	1.6 1.7	1.7	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:09	Middle	0.09	21.8 21.9	21.9	7.8 7.8	7.8	0.02 0.02	0.02	94.0 93.5	93.8	8.0 7.9	8	1.8 1.9	1.9	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:32	Middle	0.09	21.8 21.8	21.8	7.7 7.7	7.7	0.02 0.02	0.02	93.6 93.1	93.4	7.9 7.8	7.9	1.6 1.7	1.7	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:32	Middle	0.09	21.0 21.0	21	7.8 7.8	7.8	0.02 0.02	0.02	92.9 92.4	92.7	7.7 7.6	7.7	1.9 2.0	2	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:40	Middle	0.09	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	92.1 91.6	91.9	7.4 7.4	7.4	1.9 2.0	2	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:20	Middle	0.09	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	94.0 93.5	93.8	7.8 7.8	7.8	2.0 2.1	2.1	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:44	Middle	0.09	21.0 21.0	21	7.8 7.8	7.8	0.02 0.02	0.02	94.7 94.2	94.5	7.9 7.9	7.9	1.7 1.8	1.8	6.0 6.0	6
17-Oct-08	Sunny	Calm	12:20	Middle	0.09	21.0 21.0	21	7.9 7.9	7.9	0.02 0.02	0.02	95.6 95.1	95.4	8.0 8.0	8	2.0 2.1	2.1	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:24	Middle	0.09	20.9 20.9	20.9	7.9 7.8	7.9	0.02 0.02	0.02	93.7 93.2	93.5	7.6 7.6	7.6	1.9 2.0	2	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:39	Middle	0.09	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	91.8 91.3	91.6	7.5 7.5	7.5	1.7 1.8	1.8	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:52	Middle	0.09	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	92.9 92.4	92.7	7.5 7.5	7.5	1.8 1.9	1.9	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:18	Middle	0.09	20.9 20.9	20.9	7.9 7.9	7.9	0.02 0.02	0.02	93.6 93.1	93.4	7.6 7.6	7.6	2.0 2.1	2.1	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:42	Middle	0.09	20.9 20.9	20.9	7.9 7.9	7.9	0.02 0.02	0.02	92.0 91.5	91.8	7.5 7.5	7.5	2.2 2.3	2.3	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:47	Middle	0.09	20.8 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	91.4 90.9	91.2	7.5 7.4	7.5	2.0 2.1	2.1	<2.5 <2.5	<2.5

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	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
2-Oct-08	Sunny	Calm	11:25	Middle	0.08	21.8 21.9	21.9	7.7 7.7	7.7	0.02 0.02	0.02	93.7 93.6	93.7	7.8 7.8	7.8	1.3 1.3	1.3	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	11:03	Middle	0.08	21.8 21.8	21.8	7.8 7.8	7.8	0.02 0.02	0.02	95.3 95.2	95.3	8.1 8.1	8.1	1.5 1.5	1.5	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:26	Middle	0.08	21.7 21.7	21.7	7.7 7.7	7.7	0.02 0.02	0.02	94.9 94.8	94.9	8.0 8.0	8	1.3 1.3	1.3	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:26	Middle	0.08	20.9 21.0	21	7.8 7.8	7.8	0.02 0.02	0.02	94.2 94.1	94.2	7.8 7.8	7.8	1.6 1.6	1.6	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:34	Middle	0.08	20.8 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	93.4 93.3	93.4	7.6 7.6	7.6	1.6 1.6	1.6	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:14	Middle	0.08	20.8 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	95.3 95.2	95.3	8.0 7.9	8	1.7 1.7	1.7	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:38	Middle	0.08	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	96.0 95.9	96	8.1 8.1	8.1	1.4 1.4	1.4	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	12:14	Middle	0.08	20.9 20.9	20.9	7.9 7.9	7.9	0.02 0.02	0.02	96.9 96.8	96.9	8.2 8.2	8.2	1.7 1.7	1.7	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:18	Middle	0.08	20.8 20.9	20.9	7.9 7.9	7.9	0.02 0.02	0.02	95.0 94.9	95	7.7 7.7	7.7	1.6 1.6	1.6	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:33	Middle	0.08	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	93.1 93.0	93.1	7.7 7.6	7.7	1.4 1.4	1.4	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:46	Middle	0.08	20.8 20.8	20.8	7.9 7.8	7.9	0.02 0.02	0.02	94.2 94.1	94.2	7.7 7.7	7.7	1.5 1.5	1.5	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:12	Middle	0.08	20.8 20.9	20.9	7.9 7.9	7.9	0.02 0.02	0.02	94.9 94.8	94.9	7.8 7.8	7.8	1.7 1.7	1.7	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:36	Middle	0.08	20.8 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	93.3 93.2	93.3	7.6 7.6	7.6	1.9 1.9	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:41	Middle	0.08	20.7 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	92.7 92.6	92.7	7.6 7.6	7.6	1.7 1.7	1.7	<2.5 <2.5	<2.5

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	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	11:16	Middle	0.13	21.8 21.8	21.8	7.7 7.7	7.7	0.02 0.02	0.02	95.1 94.6	94.9	8.0 7.9	8	1.3 1.4	1.4	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	10:53	Middle	0.13	21.8 21.7	21.8	7.8 7.8	7.8	0.02 0.02	0.02	96.7 96.2	96.5	8.3 8.2	8.3	1.5 1.6	1.6	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	11:17	Middle	0.13	21.7 21.7	21.7	7.7 7.7	7.7	0.02 0.02	0.02	96.3 95.8	96.1	8.2 8.1	8.2	1.3 1.4	1.4	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	11:17	Middle	0.13	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	95.6 95.1	95.4	8.0 7.9	8	1.6 1.7	1.7	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:24	Middle	0.13	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	94.8 94.3	94.6	7.7 7.7	7.7	1.6 1.7	1.7	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	10:04	Middle	0.13	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	96.7 96.2	96.5	8.1 8.0	8.1	1.7 1.8	1.8	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:28	Middle	0.13	20.9 20.9	20.9	7.8 7.8	7.8	0.02 0.02	0.02	97.4 96.9	97.2	8.2 8.2	8.2	1.4 1.5	1.5	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	12:04	Middle	0.13	20.9 20.9	20.9	7.9 7.9	7.9	0.02 0.02	0.02	98.3 97.8	98.1	8.4 8.3	8.4	1.7 1.8	1.8	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	11:08	Middle	0.13	20.8 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	96.4 95.9	96.2	7.9 7.8	7.9	1.6 1.7	1.7	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:23	Middle	0.13	20.8 20.8	20.8	7.8 7.8	7.8	0.02 0.02	0.02	94.5 94.0	94.3	7.8 7.7	7.8	1.4 1.5	1.5	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:36	Middle	0.13	20.8 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	95.6 95.1	95.4	7.8 7.8	7.8	1.5 1.6	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	10:02	Middle	0.13	20.8 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	96.3 95.8	96.1	7.9 7.9	7.9	1.7 1.8	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:26	Middle	0.13	20.8 20.8	20.8	7.9 7.9	7.9	0.02 0.02	0.02	94.7 94.2	94.5	7.8 7.7	7.8	1.9 2.0	2	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:31	Middle	0.13	20.7 20.7	20.7	7.9 7.9	7.9	0.02 0.02	0.02	94.1 93.6	93.9	7.8 7.7	7.8	1.7 1.8	1.8	<2.5 <2.5	<2.5

Water Quality Monitoring Results at 40_I

Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	р	Н	Salin	nity 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
2-Oct-08	Sunny	Calm	10:47	Middle	0.09	22.1 22.1	22.1	7.7 7.7	7.7	0.05 0.05	0.05	98.9 98.7	98.8	8.0 7.9	8	1.7 1.7	1.7	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	10:25	Middle	0.09	22.0 22.0	22	7.7 7.7	7.7	0.05 0.05	0.05	100.5 100.3	100.4	8.3 8.3	8.3	1.9 1.9	1.9	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	10:48	Middle	0.09	21.9 21.9	21.9	7.7 7.7	7.7	0.05 0.05	0.05	100.1 99.9	100	8.2 8.2	8.2	1.7 1.7	1.7	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	10:48	Middle	0.09	21.2 21.2	21.2	7.8 7.8	7.8	0.05 0.05	0.05	99.4 99.2	99.3	8.0 8.0	8	2.0 2.0	2	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	9:56	Middle	0.09	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	98.6 98.4	98.5	7.7 7.7	7.7	2.0 2.0	2	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	9:36	Middle	0.09	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	100.5 100.3	100.4	8.1 8.1	8.1	2.1 2.1	2.1	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:00	Middle	0.09	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	101.2 101.0	101.1	8.2 8.2	8.2	1.8 1.8	1.8	3.0 3.0	3
17-Oct-08	Sunny	Calm	11:36	Middle	0.09	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	102.1 101.9	102	8.4 8.3	8.4	2.1 2.1	2.1	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	10:40	Middle	0.09	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	100.2 100.0	100.1	7.9 7.9	7.9	2.0 2.0	2	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	8:55	Middle	0.09	21.0 21.0	21	7.8 7.8	7.8	0.05 0.05	0.05	98.3 98.1	98.2	7.8 7.8	7.8	1.8 1.8	1.8	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:08	Middle	0.09	21.0 21.0	21	7.8 7.8	7.8	0.05 0.05	0.05	99.4 99.2	99.3	7.8 7.8	7.8	1.9 1.9	1.9	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	9:34	Middle	0.09	21.1 21.1	21.1	7.9 7.9	7.9	0.05 0.05	0.05	100.1 99.9	100	7.9 7.9	7.9	2.1 2.1	2.1	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	11:58	Middle	0.09	21.0 21.0	21	7.9 7.9	7.9	0.05 0.05	0.05	98.5 98.3	98.4	7.8 7.8	7.8	2.3 2.3	2.3	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:03	Middle	0.09	21.0 21.0	21	7.9 7.8	7.9	0.05 0.05	0.05	97.9 97.7	97.8	7.8 7.8	7.8	2.1 2.1	2.1	<2.5 <2.5	<2.5

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 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
2-Oct-08	Sunny	Calm	10:42	Middle	0.2	22.0 22.0	22	7.7 7.7	7.7	0.05 0.05	0.05	98.2 98.4	98.3	7.5 7.5	7.5	1.8 1.8	1.8	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	10:20	Middle	0.2	22.0 22.0	22	7.8 7.8	7.8	0.05 0.05	0.05	99.8 100.0	99.9	7.8 7.8	7.8	2.0 2.0	2	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	10:43	Middle	0.2	21.9 21.9	21.9	7.7 7.7	7.7	0.05 0.05	0.05	99.4 99.6	99.5	7.7 7.7	7.7	1.8 1.8	1.8	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	10:43	Middle	0.2	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	98.7 98.9	98.8	7.5 7.5	7.5	2.1 2.1	2.1	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	9:50	Middle	0.2	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	97.9 98.1	98	7.3 7.3	7.3	2.1 2.1	2.1	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	9:30	Middle	0.2	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	99.8 100.0	99.9	7.6 7.7	7.7	2.2 2.2	2.2	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	9:54	Middle	0.2	21.1 21.1	21.1	7.8 7.8	7.8	0.05 0.05	0.05	100.5 100.7	100.6	7.8 7.8	7.8	1.9 1.9	1.9	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	11:31	Middle	0.2	21.1 21.1	21.1	7.9 7.9	7.9	0.05 0.05	0.05	101.4 101.6	101.5	7.9 7.9	7.9	2.2 2.2	2.2	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	10:35	Middle	0.2	21.1 21.1	21.1	7.9 7.8	7.9	0.05 0.05	0.05	99.5 99.7	99.6	7.4 7.4	7.4	2.1 2.1	2.1	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	8:50	Middle	0.2	21.0 21.0	21	7.8 7.8	7.8	0.05 0.05	0.05	97.6 97.8	97.7	7.3 7.4	7.4	1.9 1.9	1.9	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:03	Middle	0.2	21.0 21.0	21	7.9 7.8	7.9	0.05 0.05	0.05	98.7 98.9	98.8	7.4 7.4	7.4	2.0 2.0	2	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	9:29	Middle	0.2	21.0 21.0	21	7.9 7.9	7.9	0.05 0.05	0.05	99.4 99.6	99.5	7.5 7.5	7.5	2.2 2.2	2.2	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	11:53	Middle	0.2	21.0 21.0	21	7.9 7.9	7.9	0.05 0.05	0.05	97.8 98.0	97.9	7.3 7.3	7.3	2.4 2.4	2.4	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	8:57	Middle	0.2	21.0 21.0	21	7.9 7.9	7.9	0.05 0.05	0.05	97.2 97.4	97.3	7.3 7.3	7.3	2.2 2.2	2.2	<2.5 <2.5	<2.5

Water Quality Monitoring Results at CSS_I

Date	Weather	Sea	Sampling	Dent	h (m)	Tempera	ature (°C)	p	Н	Salin	nity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	10:54	Middle	0.19	21.9 21.9	21.9	7.7 7.7	7.7	0.03 0.03	0.03	97.8 97.9	97.9	7.9 7.9	7.9	2.0 1.9	2	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	10:32	Middle	0.19	21.8 21.8	21.8	7.8 7.8	7.8	0.03 0.03	0.03	99.4 99.5	99.5	8.3 8.3	8.3	2.2 2.1	2.2	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	10:55	Middle	0.19	21.8 21.8	21.8	7.7 7.7	7.7	0.03 0.03	0.03	99.0 99.1	99.1	8.1 8.2	8.2	2.0 1.9	2	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	10:55	Middle	0.19	21.0 21.0	21	7.8 7.8	7.8	0.03 0.03	0.03	98.3 98.4	98.4	7.9 7.9	7.9	2.2 2.1	2.2	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	10:02	Middle	0.19	20.9 20.9	20.9	7.8 7.8	7.8	0.03 0.03	0.03	97.5 97.6	97.6	7.7 7.7	7.7	2.1 2.0	2.1	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	9:42	Middle	0.19	20.9 20.9	20.9	7.8 7.8	7.8	0.03 0.03	0.03	99.4 99.5	99.5	8.1 8.1	8.1	2.2 2.1	2.2	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	10:06	Middle	0.19	20.9 20.9	20.9	7.8 7.8	7.8	0.03 0.03	0.03	100.1 100.2	100.2	8.2 8.2	8.2	1.9 1.8	1.9	3.0 3.0	3
17-Oct-08	Sunny	Calm	11:43	Middle	0.19	21.0 21.0	21	7.9 7.9	7.9	0.03 0.03	0.03	101.0 101.1	101.1	8.3 8.3	8.3	2.2 2.1	2.2	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	10:47	Middle	0.19	20.9 20.9	20.9	7.9 7.9	7.9	0.03 0.03	0.03	99.1 99.2	99.2	7.9 7.9	7.9	2.1 2.0	2.1	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	9:01	Middle	0.19	20.8 20.9	20.9	7.8 7.8	7.8	0.03 0.03	0.03	97.2 97.3	97.3	7.8 7.8	7.8	1.9 1.8	1.9	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	9:14	Middle	0.19	20.9 20.9	20.9	7.9 7.9	7.9	0.03 0.03	0.03	98.3 98.4	98.4	7.8 7.8	7.8	2.0 1.9	2	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	9:41	Middle	0.19	20.9 20.9	20.9	7.9 7.9	7.9	0.03 0.03	0.03	99.0 99.1	99.1	7.9 7.9	7.9	2.2 2.1	2.2	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	12:04	Middle	0.19	20.8 20.8	20.8	7.9 7.9	7.9	0.03 0.03	0.03	97.4 97.5	97.5	7.8 7.8	7.8	2.4 2.3	2.4	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	9:09	Middle	0.19	20.8 20.8	20.8	7.9 7.9	7.9	0.03 0.03	0.03	96.8 96.9	96.9	7.7 7.8	7.8	2.2 2.1	2.2	<2.5 <2.5	<2.5

Water Quality Monitoring Results at TCB_I

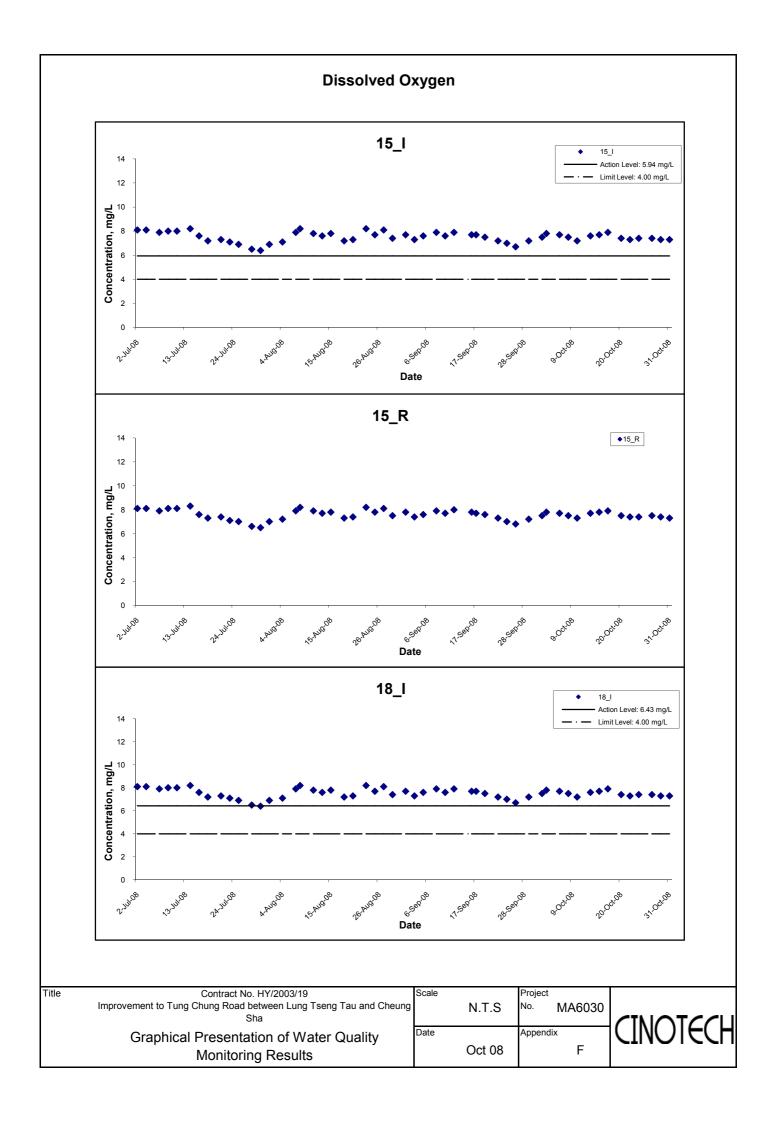
Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Всрі	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:57	Middle	0.35	23.0 23.0	23	7.3 7.3	7.3	12.45 12.44	12.45	97.0 96.8	96.9	7.6 7.6	7.6	3.8 3.9	3.9	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	12:35	Middle	0.35	22.9 22.9	22.9	7.3 7.3	7.3	12.51 12.50	12.51	98.6 98.4	98.5	8.0 7.9	8	4.4 4.5	4.5	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:58	Middle	0.35	22.9 22.9	22.9	7.3 7.3	7.3	12.57 12.56	12.57	98.2 98.0	98.1	7.8 7.8	7.8	5.1 5.2	5.2	9.0 10.0	9.5
8-Oct-08	Sunny	Calm	12:58	Middle	0.35	22.1 22.1	22.1	7.4 7.4	7.4	12.49 12.48	12.49	97.5 97.3	97.4	7.6 7.6	7.6	5.5 5.6	5.6	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	12:05	Middle	0.35	22.0 22.0	22	7.4 7.4	7.4	12.42 12.41	12.42	96.7 96.5	96.6	7.4 7.4	7.4	4.7 4.8	4.8	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	11:46	Middle	0.35	22.0 22.0	22	7.4 7.4	7.4	12.47 12.46	12.47	98.6 98.4	98.5	7.8 7.8	7.8	3.8 3.7	3.8	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	12:09	Middle	0.35	22.1 22.1	22.1	7.4 7.4	7.4	13.13 13.12	13.13	99.3 99.1	99.2	7.9 7.9	7.9	3.5 3.4	3.5	<2.5 <2.5	<2.5
17-Oct-08	Sunny	Calm	13:46	Middle	0.35	22.1 22.1	22.1	7.4 7.5	7.5	13.25 13.24	13.25	100.2 100.0	100.1	8.0 8.0	8	4.1 4.0	4.1	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:50	Middle	0.35	22.0 22.0	22	7.4 7.4	7.4	13.17 13.16	13.17	98.3 98.1	98.2	7.6 7.6	7.6	4.0 3.9	4	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	11:05	Middle	0.35	22.0 22.0	22	7.4 7.4	7.4	13.06 13.05	13.06	96.4 96.2	96.3	7.5 7.5	7.5	3.6 3.5	3.6	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	11:18	Middle	0.35	22.0 22.0	22	7.4 7.4	7.4	13.10 13.09	13.1	97.5 97.3	97.4	7.5 7.5	7.5	3.8 3.7	3.8	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	11:44	Middle	0.35	22.0 22.0	22	7.5 7.5	7.5	13.13 13.12	13.13	98.2 98.0	98.1	7.6 7.6	7.6	4.0 3.9	4	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	14:08	Middle	0.35	22.0 22.0	22	7.5 7.5	7.5	12.90 12.89	12.9	96.6 96.4	96.5	7.5 7.5	7.5	4.4 4.3	4.4	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	11:13	Middle	0.35	21.9 21.9	21.9	7.5 7.5	7.5	12.86 12.85	12.86	96.0 95.8	95.9	7.4 7.4	7.4	4.0 3.9	4	<2.5 <2.5	<2.5

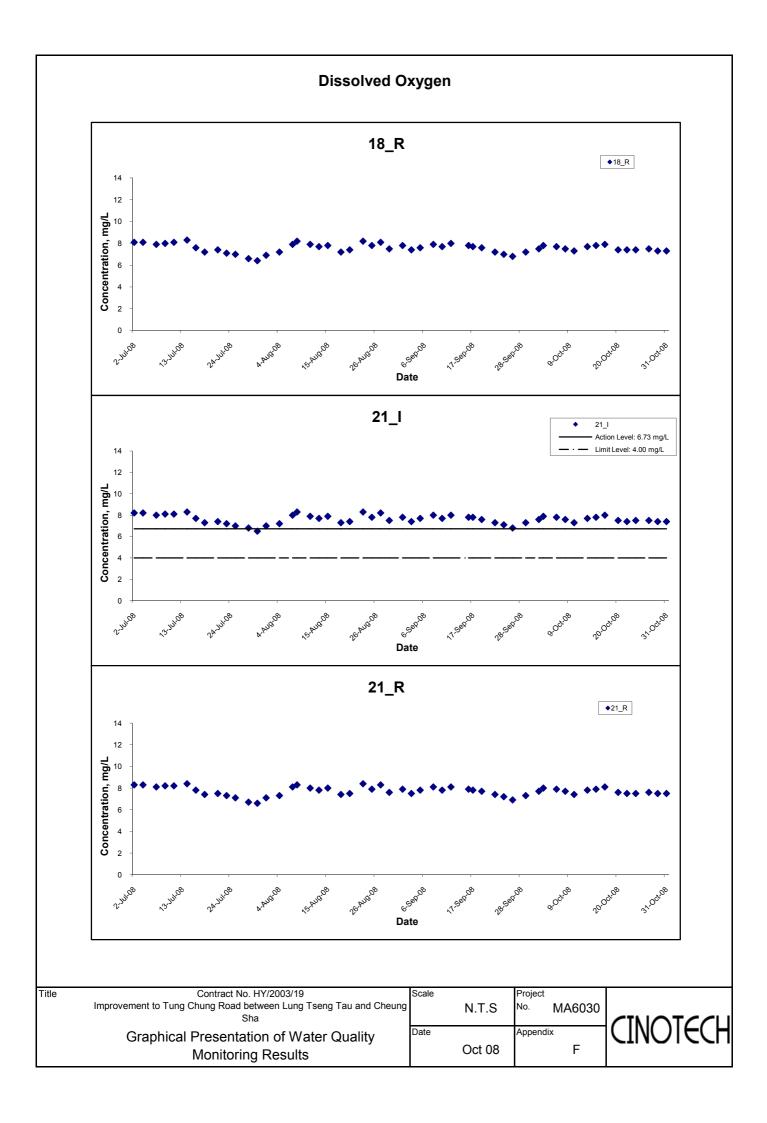
Water Quality Monitoring Results at TCB_R

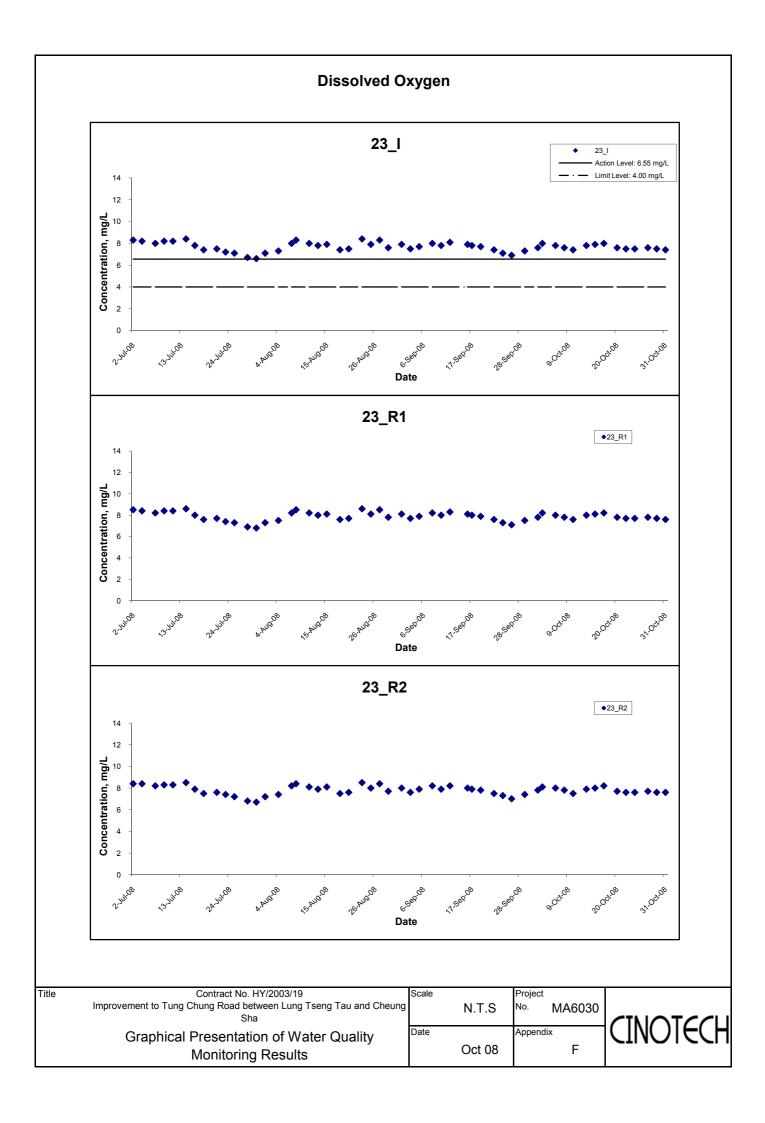
Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:52	Middle	0.2	23.1 23.1	23.1	7.3 7.3	7.3	18.77 18.78	18.78	96.0 95.8	95.9	7.5 7.5	7.5	5.0 5.2	5.1	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	12:30	Middle	0.2	23.0 23.0	23	7.4 7.4	7.4	18.83 18.84	18.84	97.6 97.4	97.5	7.9 7.8	7.9	5.6 5.8	5.7	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:53	Middle	0.2	22.9 23.0	23	7.3 7.3	7.3	18.89 18.90	18.9	97.2 97.0	97.1	7.7 7.7	7.7	6.3 6.5	6.4	18.0 18.0	18
8-Oct-08	Sunny	Calm	12:53	Middle	0.2	22.2 22.2	22.2	7.4 7.4	7.4	18.81 18.82	18.82	96.5 96.3	96.4	7.5 7.5	7.5	6.7 6.9	6.8	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	12:00	Middle	0.2	22.1 22.1	22.1	7.4 7.4	7.4	18.74 18.75	18.75	95.7 95.5	95.6	7.3 7.3	7.3	5.8 6.0	5.9	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	11:41	Middle	0.2	22.1 22.1	22.1	7.4 7.4	7.4	18.79 18.80	18.8	97.6 97.4	97.5	7.7 7.7	7.7	4.9 5.0	5	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	12:04	Middle	0.2	22.1 22.1	22.1	7.4 7.4	7.4	19.45 19.46	19.46	98.3 98.1	98.2	7.8 7.8	7.8	4.6 4.7	4.7	4.0 4.0	4
17-Oct-08	Sunny	Calm	13:41	Middle	0.2	22.1 22.2	22.2	7.5 7.5	7.5	19.57 19.58	19.58	99.2 99.0	99.1	7.9 7.9	7.9	5.2 5.3	5.3	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:45	Middle	0.2	22.1 22.1	22.1	7.5 7.5	7.5	19.49 19.50	19.5	97.3 97.1	97.2	7.5 7.4	7.5	5.1 5.2	5.2	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	11:00	Middle	0.2	22.0 22.0	22	7.4 7.4	7.4	19.38 19.39	19.39	95.4 95.2	95.3	7.4 7.4	7.4	4.7 4.8	4.8	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	11:13	Middle	0.2	22.1 22.1	22.1	7.5 7.5	7.5	19.42 19.43	19.43	96.5 96.3	96.4	7.4 7.4	7.4	4.9 5.0	5	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	11:39	Middle	0.2	22.1 22.1	22.1	7.5 7.5	7.5	19.45 19.46	19.46	97.2 97.0	97.1	7.5 7.5	7.5	5.1 5.2	5.2	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	14:03	Middle	0.2	22.0 22.0	22	7.5 7.5	7.5	19.22 19.23	19.23	95.6 95.4	95.5	7.4 7.3	7.4	5.5 5.6	5.6	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	11:08	Middle	0.2	22.0 22.0	22	7.5 7.5	7.5	19.18 19.19	19.19	95.0 94.8	94.9	7.3 7.3	7.3	5.1 5.2	5.2	<2.5 <2.5	<2.5

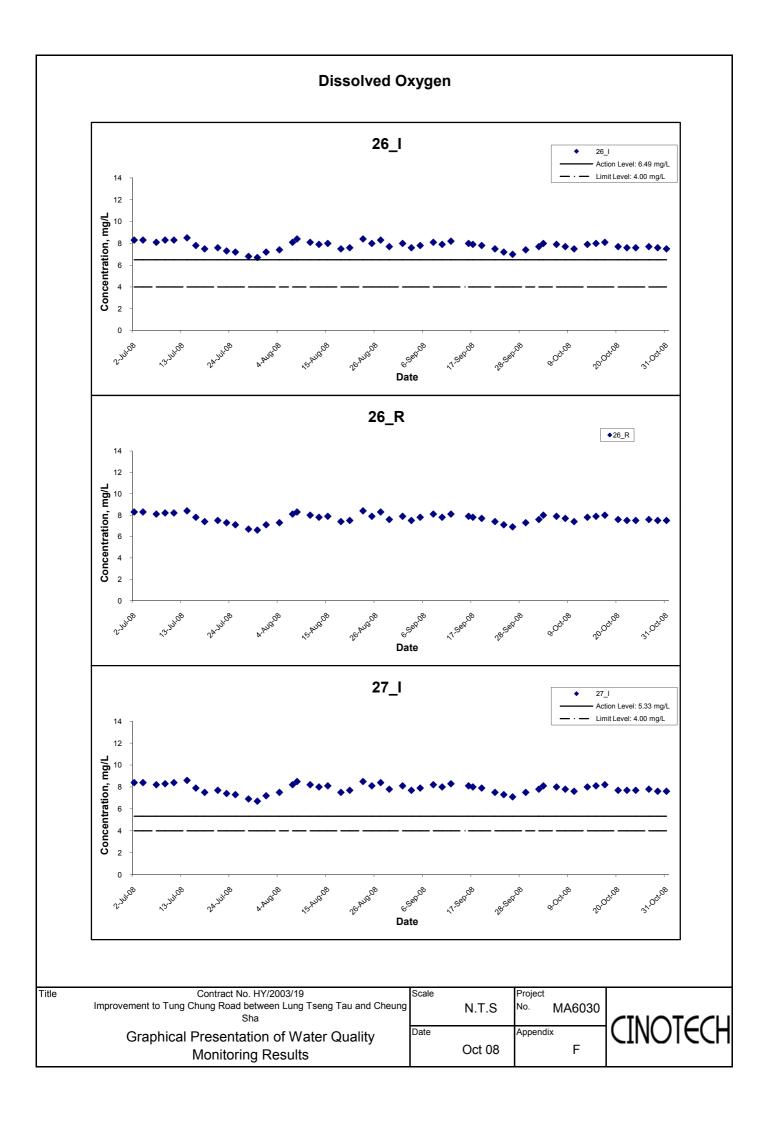
Water Quality Monitoring Results at TCS_I

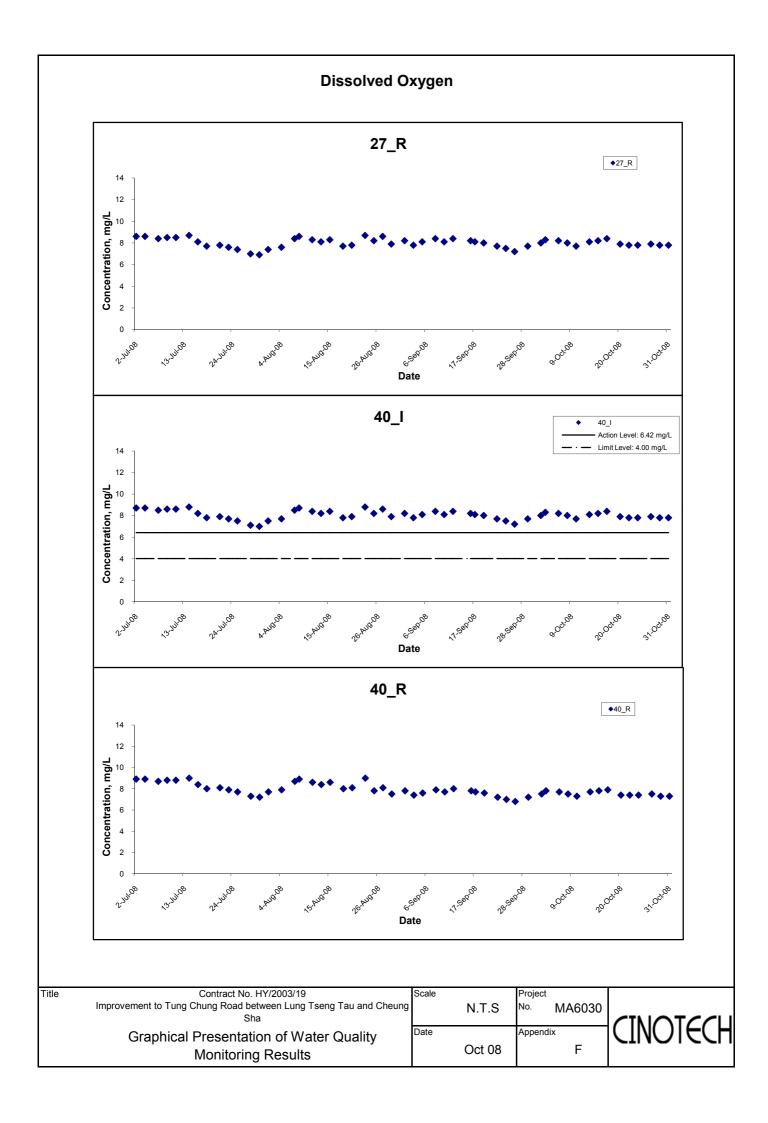
Date	Weather	Sea	Sampling	Dept	h (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L
Date	Condition	Condition*	Time	Вері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Oct-08	Sunny	Calm	12:35	Middle	0.2	21.8 21.8	21.8	7.4 7.4	7.4	0.02 0.02	0.02	92.2 91.8	92	7.4 7.4	7.4	1.5 1.5	1.5	<2.5 <2.5	<2.5
3-Oct-08	Cloudy	Calm	12:12	Middle	0.2	21.7 21.8	21.8	7.4 7.4	7.4	0.02 0.02	0.02	93.8 93.4	93.6	7.8 7.8	7.8	1.7 1.7	1.7	<2.5 <2.5	<2.5
6-Oct-08	Sunny	Calm	12:35	Middle	0.2	21.7 21.7	21.7	7.4 7.4	7.4	0.02 0.02	0.02	93.4 93.0	93.2	7.7 7.7	7.7	1.5 1.5	1.5	<2.5 <2.5	<2.5
8-Oct-08	Sunny	Calm	12:35	Middle	0.2	20.9 20.9	20.9	7.5 7.5	7.5	0.02 0.02	0.02	92.7 92.3	92.5	7.5 7.4	7.5	1.8 1.8	1.8	<2.5 <2.5	<2.5
10-Oct-08	Sunny	Calm	11:43	Middle	0.2	20.8 20.8	20.8	7.5 7.5	7.5	0.02 0.02	0.02	91.9 91.5	91.7	7.2 7.2	7.2	1.7 1.7	1.7	<2.5 <2.5	<2.5
13-Oct-08	Sunny	Calm	11:23	Middle	0.2	20.8 20.8	20.8	7.5 7.5	7.5	0.02 0.02	0.02	93.8 93.4	93.6	7.6 7.6	7.6	1.8 1.8	1.8	<2.5 <2.5	<2.5
15-Oct-08	Sunny	Calm	11:47	Middle	0.2	20.8 20.9	20.9	7.5 7.5	7.5	0.02 0.02	0.02	94.5 94.1	94.3	7.7 7.7	7.7	1.5 1.5	1.5	5.0 4.0	4.5
17-Oct-08	Sunny	Calm	13:23	Middle	0.2	20.9 20.9	20.9	7.5 7.6	7.6	0.02 0.02	0.02	95.4 95.0	95.2	7.8 7.8	7.8	1.8 1.8	1.8	<2.5 <2.5	<2.5
20-Oct-08	Sunny	Calm	12:27	Middle	0.2	20.8 20.8	20.8	7.5 7.5	7.5	0.02 0.02	0.02	93.5 93.1	93.3	7.4 7.4	7.4	1.7 1.7	1.7	<2.5 <2.5	<2.5
22-Oct-08	Sunny	Calm	10:42	Middle	0.2	20.8 20.8	20.8	7.5 7.5	7.5	0.02 0.02	0.02	91.6 91.2	91.4	7.3 7.3	7.3	1.5 1.5	1.5	<2.5 <2.5	<2.5
24-Oct-08	Sunny	Calm	10:55	Middle	0.2	20.8 20.8	20.8	7.5 7.5	7.5	0.02 0.02	0.02	92.7 92.3	92.5	7.3 7.3	7.3	1.6 1.6	1.6	<2.5 <2.5	<2.5
27-Oct-08	Sunny	Calm	11:21	Middle	0.2	20.8 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	93.4 93.0	93.2	7.4 7.4	7.4	1.8 1.8	1.8	<2.5 <2.5	<2.5
29-Oct-08	Sunny	Calm	13:45	Middle	0.2	20.7 20.8	20.8	7.6 7.6	7.6	0.02 0.02	0.02	91.8 91.4	91.6	7.3 7.3	7.3	1.9 1.9	1.9	<2.5 <2.5	<2.5
31-Oct-08	Sunny	Calm	10:50	Middle	0.2	20.7 20.7	20.7	7.5 7.6	7.6	0.02 0.02	0.02	91.2 90.8	91	7.3 7.3	7.3	1.9 1.9	1.9	<2.5 <2.5	<2.5

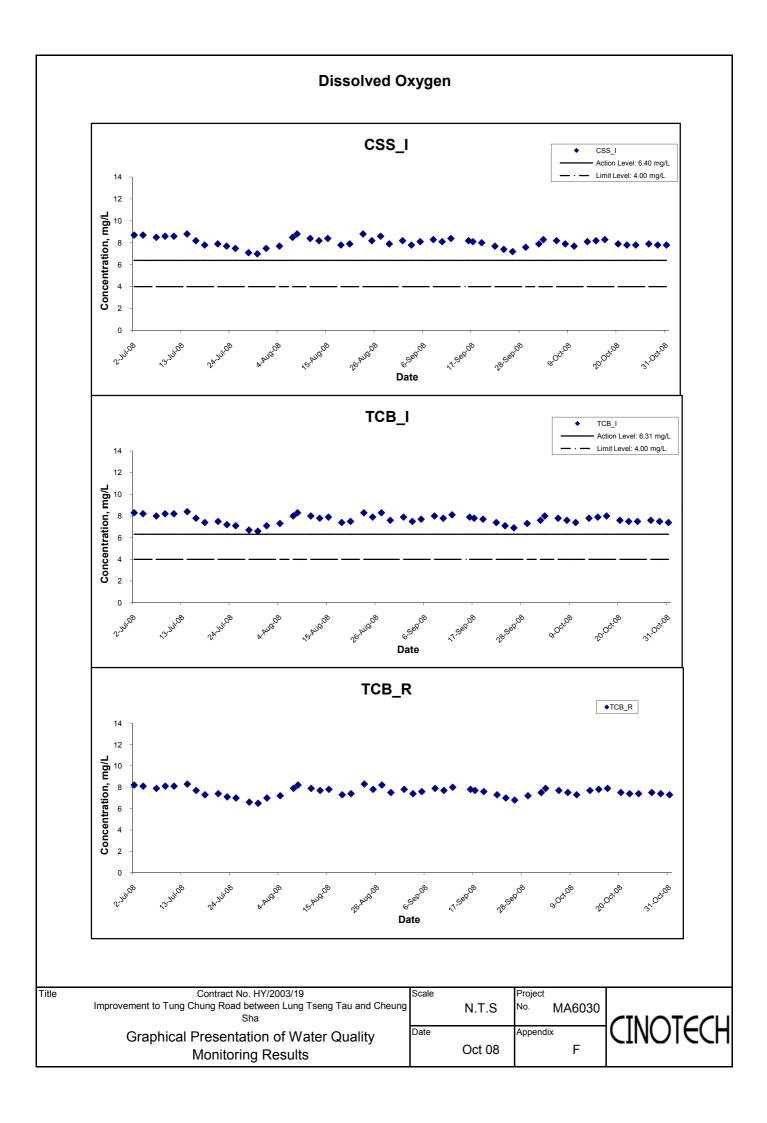




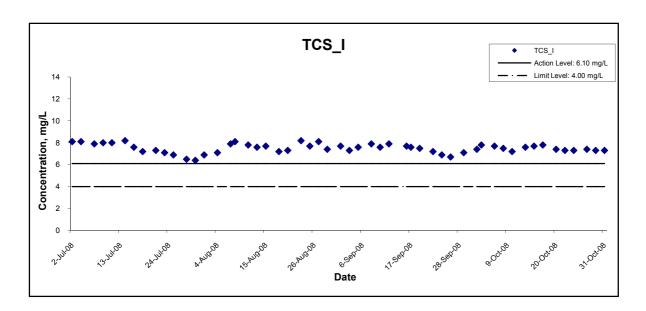








Dissolved Oxygen



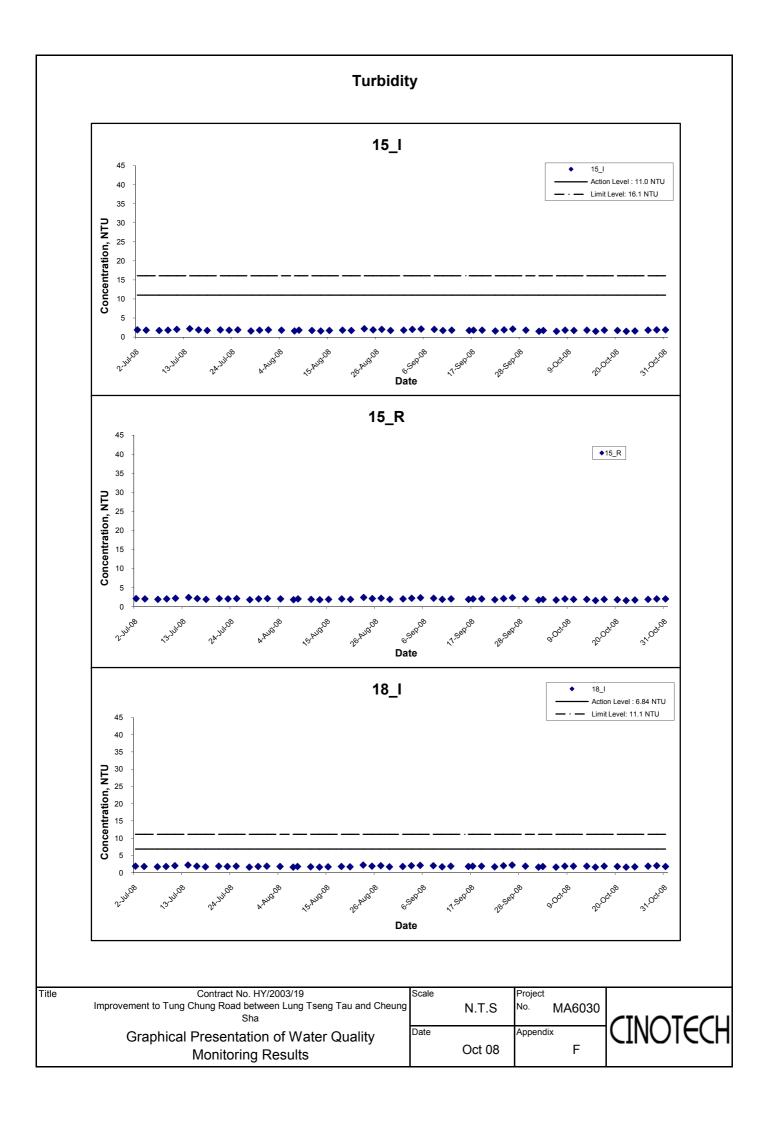
Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha
Graphical Presentation of Water Quality
Monitoring Results

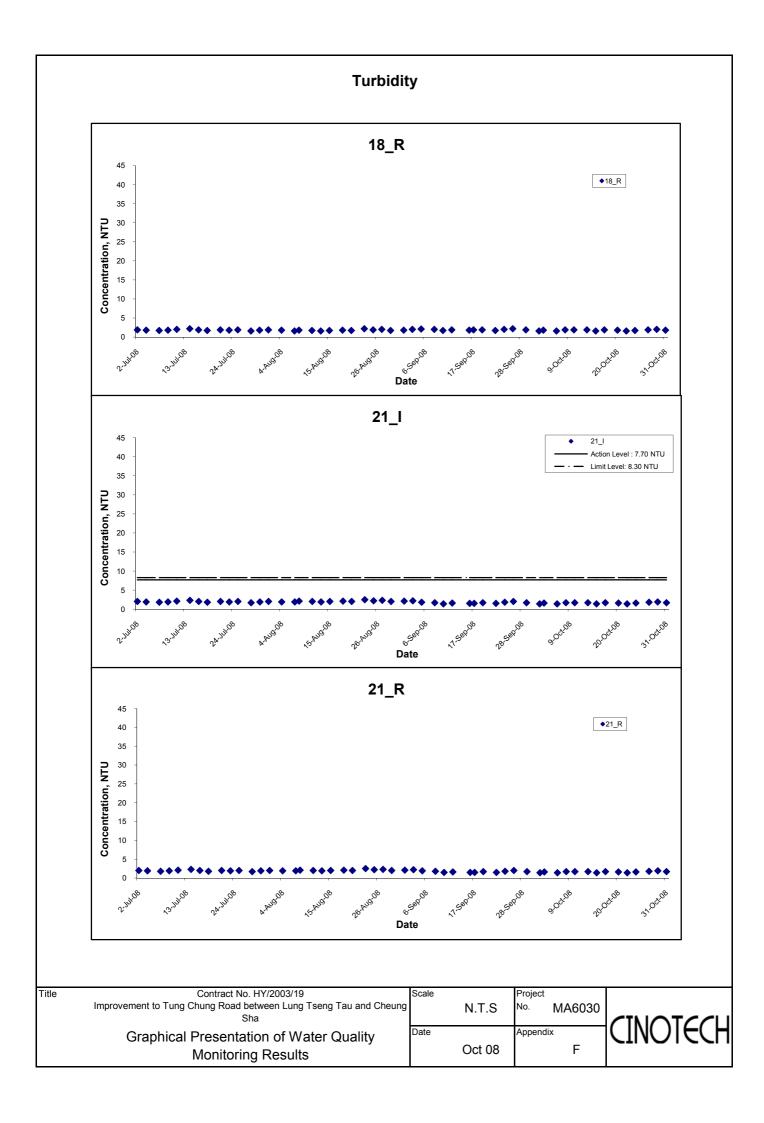
N.T.S Project
No. MA6030

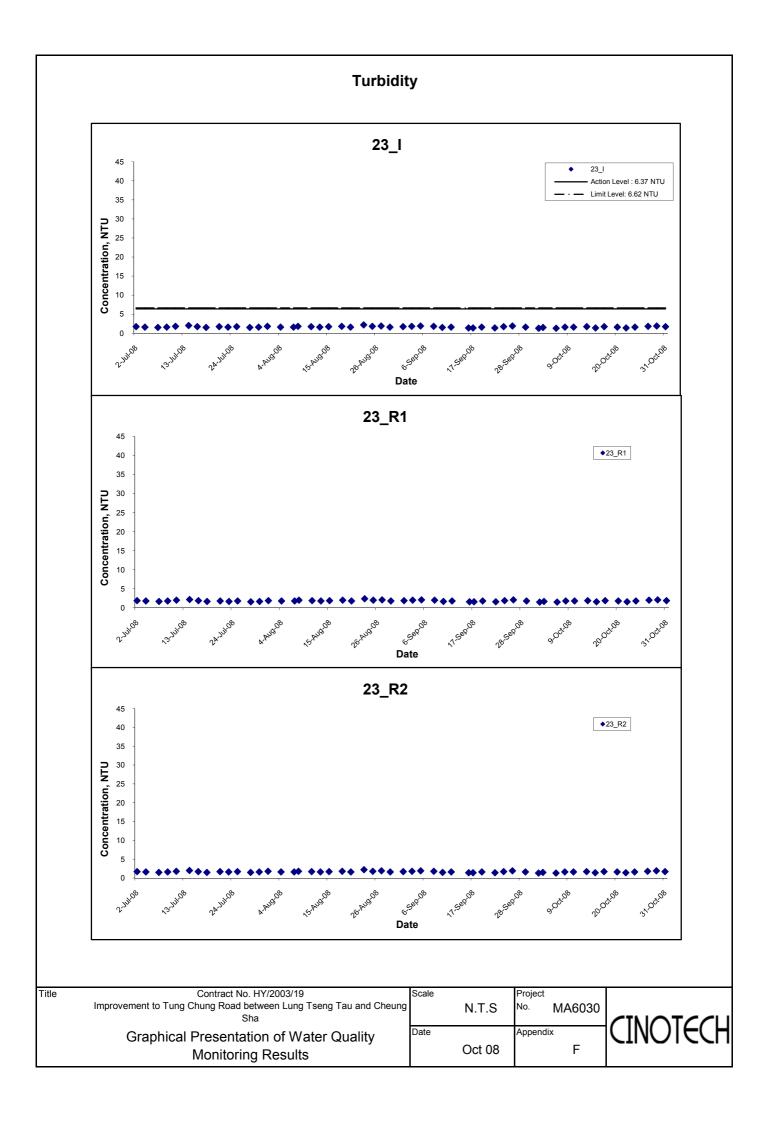
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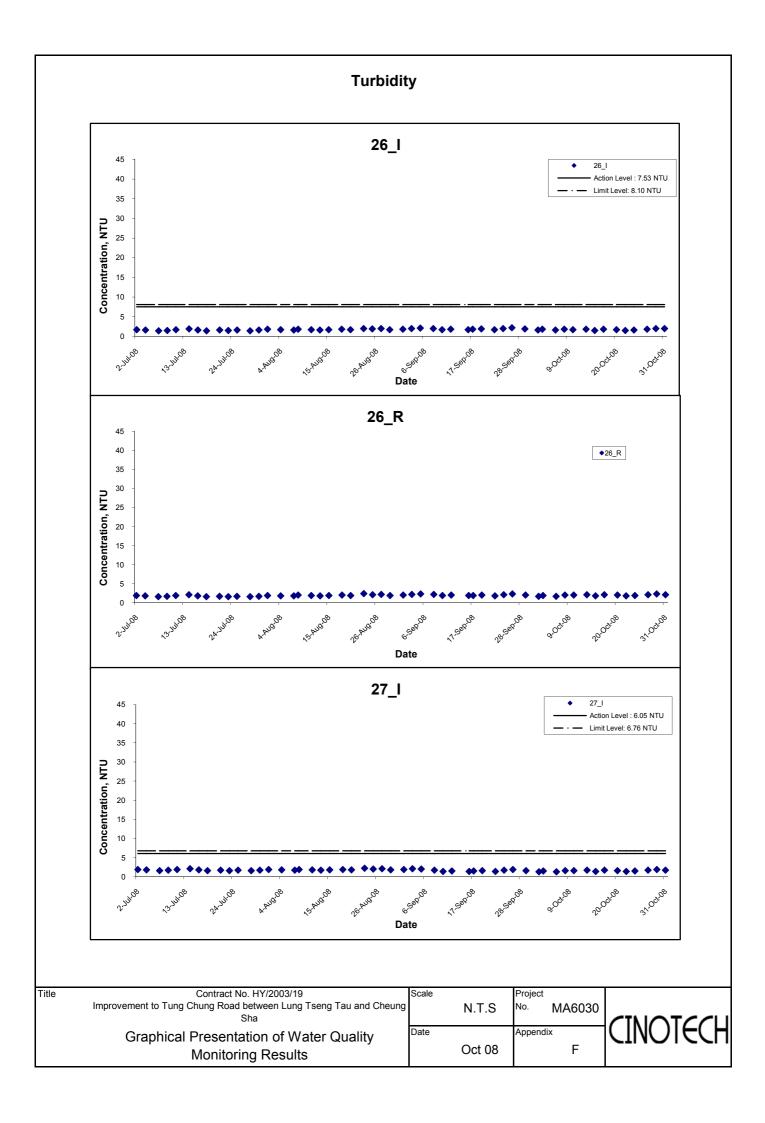
Oct 08 F

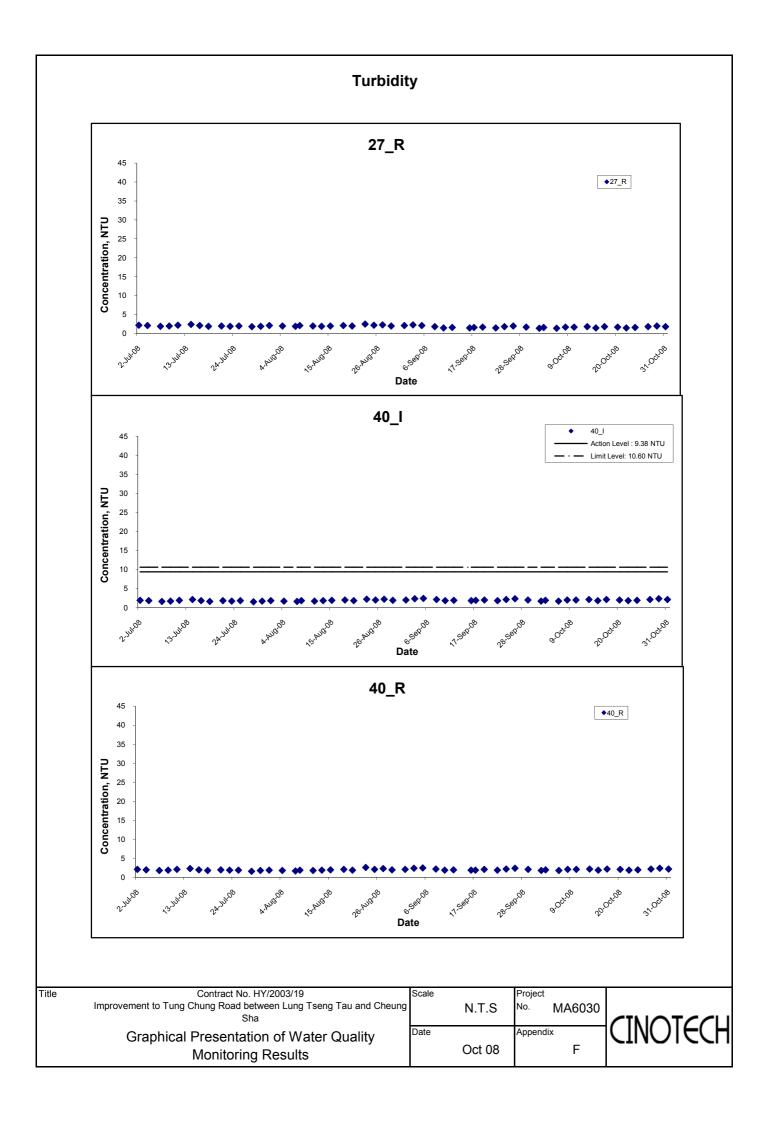


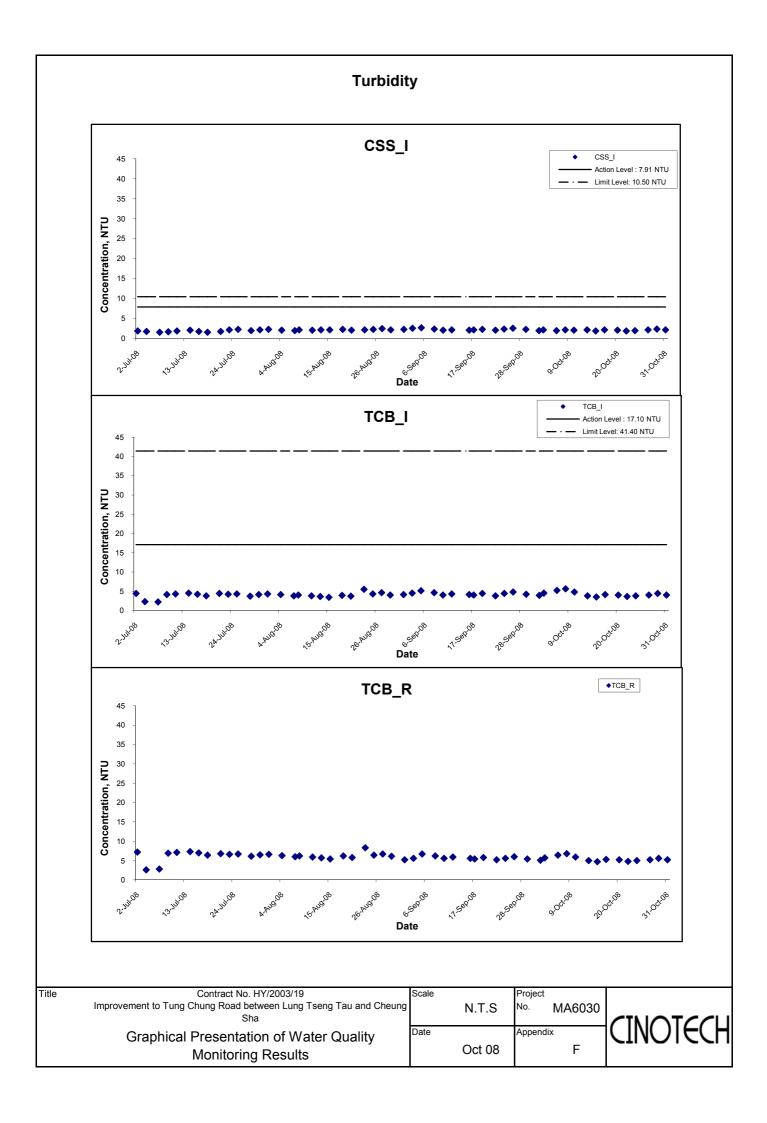




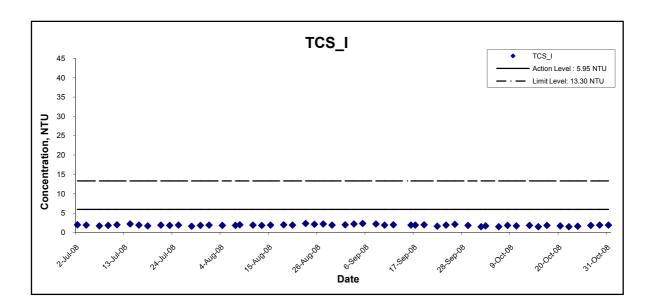








Turbidity

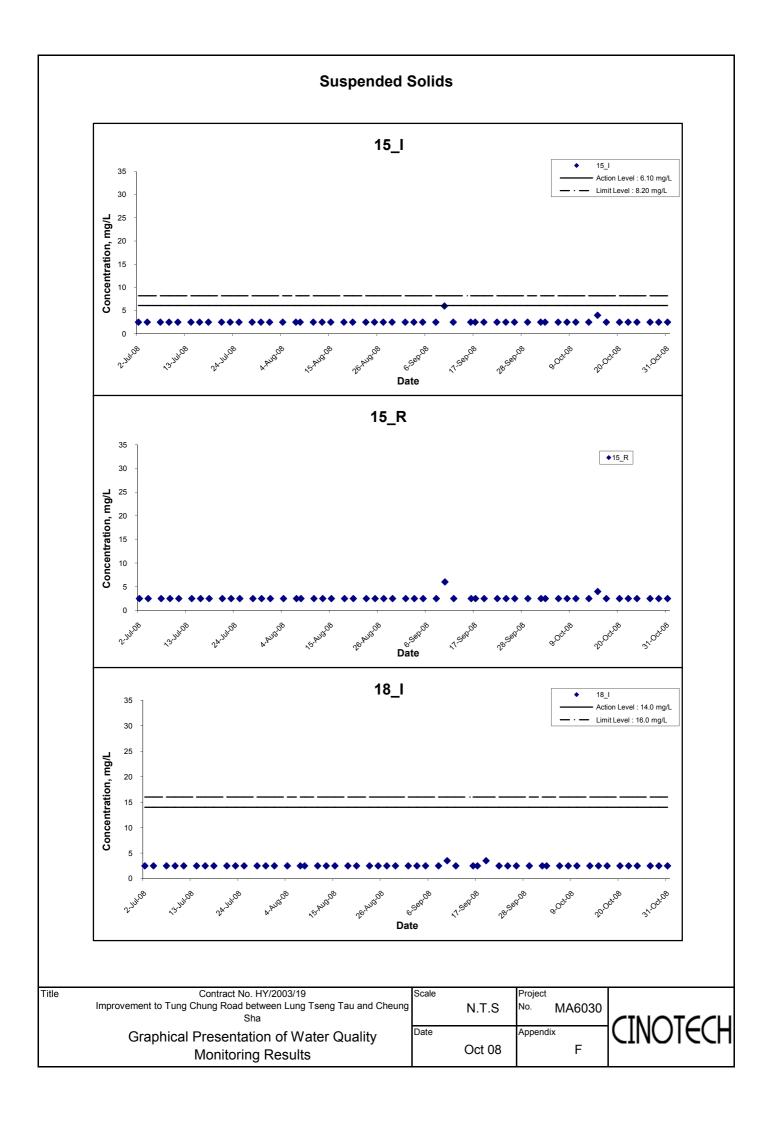


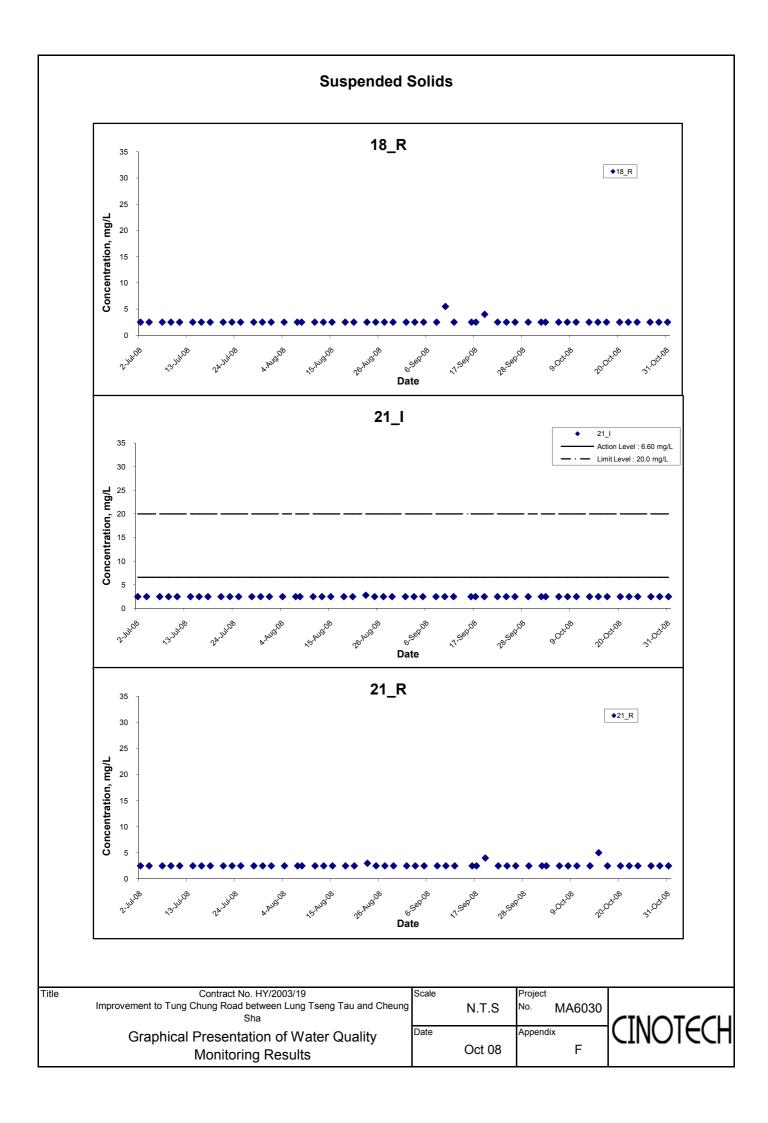
Title Contract No. HY/2003/19
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

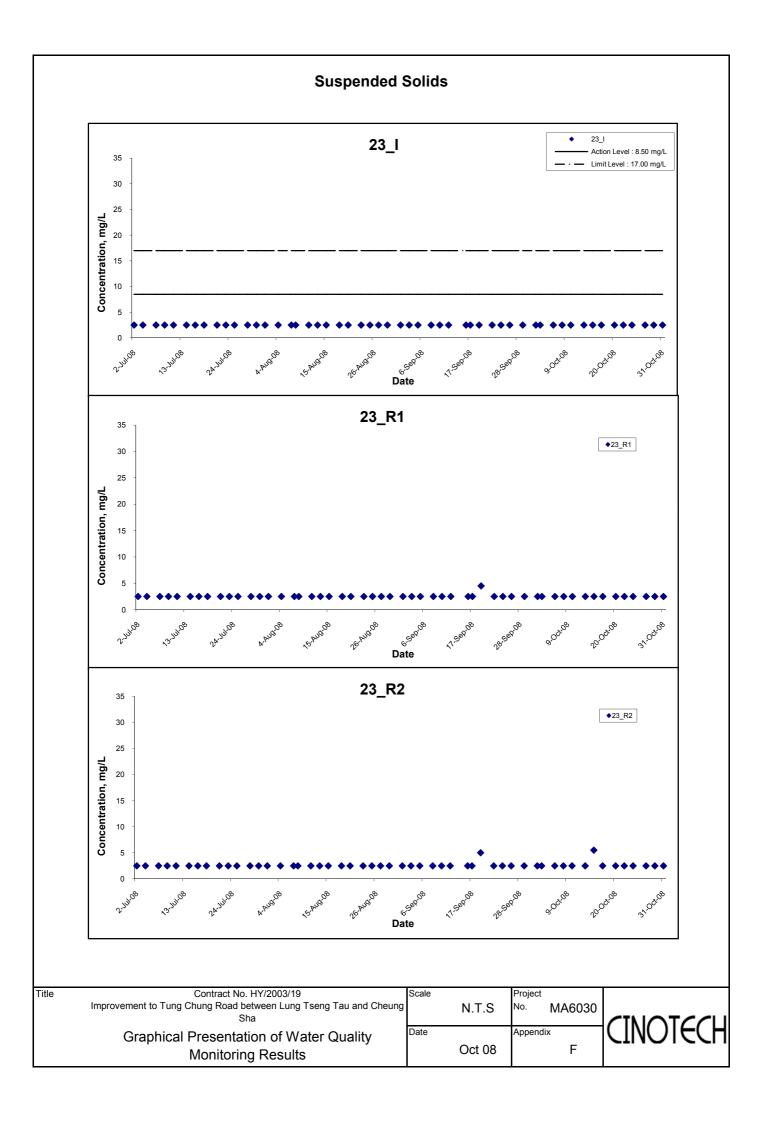
Graphical Presentation of Water Quality

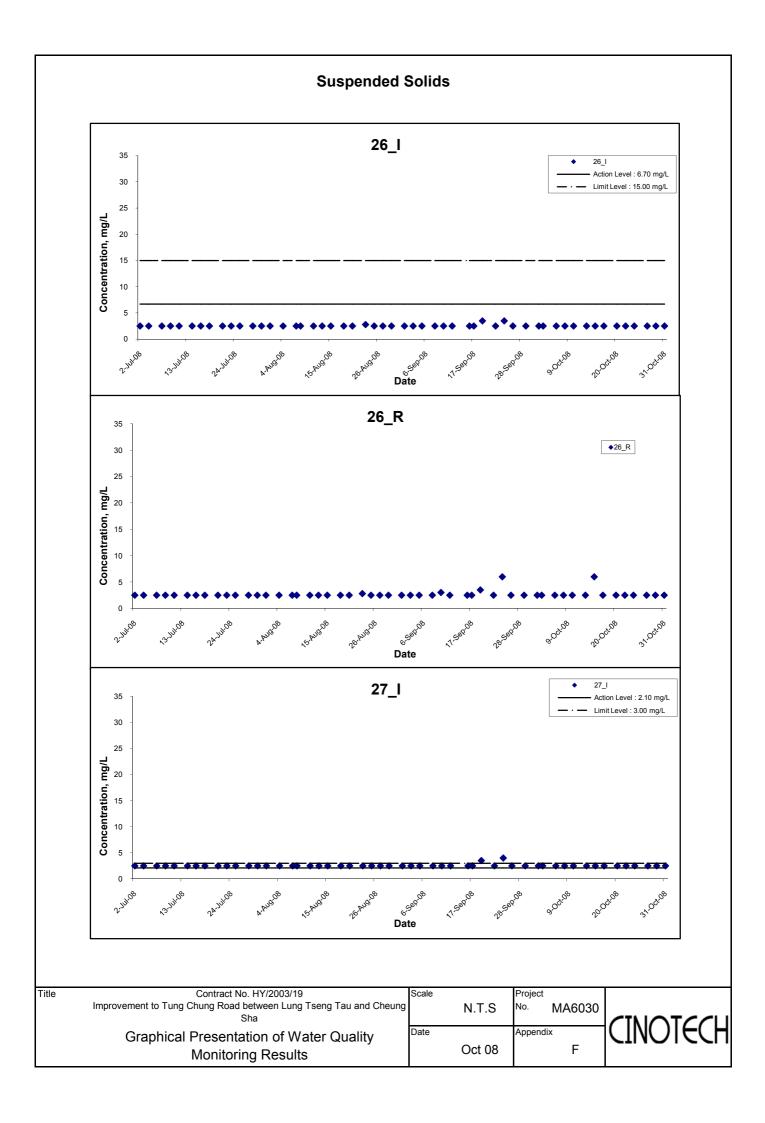
Monitoring Results

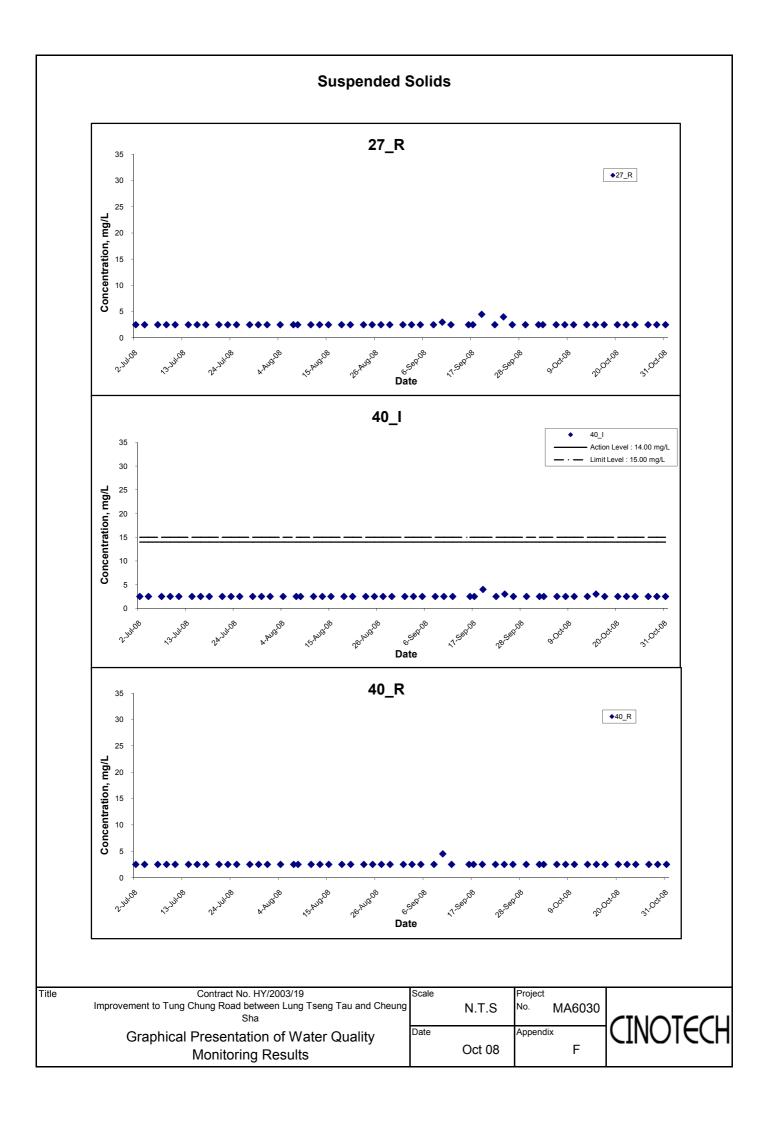


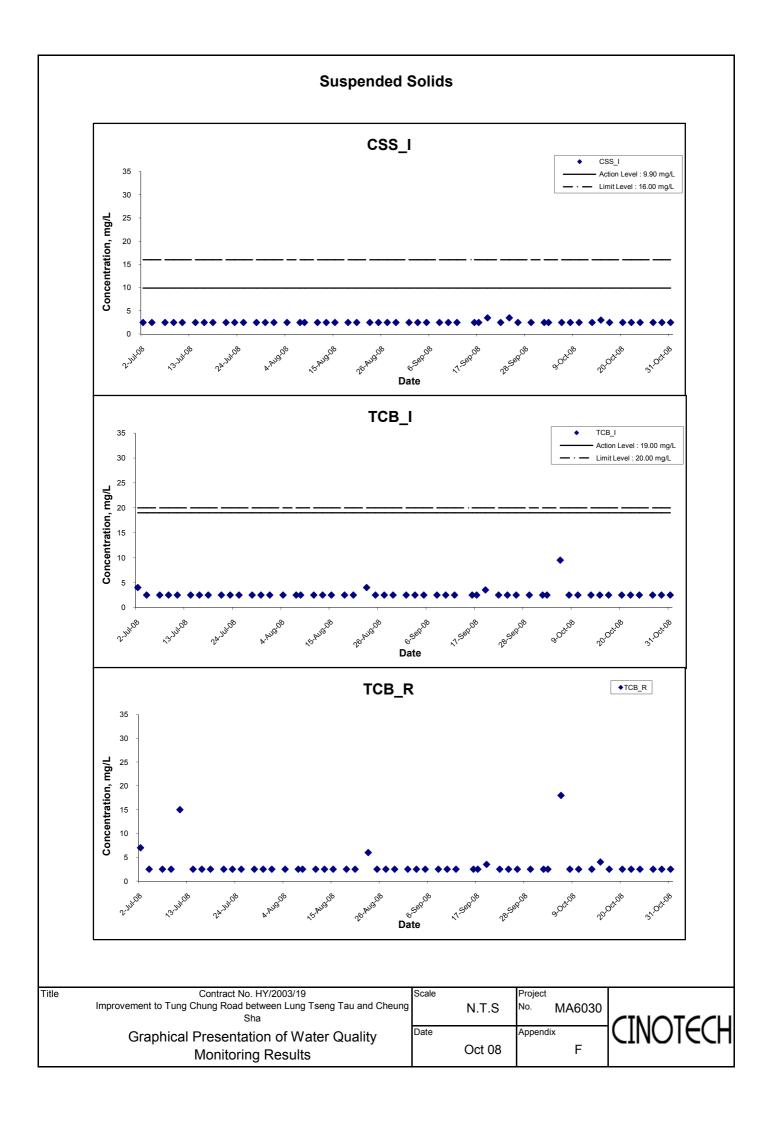




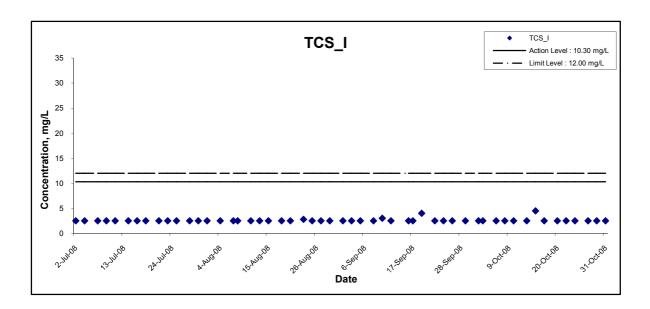








Suspended Solids



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

Title



APPENDIX G QUALITY CONTROL REPORTS FOR LABORATORY ANALYSIS





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07371

Page:

Date of Issue: 2008/10/03

Date Received: 2008/10/02 Date Tested: 2008/10/02

Date Completed: 2008/10/03

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/02

Number of Sample:

38

Custody No.:

MA6030/81002

Ī	Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
I	Sampling Point	Trial 1,	Trial 2,	Difference,	
l		mg/L	mg/L	%	
ĺ	26_I	< 2.5	< 2.5	N/A	93

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

 Laboratory No.:
 07389

 Date of Issue:
 2008/10/06

 Date Received:
 2008/10/03

Date Tested: 2008/10/03 Date Completed: 2008/10/06

1 of 1

Page:

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2008/10/03

Number of Sample: 38

Custody No.: MA6030/81003

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	92

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

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07401

Page:

Date of Issue: 2008/10/08

Date Received: 2008/10/06 Date Tested: 2008/10/06

Date Completed: 2008/10/08

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/06

Number of Sample:

38

Custody No.: MA6030/81006

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	101

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

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

 Laboratory No.:
 07411

 Date of Issue:
 2008/10/09

 Date Received:
 2008/10/08

 Date Tested:
 2008/10/08

2008/10/09

Page: 1 of 1

Date Completed:

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2008/10/08

Number of Sample: 38

Custody No.: MA6030/81008

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	94

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

PATRICK TSE

Laboratory Manager

Patrahlee





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07433

Page:

Date of Issue: 2008/10/13 Date Received: 2008/10/10

Date Tested: 2008/10/10 Date Completed: 2008/10/13

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/10

Number of Sample:

38

Custody No.:

MA6030/81010

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	102

PREPARED AND CHECKED BY:

atirk le

For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

 Laboratory No.:
 07439

 Date of Issue:
 2008/10/14

 Date Received:
 2008/10/13

Date Tested: 2008/10/13 Date Completed: 2008/10/14

1 of 1

Page:

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/13

Number of Sample:

38

Custody No.:

MA6030/81013

Total Suspended Solids	Du	plicate Analy	/sis	QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	< 2.5	<2.5	N/A	89

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For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07451 Date of Issue: 2008/10/16

Date Received: 2008/10/15 Date Tested: 2008/10/15

Date Completed: 2008/10/16 Page:

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2008/10/15

Number of Sample: 38

MA6030/81015 Custody No.:

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
18_I	<2.5	<2.5	N/A	94

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

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07474

Page:

Date of Issue: 2008/10/20

Date Received: 2008/10/17
Date Tested: 2008/10/17

Date Completed: 2008/10/20

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/17

Number of Sample:

38

Custody No.: MA6030/81017

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	94

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For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07480

Date Completed:

Date of Issue: 2008/10/21 Date Received: 2008/10/20

Date Tested: 2008/10/20

2008/10/21

Page: 1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030 2008/10/20

Sampling Date:

38

Number of Sample: Custody No.:

MA6030/81020

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	93

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laboratory Manager

Patrh le





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07495
Date of Issue: 2008/10/23

Page:

Date Received: 2008/10/22 Date Tested: 2008/10/22

Date Completed: 2008/10/23

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/22

Number of Sample:

38

Custody No.:

MA6030/81022

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	96

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PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07510

Page:

Date of Issue: 2008/10/27

Date Received: 2008/10/24 Date Tested: 2008/10/24

Date Completed: 2008/10/27

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2008/10/24

Number of Sample: 38

Custody No.: MA6030/81024

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
23_R2	<2.5	<2.5	N/A	106

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For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07521

Date of Issue: 2008/10/28

Date Received: 2008/10/27

Date Tested: 2008/10/27 Date Completed: 2008/10/28

1 of 1

ATTN: Mr. Henry Leung Page:

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2008/10/27

Number of Sample: 38

Custody No.: MA6030/81027

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	94

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**

atrik (ce

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07532 Date of Issue: 2008/10/30

Date Received: 2008/10/29 Date Tested: 2008/10/29

Date Completed: 2008/10/30
Page: 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Tung Chung Road

Project No.: MA6030 Sampling Date: 2008/10/29

Number of Sample: 38

Custody No.: MA6030/81029

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26_I	<2.5	<2.5	N/A	91

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07551 Date of Issue: 2008/1

Page:

Date of Issue: 2008/11/03 Date Received: 2008/10/31

Date Tested: 2008/10/31 Date Completed: 2008/11/03

1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Tung Chung Road

Project No.:

MA6030

Sampling Date:

2008/10/31

Number of Sample:

38

Custody No.: MA6030/81031

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
26 I	< 2.5	<2.5	N/A	89

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laboratory Manager

Patrahlee

APPENDIX H SUMMARY OF EXCEEDANCES

Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report Report No. $81006W-81002_S$

Part A – Exceedance Summary Tables

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

				Exceedan	ces Criteri	ia				Action
	ream cation	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		2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81008W-81003_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81009W-81006_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81009W-81008_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81014W-81010_S$

Part A – Exceedance Summary Tables

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

				Exceedan	ces Criteri	ia				Action
	ream cation	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		2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81016W-81013_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81020W-81015_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81021W-81017_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81022W-81020_S$

Part A – Exceedance Summary Tables

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

			Exceedan	ces Criteri	a				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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81024W-81022_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81028W-81024_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81030W-81027_S$

Part A – Exceedance Summary Tables

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

			Exceedan	ces Criteri	a				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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81103W_81029_S$

Part A – Exceedance Summary Tables

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

				Exceedan	ces Criteri	ia				Action
	ream cation	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		2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- (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. $81105W_81031_S$

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	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

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

APPENDIX I SITE AUDIT SUMMARY

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

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	81002
Date	2 October 2008 (Thursday)
Time	09:00 – 14:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
81002-O01	• Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan. The Contractor was reminded to clear the silt and sediment regularly.	B5iii & iv.
	B. Air Quality	
81002-O02	• Sediment was observed on the public road at underneath STR7 and haul road from existing TCR to Zone 6. The Contractor was reminded to cover the exposed surface to prevent any silty runoff.	C3
81002-O03	Soil nailing work was observed at near STR 12. The Contractor was reminded to spray water regularly and provide proper enclosure to prevent dust generation.	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 (80925- O01- O02, R04, R05, R07- R09, R11- R13, R15, R16, R18- R23 and G24- G27). Follow-up action is needed for the outstanding items. An item (80925-O03) was not observed during site inspection because no construction activities was being carried out. 	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	A. Water Quality	
81002-R04	Clear standing water in the drip tray at the entrance of STR7.	B11
81002-R06	Clear stagnant water at pit at STR7 and the discarded tank at Shek Mun Kap.	B11
81002-R07	• Stagnant water was observed at paved road near STR9a and near STR10. The Contractor was reminded to dry them.	B11
81002-R09	Oily waste water was observed at culvert at STR8. The Contractor was reminded to clear them with licensed collector.	B22
81002-R10	• Oil stains were observed at paved road at STR8. The Contractor was reminded to clear them.	B22
81002-R11	• Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	В8
81002-R13	• Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7.	В8
81002-R15	Properly cover the catchment channel at underneath STR16 and STR17.	B1
81002-R16	Clear sediment and debris at the paved road along existing TCR.	B18
81002-R18	• Re-arrange the stream diversion at Stream 6, Stream 7 and Stream 13.(in-progress)	B15
81002-R19	Keep clear the culvert near Stream 11.	B18

81002-R20	Clear the sediment at the public road near Stream 7.	B18
81002-R21	Hydroseed/cover the exposed surface at STR6.	B8
81002-R22	Clear sediment and debris in U- Channel at STR17 and opposite to RW11.	B18
81002-R24	• Clear sediment and debris in gullies near Stream 19 (downstream) and near STR9a.	B18
	B. Air Quality	
81002-R11	• Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	C13
81002-R17	• Properly cover the stockpile at Pak Kung Au near existing TCR and between STR13-14.	C7
81002-R21	Hydroseed/cover the exposed surface at STR6.	C13
	C. Waste / Chemical Management	
81002-R05	Provide drip tray for the plant equipment at STR7and STR12.	E7ii.
81002-R08	• Oil containers were observed at STR8. The Contractor was reminded to store them in	E3i.
	designated chemical waste area.	
81002-R12	• Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream).	E4ii.
81002-R14	Clear C&D waste at underneath STR12.	E4ii.
81002-R23	• Clear C&D waste and sediment in culvert at Stream 11, Stream 12, Stream 19, STR9a,	E4ii.
<u></u>	STR10 and between STR8-9.	
	D. General	
81002-G25	• Erect fencing for the streams near the construction works, especially for the Stream 29 and	C11
01002-023	Stream 31.	C11
81002-G26	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction	B2
	area and the paved road to prevent any sediment from carrying out.	
81002-G27	Regularly water spray on dusty paved road is necessary.	C5

Ref. No.	Proposed Completion Date	Completion Date	Remarks
80925-R06			
80925-R10		***************************************	***************************************
80925-R14	2 October 2008	2 October 2008	
80925-R17			
81002-O01			
81002-O02	8 October 2008		
81002-O03			
81002-R04	·		·
81002-R05			·
81002-R06			<i>:</i>
81002-R07			
81002-R08		1	·
81002-R09			
81002-R10	•		
81002-R11			
81002-R12			
81002-R13			
81002-R14	N. Committee of the Com		
81002-R15			
81002-R16			
81002-R17			
81002-R18			
81002-R19			
81002-R20			
81002-R21			
81002-R22			
81002-R23			
81002-R24			

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

81002-G25		
81002-G26		
81002-G27		

	Name	Signature	Date
Recorded by	Claire Yau	yan.	2 October 2008
Checked by	Dr. Priscilla Choy	Wit	2 October 2008

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

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	81008
Date	8 October 2008 (Wednesday)
Time	09:00 – 14:15

D.e Ni.		Related Item No.
Ref. No.	Non-Compliance	Hem No.
-	None identified	75.1.4.3
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
81008-O01	Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan. The Contractor was reminded to clear the silt and sediment, especially after rainstorm.	B5iii & iv.
	B. Air Quality	
81008-O02	• Sediment was observed on the public road at underneath STR7 and from haul road at existing TCR to Zone 6. The Contractor was reminded to cover the exposed surface to prevent any silty runoff.	C3
81008-O03	Oil leakage was observed at plant equipment at STR7. The Contractor was advised to clear the oil leakage. (in progress)	B22
	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 (81002- O01- O03, R04-R07, R10- R24 and G25- G27). Follow-up action is needed for the outstanding items. An item (81002-R08) was not observed during site inspection because no construction activities 	
	• An item (81002-R08) was not observed during site inspection because no construction activities was being carried out.	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	T(CIII I (O.
	A. Water Quality	
81008-R04	Clear standing water in the drip tray at the entrance of STR7.	B11
81008-R05	Provide drip tray for the plant equipment at STR7and STR12.	B22
81008-R06	Clear stagnant water on uneven paved road near STR9a and near STR10.	B11
81008-R07	Clear oil stains at paved road at STR8.	B22
81008-R09	• Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at	В8
	STR14.	
81008-R11	• Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7.	В8
81008-R13	Properly cover the catchment channel at underneath STR16 and STR17.	B1
81008-R14	Clear sediment and debris at the paved road along existing TCR.	B18
81008-R16	• Re-arrange the stream diversion at Stream 6, Stream 7 and Stream 13.(in-progress)	B15
81008-R17	Keep clear the culvert near Stream 11.	B18
81008-R18	Clear the sediment at the public road near Stream 7.	B18
81008-R19	Hydroseed/cover the exposed surface at STR6.	В8
81008-R20	• Clear sediment and debris in gullies near Stream 19 (downstream) and near STR9a.	B18

81008

	B. Air Quality	
81008-R08	Provide proper enclosure for soil nailing work at STR12.	C6
81008-R09	Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	C13
81008-R11	Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7.	C13
81008-R15	• Properly cover the stockpile at Pak Kung Au near existing TCR and between STR13-14. (in progress)	C7
81008-R19	Hydroseed/cover the exposed surface at STR6.	C13
	C. Waste / Chemical Management	
81008-R10	Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream).	E4ii.
81008-R12	Clear C&D waste at underneath STR12.	E4ii.
81008-R21	Oil containers should be provided with drip tray at STR10.	E2i.
	D. General	
81008-G22	Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially near RW7 and RW12, to prevent any sediment from carrying out.	В2
81008-G23	• Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31.	C11
81008-G24	Regularly water spray on dusty paved road is necessary. (in progress)	C5
81008-G24	• Clear sediment and debris at drainage system (U channels, gullies and culverts), especially U channels underneath STR8.	B17
81008-G26	Clear stagnant water at pits and the discarded tank at Shek Mun Kap. (in progress)	B11

Ref. No.	Proposed Completion Date	Completion Date	Remarks
81002-R09	8 October 2008	8 October 2008	
81008-O01			
81008-O02			
81008-O03			
81008-R04			
81008-R05			
81008-R06			
81008-R07	•		
81008-R08			
81008-R09			<i>j</i> .
81008-R10			
81008-R11			
81008-R12			
81008-R13			·
81008-R14	16 October 2008		
81008-R15	•		
81008-R16			
81008-R17			
81008-R18			
81008-R19			
81008-R20			
81008-R21			
81008-G22			
81008-G23			
81008-G24			
81008-G25			
81008-G26			

	Name	Signature	Date
Recorded by	Claire Yau	Jan	10 October 2008
Checked by	Dr. Priscilla Choy	WI	10 October 2008

Inspection Information

Checklist Reference Number	81016
Date	16 October 2008 (Thursday)
Time ,	09:00 – 13:30

Ref. No.	Non-Compliance	Related Item No.
_	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
81016-O01	Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan. The Contractor was reminded to clear the silt and sediment regularly.	B5iii & iv.
	B. Air Quality	
81016-O02	• Sediment was observed on the public road at underneath STR7 and from haul road at existing TCR to Zone 6. The Contractor was reminded to cover the exposed surface to prevent any silty runoff. (in progress)	C3
81016-O03	Stagnant water was observed at construction site at Stream 13. The Contractor was reminded to clear it to prevent mosquito breeding.	B11
	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 (81008- O01- O02, R04, R09-R13, R15- R20 and G22- G26). Follow-up action is needed for the outstanding items. Items (81002- O03, R05, R07, R08, R21) were not observed during site inspection because no construction activities was being carried out. 	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	A. Water Quality	
81016-R04	Clear standing water in the drip tray at the entrance of STR7.	B11
81016-R05	Provide drip tray for the plant equipments at STR8 and STR13.	B22
81016-R06	Clear sediment underneath STR8.	B18
81016-R07	• Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	В8
81016-R09	• Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7. (in progress)	В8
81016-R12	Properly cover the catchment channel at underneath STR16 and STR17.	B1
81016-R13	Clear stagnant water in the discarded tank at between STR16 and STR17.	B11
81016-R14	Clear the sediment in U channel near STR17.	B18
81016-R15	• Re-arrange the stream diversion at Stream 6, Stream 7, Stream 12 and Stream 13. (in-progress)	B15
81016-R16	Keep clear the culvert near Stream 11.	B18
81016-R17	Clear the sediment at the public road near Stream 7.	B18

81016-R18	Hydroseed/cover the exposed surface at STR6.	В8
81016-R19	Clear sediment and debris at gullies near STR9a and Stream 19 (downstream).	B18
81016-R20	Clear stagnant water at discarded tank at Shek Mun Kap.	B11
81016-R21	Properly cover the stockpile at Pak Kung Au near existing TCR.	B17
	B. Air Quality	
81016-R07	Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	C13
81016-R09	• Properly cover the exposed slope at STR11, STR12, STR13 and at opposite to RW7. (in progress)	C13
81016-R11	Water spray dust emission activity at STR14.	C6
	C. Waste / Chemical Management	
81016-R08	Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream).	E4ii.
81016-R10	Clear C&D waste at underneath STR12.	E4ii.
<u>,,</u>	D. General	
81016-G22	• Clear sediment and debris at drainage system (U channels, gullies and culverts), especially U channels underneath STR8, at between STR14 and STR16 and culvert at STR8.	B17
81016-G23	• Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road.	В2
81016-G24	• Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31.	C11
81016-G25	• Regularly water spray on dusty paved road and road under construction is necessary. (in progress)	C5

Ref. No.	Proposed Completion Date	Completion Date	Remarks
81008-R06	16 October 2008	16 October 2008	
81008-R14	10 October 2008	10 October 2000	
81016-O01			
81016-O02			
81016-O03			
81016-R04			
81016-R05			
81016-R06			
81016-R07		1	
81016-R08	•		
81016-R09			
81016-R10			
81016-R11			
81016-R12	23 October 2008		
81016-R13	23 0000001 2000		
81016-R14			
81016-R15			
81016-R16			
81016-R17			
81016-R18		:	
81016-R19			
81016-R20		1	
81016-R21			
81016-G22		†	
81016-G23		1	
81016-G24			
81016-G25			

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

	Name	Signature	Date
Recorded by	Claire Yau	Jan	16 October 2008
Checked by	Dr. Priscilla Choy	NX	16 October 2008

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

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	81023
Date	23 October 2008 (Thursday)
Time	09:00 – 13:30

	•	Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
81023-O01	• Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan. The Contractor was reminded to clear the silt and sediment regularly.	B5iii. & iv.
	B. Air Quality	
81023-O02	• Stagnant water was observed at construction site at Stream 13. The Contractor was reminded to clear it to prevent mosquito breeding.	B11
	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 (81016- O01, O03, R04, R06-R10, R12- R21 and G22- G25). Follow-up action is needed for the outstanding items. Items (81016- R05, R11) were not observed during site inspection because no construction 	
	activities was being carried out.	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	A. Water Quality	
81023-R03	Clear standing water in the drip tray at the entrance of STR7.	B11
81023-R04	• Provide drip tray for the plant equipments at STR7, near STR11 and near Stream 12.	B22
81023-R05	Clear sediment underneath STR8.	B18
81023-R07	• Clear oil stains underneath the plant equipment at between STR7and STR8. (in progress)	B22
81023-R08	• Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at	В8
	STR14.	
81023-R10	• Properly cover/ hydroseed the exposed slope at STR11, STR12, STR13.	В8
81023-R13	Properly cover the catchment channel at underneath STR16 and STR17.	B1
81023-R14	Clear stagnant water in the discarded tank at between STR16 and STR17.	B11
81023-R15	Clear the sediment in U channel near STR17.	B18
81023-R16	• Re-arrange the stream diversion at Stream 6, Stream 7, Stream 12 and Stream 13.	B15
81023-R17	Keep clear the culvert near Stream 11.	B18
81023-R18	• Clear the sediment at the public road near Stream 7 and at the entrance of haul road underneath	B18
	STR7.	
81023-R19	Hydroseed/cover the exposed surface at STR6.	B8
81023-R20	Clear sediment and debris at gullies near STR9a and Stream 19 (downstream).	B18
81023-R21	Clear stagnant water at discarded tank at Shek Mun Kap.	B11

	B. Air Quality	
81023-R06	Properly cover the stockpile near STR8 and near STR12.	C7
81023-R08	Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	C13
81023-R10	Properly cover the exposed slope at STR11, STR12 and STR13.	C13
81023-R22	Properly cover the stockpile at Pak Kung Au near existing TCR.	C7
	C. Waste / Chemical Management	
81023-R09	Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream).	E4ii.
81023-R11	Clear C&D waste at underneath STR12 and near Stream 28.	E4ii.
81023-R12	Properly store the chemical waste at STR11and near Stream 12.	E2i.
	D. General	
81023-G23	Clear sediments on the paved road regularly.	B18
81023-G24	Regularly water spray on dusty paved road and road under construction is necessary.	C5
81023-G25	• Clear sediment and debris at drainage system (U channels, gullies and culverts), especially U channels underneath STR8, culvert at STR8 and U channel at between STR14 and STR16.	B17
81023-G26	• Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially at construction area near Stream 11 .	B2
81023-G27	• Erect fencing for the streams near the construction works, especially for the Stream 29 and Stream 31.	C11

Ref. No.	Proposed Completion Date	Completion Date	Remarks
81016-002	23 October 2008	23 October 2008	
81023-O01			
81023-O02			
81023-R03			
81023-R04			
81023-R05			
81023-R06			
81023-R07	•		
81023-R08			
81023-R09			·
81023-R10			
81023-R11			
81023-R12			
81023-R13	30 October 2008		
81023-R14	50 October 2000		
81023-R15			
81023-R16			
81023-R17			
81023-R18			
81023-R19			
81023-R20			
81023-R21			
81023-R22			
81023-G23			
81023-G24			
81023-G25			
81023-G26			
81023-G27			

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

	Name	Signature	Date
Recorded by,	Claire Yau	in.	23 October 2008
Checked by	Dr. Priscilla Choy	WiL	23 October 2008

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

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	81030
Date	30 October 2008 (Thursday)
Time	09:00 – 14:00

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	Dalatad
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
81030-O01	• Sediment was observed accumulate at the sedimentation tanks at Shan Shek Wan. The Contractor was reminded to clear the silt and sediment regularly.	B5iii. & iv.
81030-O02	• Stagnant water was observed at construction site at Stream 13. The Contractor was reminded to clear it to prevent mosquito breeding.	B11
81030-O03	• Sediment was observed accumulate in culvert at Stream 11 . The Contractor was reminded to seal the drainage channel connected to the culvert to prevent any silty runoff from entering the streams.	B24
	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 (81023- O01, O02, R05- R11, R13-R22 and G23- G27). Follow-up action is needed for the outstanding items. Items (81023- R04, R12) were not observed during site inspection because no construction activities was being carried out. 	

·	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	A. Water Quality	
81030-R04	Provide drip tray for the plant equipments at STR12 and near Stream 12.	B22
81030-R06	Clear sediment underneath STR8.	B18
81030-R08	• Clear oil stains underneath the plant equipment at between STR7 and STR8.	B22
81030-R09	• Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14.	В8
81030-R11	Properly cover/ hydroseed the exposed slope at STR11, STR12, STR13.	В8
81030-R13	Properly cover the catchment channel at underneath STR16 and STR17.	B1
81030-R14	Clear stagnant water in the discarded tank at between STR16 and STR17.	B11
81030-R15	• Clear the sediment in U channel near STR17.	B18
81030-R16	• Re-arrange the stream diversion at Stream 6, Stream 7, Stream 12 and Stream 13.	B15
81030-R17	Keep clear the culvert near Stream 11.	B18
81030-R18	• Clear the sediment at the public road near Stream 7and at the entrance of haul road underneath STR7.	B18

Hydrogoddogyer the gynogod cyrfogo et STD6	B8	
Properly cover the culvert at between STR14 and STR16.		
B. Air Quality		
• Provide 3-side enclosure for the soil nailing work at near STR12.	C6	
Properly cover the stockpile near STR8 and near STR12.		
	C13	
\$***,*********************************		
	C7	
C. Waste / Chemical Management		
Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream).	E4ii.	
D. General		
Clear sediments on the paved road regularly.	B18	
Regularly water spray on dusty paved road and road under construction is necessary.		
	B2	
	C11	
Stream 31.		
	 Provide 3-side enclosure for the soil nailing work at near STR12. Properly cover the stockpile near STR8 and near STR12. Properly cover/ hydroseed the exposed slope at underneath STR9, underneath STR16 and at STR14. Properly cover the exposed slope at STR11, STR12 and STR13. Properly cover the stockpile at Pak Kung Au near existing TCR. C. Waste / Chemical Management Clear C&D waste at Stream 29, Stream 34, Stream 35 and Stream 19 (downstream). Clear C&D waste at underneath STR7, STR12 and near Stream 28. D. General Clear sediments on the paved road regularly. Regularly water spray on dusty paved road and road under construction is necessary. Clear sediment and debris at drainage system (U channels, gullies and culverts), especially U channels underneath STR7, STR8, between STR14 and STR16 and culvert at STR8. Provide mitigation measures (sand bag bund/cover with tarpaulin) at between the construction area and the paved road, especially at construction area near Stream 11. Erect fencing for the streams near the construction works, especially for the Stream 29 and 	

Ref. No.	Proposed Completion Date	Completion Date	Remarks
81023-R04	30 October 2008	30 October 2008	
81030-O01	6 November 2008		
81030-O02			·
81030-O03			·
81030-R04		1	
81030-R05			
81030-R06			
81030-R07			
81030-R08			·
81030-R09	•		
81030-R10	•		
81030-R11			
81030-R12		1	
81030-R13			
81030-R14			
81030-R15			
81030-R16			
81030-R17			
81030-R18			
81030-R19			;
81030-R20			
81030-R21			
81030-R22			
81030-R23			
81030-G24			
81030-G25			
81030-G26			

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

Weekly Site Inspection Record Summary

81030-G27	
81030-G28	

	Name		Date		
Recorded by	Claire Yau	Yan	30 October 2008		
Checked by	Dr. Priscilla Choy	M	30 October 2008		

3

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. 	^
Construction	• 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.	*
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. 	٨

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. 	٨
	 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	٨
	Reduce the number of plant operating in critical areas close NSRs.	Λ > 7.7.4
	Construct temporary and movable noise barriers	N/A
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.	*
	• 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.	۸
	 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. 	٨
	• 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. 	*
	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.	٨
	 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. 	٨
	• 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.	*
	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. 	۸					
	 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; 	*					
	 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.	۸					
	 Reusable rather than disposable dishware shall be used if feasible. 	۸					
	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; 	٨					
	 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;	^					

Mitigation Measures	Status
Compensatory planting;	٨
• 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	٨
Grassing and woodland planting of soil slopes and disturbed areas	٨
Construction activities in the stream and other disturbances to it should be avoided.	٨
_	 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

ectified by the contractor; ectified/improved by the g IEC's further comment;
ectifie

APPENDIX K EVENT ACTION PLANS

Appendix K – Event Action Plans

Event /Action Plan for Air Quality

EVENT	AC.	TION						
	ET		ΙE	С	ER		Co	ntractor
Action Level								
Excee dance for one sample	 3. 4. 6. 	Inform the IEC and the Contractor about the exceedance within 24 hours 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 1- hour monitoring with 3 times every six days until no exceedance is recorded.	3.	submitted by the ET. Confirm the ET assessment regarding the action and/or limit level exceedance during the impact monitoring;	1. 2.	Confirm receipt of NOE in writing. Notify EPD and other relevant Government departments within 24 hours of identification of exceedance.	 2. 4. 	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; Advise 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. 	 Check monitoring data submitted by the ET. Check Contractor's working method. Discuss with the ET, the Contractor and the ER on possible remedial measures. Advise the ER on the effectiveness of the proposed remedial measures. 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.

E	ÆNT	ACTION						
		ET	ΙE	С	ER		Co	ntractor
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. 	2.	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;	1. 2. 3.	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.	1. 2. 3. 4. 5. 6. 7. 8.	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	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		1. Discuss amongst the ER, the ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness 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. 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.	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated.	
	Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results. 9. If exceedance stops, cease ad ditional monitoring.				

Note: 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.	 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 the ER; 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 non-compliance 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
I insit I area	Repeat measurement on next day of exceedance. 1. Repeat in aith annual and a second a second and a second a second and a second a second a second and a second and a second and a second and a sec	effectiveness of the implemented mitigation measures.	1 Diamental IEC H	1 T-6
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 non-compliance 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
\$73	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
\$77	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
\$80	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.	1 27 Iviav 2007 and the 1 dweled ivicellanical i	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
\$93	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 a suspected case of silty runoff and muddy water generated from construction site flowing on public road. Turbid water was observed behind the weir near the AFCD's office at Tung Chung Au.	No non-compliance or environmental deficiency related to or in the vicinity of the concerned area was identified during these site audits. According to Hong Kong Observatory, Hong Kong was under the effect of the tropical storm over the central part of the South China Sea which brought heavy showers with 100.4 millimeters of total rainfall recorded on 6 August. The amber rainstorm warning was hoisted between 15:55pm to 17:30pm. The Contractor has confirmed there was no	
				construction activity in the concerned area on 6 th August 2007 due to heavy rainfall. According to the Contractor, muddy water was the silty runoff from nearby work sites due to the heavy rainfall on the day.	Closed
				 The Contractor has implemented following mitigation measures: To desilt temporary drainage channels and sedimentation tank. To clear the silt and mud in the surface of haul road at RW06 ad RW07. To cover exposed slope with tarpaulin at RW06 and RW07. 	
				According to the RSS and the Contractor, no further report of silt and muddy water runoff from concerned area was received after implementation of the aforesaid mitigation measures.	

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

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
2437 1 2007	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
12 4 21 2006	construction to cross the stream.
13 April 2006	The Contractor was requested to rectify the situation of Zone E where fuel oil
20.1	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
26.0 1 2006	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
4 October 2000	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.
19 February 2008	The Contractor was requested to take all necessary actions to rectify the
	situation that surface run-off from the construction site discharged into storm
	drain without treatment in order to comply with EP Condition 3.16.
14 April 2008	The Contractor was required to take all necessary actions to rectify the situation

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

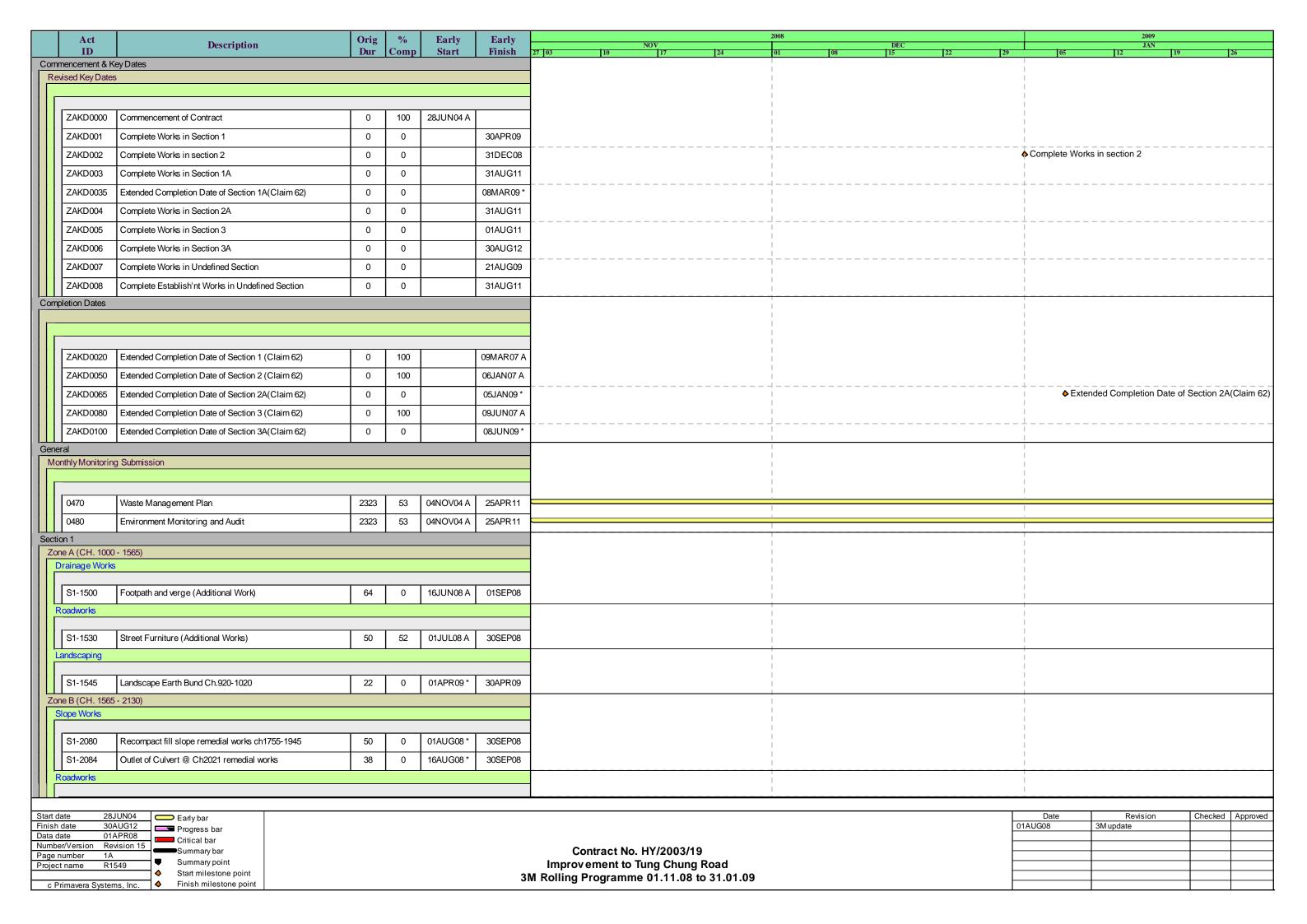
Summary of Notification of Summons

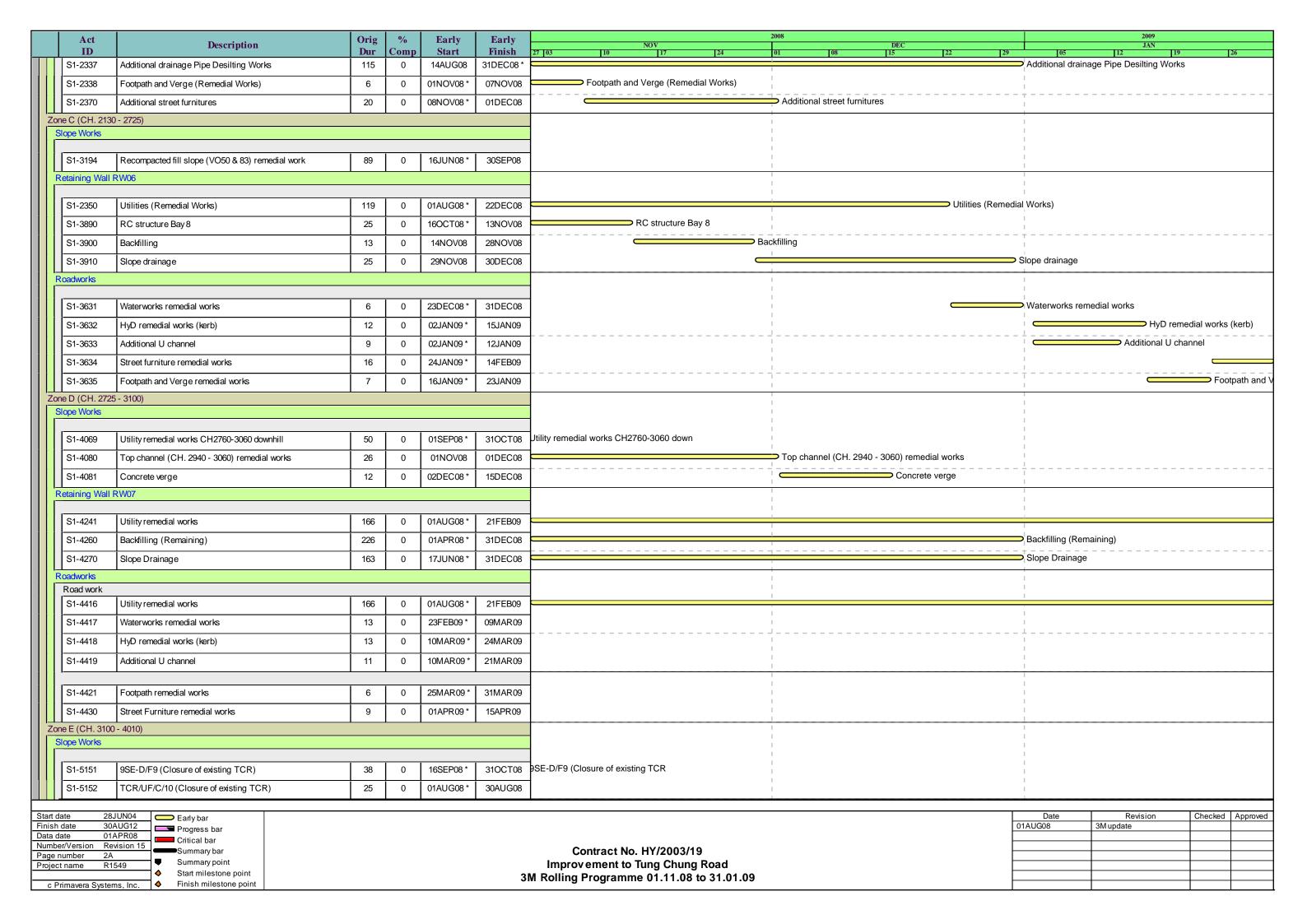
Date of Summons	Details of the Summons	Status
25 January 2007	Construction works at a slope next to Stream no. 28	Withdrawn by
	along Tung Chung Road, Cheung Sha, Lantau Island	EPD
	which contrary to EP Condition 3.9 concerning works at	
	Stream 28 on 26 July 2006	
16 February 2007	Construction works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

Summary of Notification of Successful Prosecution

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

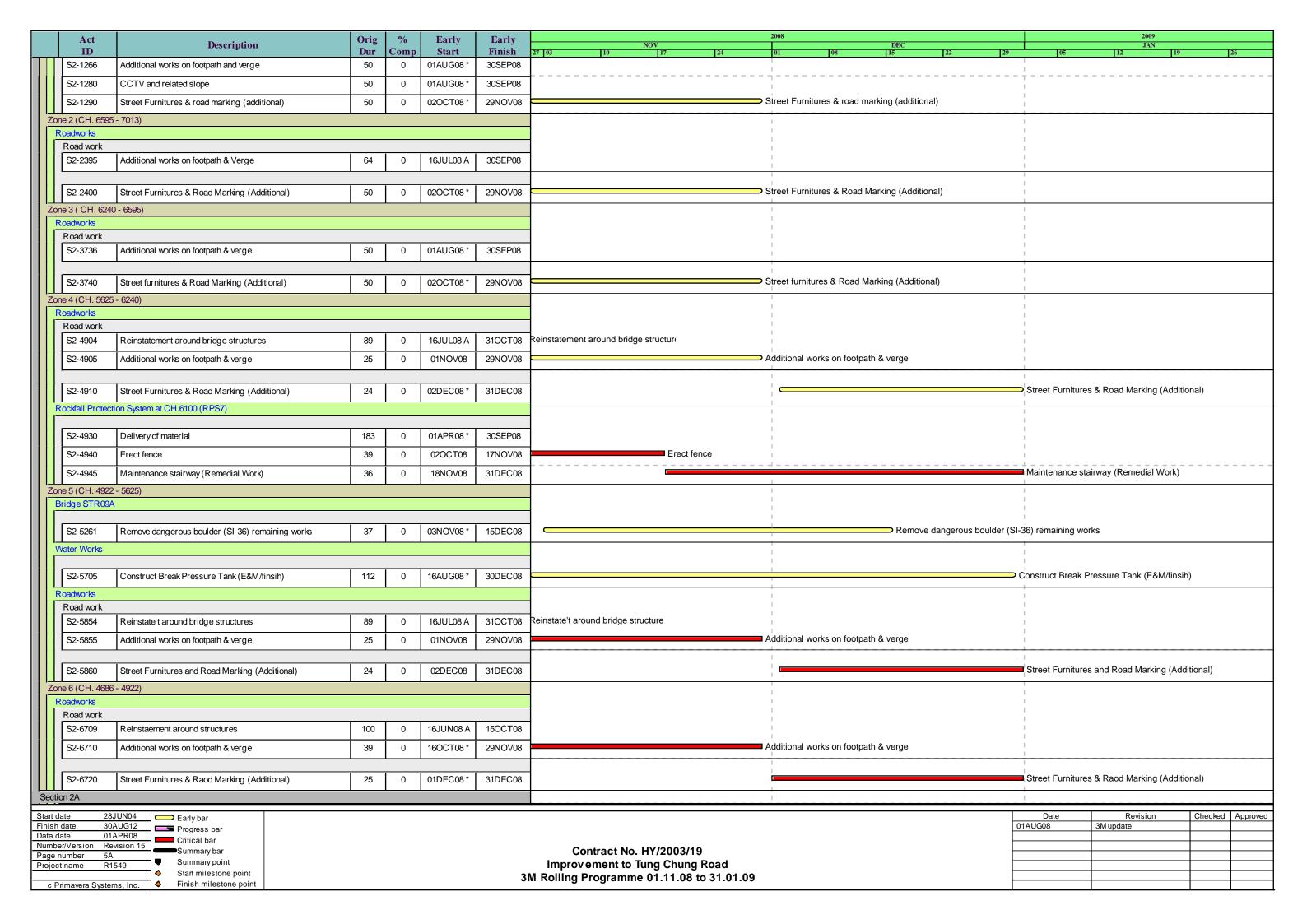
APPENDIX N CONSTRUCTION PROGRAMME





Act	Description	Orig	%	Early	Early	<u> </u>	NOV		2008		DEC					2009 JAN	
ID		Dur	Comp	Start	Finish	27 03 10	17	24	01	08	15	22	29	05	12	19	26
Retaining Wall F	RW10								I I					l I			
S1-5390	Backfilling	176	0	01APR08 *	31OCT08	Backfilling			I I								
Retaining Wall F	RW11								 					 			
1				•	1				I								
	Backfilling	48	0	01DEC08 *	31JAN09												
S1-5463	U channel	24	0	02FEB09 *	28FEB09				i i								
Retaining Wall F	RW12								i								
S1-5500	Backfilling & Reinstatement of Carriageway	37	0	01AUG08 *	16SEP08												
Roadworks									I I								
Road work S1-5843	HyD remedial works (kerb)	23	l 0	02JAN09 *	31JAN09				i								
	Waterworks remedial works	20	0	02JAN09 *	24JAN09				i i								Waterwor
					ļ				<u>!</u>								
	Additional drainage works	223	0	02JUN08 *	28FEB09				I I								
S1-5847	Footpath and verge additional works	26	0	02MAR09 *	31MAR09									!			
S1-5836	Utilities remedial works	113	0	16AUG08 *	31DEC08				:					Utilities remedial	works		
S1-5838	Additional street furniture	22	0	01APR09 *	30APR09				1					 			
Zone F (CH. 4010) - 4686)		<u> </u>						!					<u> </u>			
Slope Works									1								
S1-6111	9SE-D/C20 (Closure of existing TCR)	126	0	01APR08 *	30AUG08				1								
S1-6113	TCR/UF/C/12 (Closure of existing TCR)	25	0	01AUG08 *	30AUG08				1								
					ļ				!								
	9SE-D/C35 (Closure of existing TCR)	40	0	02JAN09	20FEB09				1								
Retaining Wall F	RW14								 								
S1-6231	Additional drainage works	35	0	21JUL08 *	30AUG08				1								
S1-6232	Backfillling	25	0	01SEP08 *	30SEP08				1					 			
Retaining Wall F	RW15								! !					<u> </u> 			
S1-6285	Additional base slab & wall (V.O.115)	22	Ι ο	02JAN09	30JAN09				I I								
Retaining Wall F	· · ·		0	UZJANUS	SOJANOS				I I								
Relating Wall P	KWIO								I I					l I			
S1-6365	Proposed utilities installation	60	0	02JAN09	16MAR09				I I								
Retaining Wall R	RW39								I I								
0.055	lo rem	l		Louces		Danielillan maren ettet			I I					 			
	Backfilling remedial works	50	0	01SEP08 *	31OCT08	Backfilling remedial work			I .								
Culvert at CH. 46	631								I I					l I			
S1-6615	1050mm dia. pipeline under existing TCR	30	0	02JAN09	09FEB09				I I								
Water Works			<u> </u>		<u> </u>				1								
		,							I I					 			
	Watermain water seepage around STR007	34	0	07JUL08 *	15AUG08				1					 			
Drainage Works	5								1								
S1-6750	Additional drainage works	64	0	07JUL08 *	20SEP08				I I					 			
Roadworks	, add on the distriction of the second of th	04		1 0,30000	1 20021 00				1					<u> </u>			
	JUN04 Early bar								·					Date	Revis	ion T	Checked Assess
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mber/Version Rev	vision 15 Critical bar					Contract No. I	17/2002/40										
ge number 3A oject name R15	■ Summary point					Improvement to Tu		oad									
c Primavera System	◆ Start milestone point				3	A Rolling Programme	01.11.08 to	31.01.09									
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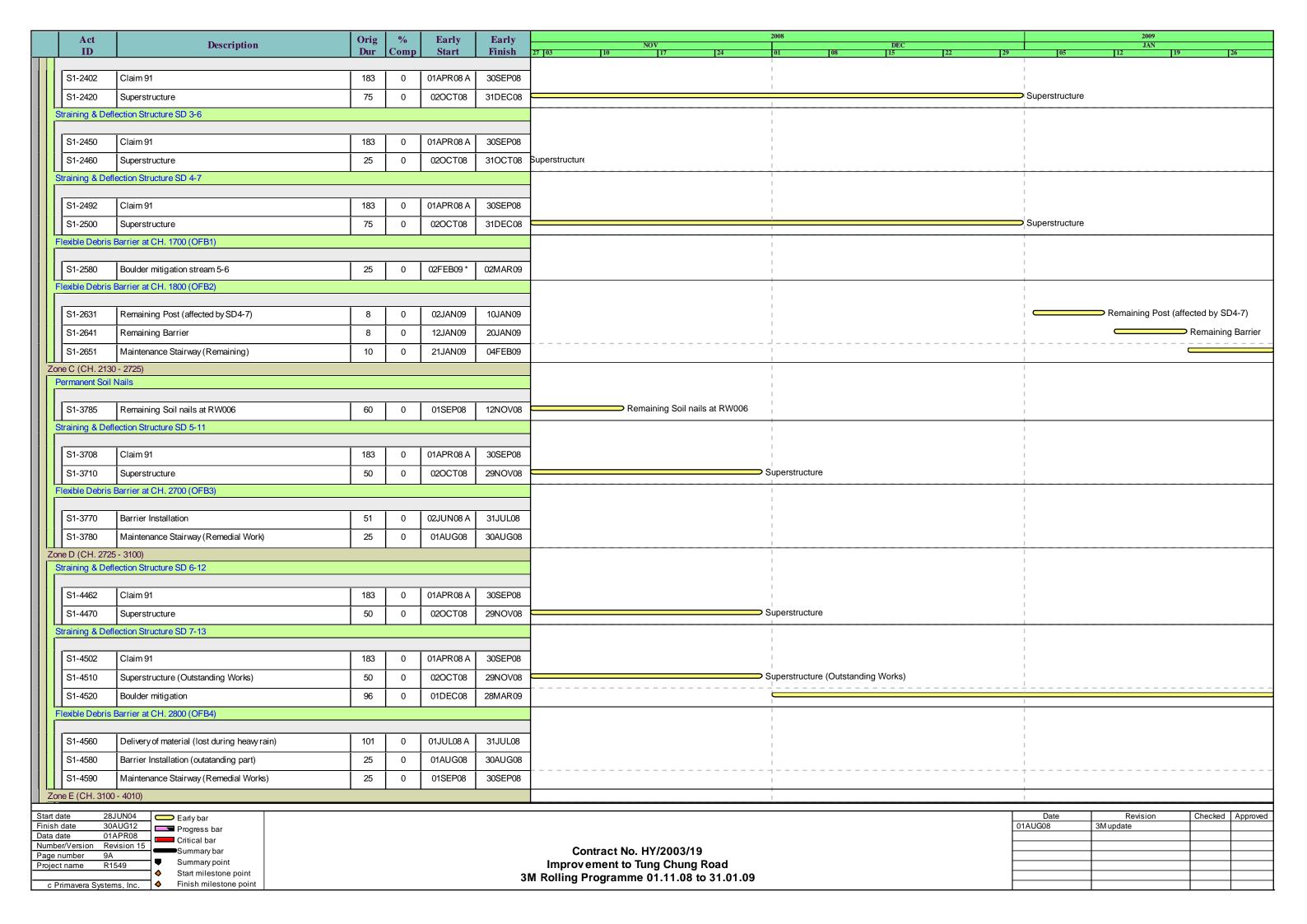
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	Act ID	Description	Orig Dur	% Comp	Early Start	Early Finish	NOV 27 03 10 17 24	2008	108	DEC 15	22	29	05		AN 19	26			
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	S1-6722	Utilities remedial works	58	0	23JUN08 *	30AUG08		1					I I						
	S1-6723	Buttress wall near STR007	134	0	07APR08 *	16SEP08							L						
	S1-6724	Additional footpath & verge	33	0	22SEP08 *	31OCT08	Additional footpath & verç	I I					I I						
	S1-6725	Additional street furnitures	25	0	01NOV08 *	29NOV08		Additiona	al street furnitures	3			I I						
l l l <u>F</u>	Pump House fo	r Fire Hydrant @ CH. 4398						1					I I						
	S1-6891	E&M works	126	l 0	01APR08 *	30AUG08		I					I I						
	S1-6922	Testing & commissioning	25	0	01SEP08*	30SEP08	-	I					I I						
	S1-6923	Fencing & ground level works	75	0	01SEP08 *	29NOV08		Fencing	& ground level we				! !						
		oom at CH. 4660	13		0132100	29110100		— Tollowing	a ground level we				 						
	Transformer IX	odina. Ori. 4000											 						
	S1-6903	Fencing & ground level works	151	0	02JUN08 *	29NOV08		Fencing	& ground level we	orks			 						
	ion 1A					•													
Ma	aintenance Acc	ess Track					-	i											
								i											
	S1-1570	Landscape softworks Ch.0-260	422	0	01APR08 *	31AUG09		<u> </u>					· 						
Zo	ne A (CH. 1000	0 - 1565)						i					I I						
	_							i											
	S1-1550	Landscape softworks	422	0	01APR08 *	31AUG09													
Zo	ne B (CH. 1565	5 - 2130)											l						
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	S1-2660	Landscape Softworks	422	0	01APR08 *	31AUG09		Į.					I						
	ne C (CH. 213		422		UIAFROO	3140009		I					I I						
	Landscaping	0 - 2123)						1					I I						
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		Landscape softworks	123	0	01APR09 *	31AUG09							 						
Zo	ne D (CH. 272	5 - 3100)						I I					I I						
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	S1-4600	Landscape Softworks	114	0	16APR09*	31AUG09		1					I I						
Zo	ne E (CH. 3100	0 - 4010)						ı					l I						
								I					 						
	S1-5915	Landscape Softworks	123	0	01APR09*	31AUG09		I					 						
Zo	ne F (CH. 4010	0 - 4686)						<u> </u>					l I						
	Landscaping												 						
	S1-6910	Landscape Softworks	123	0	01APR09 *	31AUG09	1						! 						
	Establishment v		1 120	<u> </u>	1 3.7.1.103	1 0.7.0000							 						
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	S1-6920	Establishment Works for Section 1A(claim no.084)	710	0	01SEP09 *	31AUG11							! 						
Secti								i					 						
- I	ne 1 (CH. 7013 Roadworks	3 - Outfall)																	
	S2-1265	Additional toe wall & F/P near YWCA(Claim no141)	164	16	01MAR08 A	16SEP08		i					- -						
Start o		Early bar		•		•							Date	Revis	on Cl	necked Approved			
Finish Data o	date 01	DAUG12 IAPR08 Critical bar											IAUG08	3M update					
	er/Version Renumber 4A	Summary bar					Contract No. HY/2003/19												
		Summary point ◆ Start milestone point				3	Improvement to Tung Chung Road 3M Rolling Programme 01.11.08 to 31.01.09												
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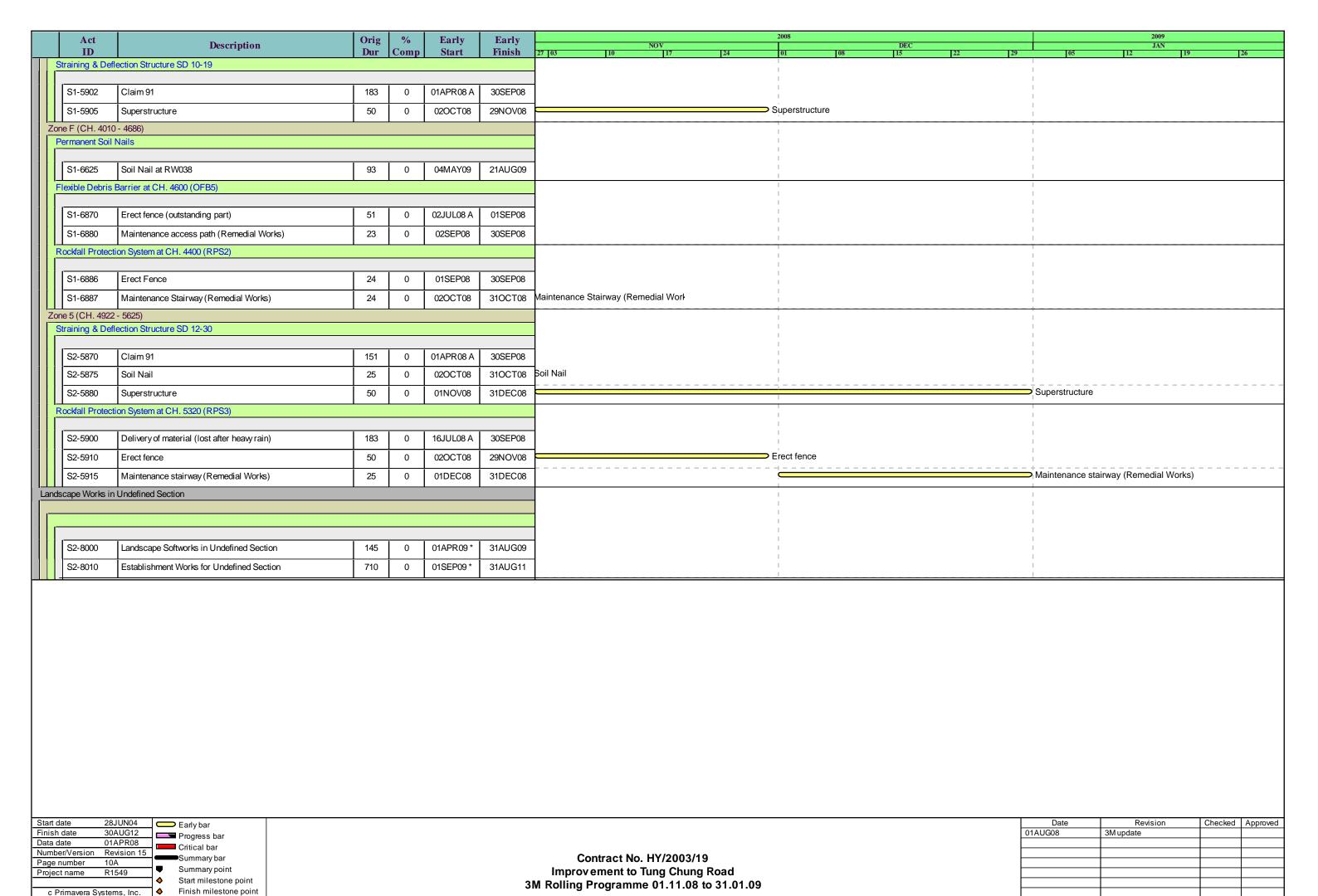


Act ID	Description	Orig	% Comp	Early Start	Early Finish	27 03 10	NOV	24	2008	DE 15		29	05	2009 JAN	19 26
Zone 1-6		Dui	Comp	Start	Tillisii	2/ 03	17	24		13	22	29		12	19 26
Landscaping									I I				I I		
S2-6730	Landscape Softworks	196	0	01APR08 A	31AUG09				l .				I		
S2-6735	Haul road reinstatement	73	0	01APR08 A	31MAR09				I				I		
Establishment w									l l				I I		
		1							 				 		
S2-6740	Establishment Works for Section 2A(claim no.084)	710	0	01SEP09 *	31AUG11				 				1		
Section 3									! 				 		
Feature No. TC	R/UF/C/15								I I				I I		
S3-3000	Cut and Trim Slope Surface	7	0	02JAN09 *	12JAN09				I I					Cut and Tri	m Slope Surface
S3-3010	300mm u channel at crest	10	0	14JAN09	31JAN09				 				 		·
S3-3020	Slope Surface Protection	14	0	31JAN09	17FEB09				, , – – – – –				+		
Feature No. 13N									 						
			1						I I				I I		
S3-3030	Install soil nail (199 nos.)	28	0	31JAN09	05MAR09				I I				I I		٩
S3-3040	Slope surface protection	14	0	05MAR09	21MAR09				 				<u> </u>		
Feature No. 13N	NE-B/U04								I I				I I		
S3-3050	Install soil nail (127 nos.)	20	0	05MAR09	28MAR09				 						
S3-3060	Pull out tests (4 nos.)	8	0	28MAR09	08APR09				I I						
S3-3065	300mm u-channel at crest & toe	20	0	08APR09	07MAY09				i				ī		
S3-3070	Slope surface protection	14	0	07MAY09	23MAY09				I I				I I		
Feature No. 13N	NE-B/C63								I I				I I		
S3-3080	Install soil nail (111 nos.)	19	0	07MAY09	30MAY09				 						
	Pull out test (5 nos.)	8	0	30MAY09					I						
S3-3100	300mm stepped & u-channel	20	0	09JUN09	03JUL09								÷ ·		
S3-3110	Slope surface protection	14	0	03JUL09	20JUL09				I I				I I		
Feature No. 13N	NE-B/C62								l				1		
S3-3120	Install soil nail (144 nos.)	Loo	Ι ο	03JUL09	29JUL09				I I						
S3-3120 S3-3130	Pull out tests (5 nos.)	22 8	0	29JUL09	07AUG09				! 				 		
S3-3140	300mm stepped & u channel	20	0	07AUG09	31AUG09				!				1		
S3-3140 S3-3150	Slope surface protection	14	0	31AUG09	16SEP09				I I				I I		
Feature No. 13N				1,10009	.0021 03				<u> </u>				I I		
			_	1					I I				I I		
	Recompact slope	14	0	31AUG09	16SEP09				I I						
S3-3170	Reconstruct 750mm stepped channel & stairway	20	0	16SEP09	10OCT09				 				i +		
S3-3180	300mm u channel	14	0	10OCT09	28OCT09				I I				1		
Feature No. 13N	NE-B/C80								I I				I I		
S3-3190	Install soil nail (42 nos.)	12	0	10OCT09	24OCT09				I I				I I		
S3-3200	Pull out test (1 nos.)	8	0	24OCT09	04NOV09				! ! !						
Finish date 30/ Data date 01/ Number/Version Re Page number 6A Project name R1	Summary point Start milestone point				3	Contract Improvement // Rolling Prograr		ng Road				0	Date 1AUG08	Revision 3M update	Checked Approved
c Primavera Syster	no, no. 🗘											L		1	

Act	Description	Orig	%	Early	Early			NOV		2008		DEC					2009 JAN	
S3-3210	300mm u channel	Dur 14	Comp 0	Start 04NOV09	Finish 20NOV09	27 03	10	17	24	01	08	15	22	29	05	12	19	26
<u> </u>										I					I I			
S3-3220 Feature No. 13N	Slope surface protection	14	0	20NOV09	07DEC09										i i			
Tealure No. 131	NL-D/C233									I					I I			
S3-3230	Install soil nail (44 nos.)	12	0	20NOV09	04DEC09	1				I					I I			
S3-3240	Pull out tests (2 nos.)	8	0	04DEC09	14DEC09	1									I I			
S3-3250	Reconstruct 300mm u channel	14	0	14DEC09	02JAN10										+			
S3-3260	Slope surface protection	20	0	02JAN10	26JAN10										1			
Feature No. 13N	NE-B/CR72																	
00,0070	I	1 00	l ,	L 00.144140	I 00.144.40					i					I I			
	Install soil nail (113 nos.)	20	0	02JAN10	26JAN10	-				i					i I			
	Pull out tests (3 nos.)	8	0	26JAN10	04FEB10										 			
S3-3290	300mm u channel	14	0	04FEB10	23FEB10					i								
	Slope surface protection	20	0	23FEB10	18MAR10					<u> </u>					 			
Feature No. 13N	NE-B/FR68									I I					I I			
S3-3310	Remove existing rubble wall	10	0	23FEB10	06MAR10	-				1					I I			
S3-3320	Recompact slope	14	0	06MAR10	23MAR10					I I					I I			
S3-3330	300mm u channel at toe	14	0	23MAR10	12APR10										<u>+</u>			
Feature No. 13N	NE-B/C115		<u> </u>							I					I I			
			ı		1					I I					I I			
	Install soil nail (136 nos.)	20	0	02JAN09	24JAN09													Install soil
<u> </u>	Pull out tests (5 nos.)	8	0	29JAN09	06FEB09					!					! !			
S3-3360	300mm u channel at toe	14	0	07FEB09	23FEB09										1			
	Slope surface protection	14	0	24FEB09	11MAR09					<u> </u>					 			
Feature No. 13N	NE-B/C116					-									I I			
S3-3380	Install soil nail (75 nos.)	14	0	02APR09	22APR09					i								
S3-3390	Pull out tests (4 nos.)	8	0	23APR09	04MAY09					I I					I I			
S3-3400	300mm u channel at toe	14	0	05MAY09	20MAY09					·					+ I			
S3-3410	Slope surface protection	20	0	21MAY09	13JUN09					I					I I			
Feature No. TC	CR/UF/F/22									1					I			
]				I I					I I			
 	Recompact slope	20	0	21MAY09	13JUN09					1					I I			
	300mm stepped & u channel at crest & toe	20	0	15JUN09	08JUL09					<u> </u>					I 			
Feature No. 13N	NE-B/FR90														I I			
S3-3440	Recompact slope	20	0	09JUL09	31JUL09	1									I I			
S3-3450	300mm stepped & u channel at crest & toe	20	0	01AUG09	24AUG09	1				i					I			
Feature No. 13N															T			
	1		ı							i					I I			
<u> </u>	Install soil nail (33 nos.)	10	0	25AUG09	04SEP09					i I					I I			
S3-3470	Pull out tests (2 nos.)	8	0	05SEP09	14SEP09										 +			
S3-3480	300mm u channel	14	0	15SEP09	30SEP09					I I					I I			
S3-3490	Slope surface protection	20	0	02OCT09	24OCT09					I I					I I			
nish date 30/ ta date 01/ imber/Version Re ige number 7A pject name R1	Summary par Summary point Start milestone point	3	Improv	ement to	o. HY/2003/ Tung Chun ne 01.11.08						0,	Date 1AUG08	Re 3M update	vision	Checked Approve			
Primavera Syster	ms, inc.						-									1		

	Act		Orig	%	Early	Early					2008							2009	
	ID	Description		Comp		Finish	27 03	10	NOV 17	24	01	08	DEC 15	22	29	05	12	JAN 19	26
	eature No. 13	SNE-B/C244									I					I I			
	S3-3500	Install soil nail (89 nos.)	17	0	02OCT09	21OCT09					I					l I			
	S3-3510	Pull out tests (3 nos.)	8	0	22OCT09	31OCT09					I					I I			
	S3-3510	300mm stepped & u channel at crest	20	0	02NOV09	24NOV09										 			
						<u> </u>					I					I I			
	S3-3530	Slope surface protection	20	0	25NOV09	17DEC09										l 			
	eature No. 13	SINE-B/FR85									I I					 			
	S3-3540	Remove existing concrete wall	7	0	25NOV09	02DEC09					I I					 			
	S3-3550	Recompact slope	20	0	03DEC09	28DEC09										 			
	S3-3560	300mm stepped & u channel at toe	20	0	29DEC09	21JAN10										<u>.</u>			
	Feature No. 13	B NE-B/C114		<u> </u>												I I			
			,		,	,					i					I I			
	S3-3570	Install soil nail (136 nos.)	20	0	22JAN10	13FEB10					İ					! !			
	S3-3580	Pull out tests (4 nos.)	8	0	17FEB10	25FEB10										! 			
	S3-3590	Slope surface protection	20	0	26FEB10	20MAR10					İ					I I			
<u> </u>	eature No. 13	BNE-B/C113									i					! 			
	S3-3600	Install soil nail (29 nos.)	11	0	26FEB10	10MAR10					i								
	S3-3610	Pull out tests (2 nos.)	8	0	11MAR10	19MAR10					i					I			
	S3-3620	Reconstruct 300mm u channel	14	0	20MAR10	08APR10													
			20		09APR10	03MAY10					i								
	S3-3630 Feature No. TO	Slope surface protection		0	USAPRIU	USIVIATIO					<u> </u>					I			
	reature No. 10	CR/UF/C/2/									i					I			
	S3-3640	Install soil nail (55 nos.)	12	0	09APR10	22APR10					i								
	S3-3650	Pull out tests (2 nos.)	8	0	23APR10	03MAY10					i					I			
	S3-3660	Slope surface protection	20	0	04MAY10	27MAY10										· 			
	eature No. 13	SNE-B/C243									1					 			
				1							I					I I			
	S3-3670	Install soil nail (16 nos.)	10	0	24FEB09	06MAR09					I					I I			
	S3-3680	Pull out test (1 nos.)	8	0	07MAR09	16MAR09					_					 +			
	S3-3690	300mm u channel at toe	14	0	17MAR09	01APR09					I I					I I			
	S3-3700	Slope surface protection	20	0	02APR09	29APR09										I L			
	Jtilities										I					I I			
	S3-3800	Utilities installation	540	0	22JAN10	31JUL11					I					I I			
Secti	on 3A	Ounited installation			220/1110	JOULIT					I I					I.			
											I I					I I			
	andscaping										I I					I I			
	S3-3805	Landscape softworks	124	0	01APR10 *	31AUG10					I					I I			
	Establishment v		'-'		017111110	01/10010					I					I I			
	- Stabilor II Tione										I					I I			
	S3-3810	Establishment Works for Section 3A(claim no.084)	719	0	01SEP10 *	30AUG12					I I					I I			
	efined Section										I					I I			
	ne B (CH. 156 Straining & De	%5 - 2130) In the structure SD 2-5									I					I I			
Start	late 28	8JUN04 Early bar														Date		vision	Checked Approved
Finish Data o	date 30	0AUG12 Progress bar													0.	1AUG08	3M update		
Numb	er/Version Renumber 8/	evision 15 Critical bar					Co	ntract No.	. HY/2003/1	9									
		■ Summary point Start milestone point					Improv	ement to	Tung Chung	g Road									
c F	rimavera Syste		3	M Rolling F	Programm	e 01.11.08	to 31.01.09												
																			





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 2009

Approved Project Cost: \$688.5 Million

Monthly Summary Waste Flow Table for Year 2007

Year	Ac	tual Quantities	s 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 in the Contract	Reused in other Projects	Disposed as Public Fill	M	etals	Paper/ca packs	ardboard aging	Plas	tic ⁽²⁾	Chemical Waste	Site clearance waste ⁽³⁾	Others, e.g. general refuse (in 10 ³ m ³)				
	(a)	(b)	(c)	(d)	(e)	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal	Timber Waste			
Jan	4.937	0	14.520	0.540	1.397	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	73.61	1.5	0			
Feb	4.135	0	8.746	3.540	1.496	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	34.21	1.5	0			
Mar	4.954	0	9.978	3.560	2.975	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	173.27	2.0	0			
Apr	2.976	0	9.010	0	0.911	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	84.83	2.2	0			
May	3.513	0	10.156	0	1.555	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	101.24	1.3	0			
Jun	5.882	0	11.020	0	8.588	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	52.51	1.7	0			
Sub-Total	26.397	0	63.430	7.640	16.922	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	519.67	10.2	0			
July	3.458	0	10.240	0	1.287	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	85.11	1.140	0.060			
Aug	3.627	0	11.144	0	0.946	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	91.00	1.710	0.090			
Sept	4.350	0	13.336	0	1.165	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	54.58	1.615	0.085			
Oct	4.122	0	12.242	0	1.497	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	72.81	1.710	0.090			
Nov	3.116	0	8.747	0	1.640	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	180.53	1.995	0.105			
Dec	3.392	0	10.234	0	1.072	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	63.99	2.090	0.110			
Total	48.462	0	129.373	7.640	24.529	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	1003.70	16.260	0.540			

Note:

^{*} Very small quantity of aluminum can, cardboard package and plastic bottle generated from site office were collected by the local resident.

⁽¹⁾ Broken concrete for recycling into aggregates

⁽²⁾ Plastics refer to plastic bottles/containers, plastic sheets/foam from package material.

⁽³⁾ Site clearance waste refers to vegetation and construction debris.

⁽⁴⁾ Please note that the total quality generated is not equivalent to the summation of the items in column (b) to (e) as part of the quality of the reused material (column c) had been counted already.

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

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

Construction Completion Date: December 2009

Approved Project Cost: \$688.5 Million

Monthly Summary Waste Flow Table for Year 2008

Year	Ac	ctual Quantities	s 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 in the Contract	Reused in other Projects	Disposed as Public Fill	М	etals	Paper/ca	ardboard aging	Plastic ⁽²⁾		Chemical Waste	Site clearance waste ⁽³⁾	Others, e.g. g (in 10	eneral refuse ³ m ³)			
	(a)	(b)	(c)	(d)	(e)	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal	Timber Waste			
Jan	1.230	0	1.128	0	0.102	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	73.61	1.235	0.065			
Feb	1.875	0	0.762	0	1.113	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	34.21	1.425	0.075			
Mar	1.064	0	0.858	0	0.206	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	56.82	1.520	0.080			
Apr	0.994	0	0.765	0	0.229	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	84.54	1.900	0.100			
May	1.335	0	1.020	0	0.315	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	78.21	1.752	0.095			
Jun	0.755	0	0.467	0	0.288	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	86.76	1.895	0.124			
Sub-Total	7.253	0	4.997	0	2.253	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	414.15	9.727	0.539			
July	0.953	0	0.685	0	0.268	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	96.88	2.036	0.098			
Aug	2.875	0	5.978	0	0.758	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	89.33	2.189	0.127			
Sept	1.954	0	1.628	0	0.985	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	85.66	2.078	0.213			
Oct	2.543	0	1.829	0	1.075	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	95.67	2.457	0.478			
Nov																		
Dec		_	_						_		_		_					
Total	15.573	0	15.109	0	5.325	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	781.69	18.487	1.448			

Note:

- (1) Broken concrete for recycling into aggregates
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from package material.
- (3) Site clearance waste refers to vegetation and construction debris.
- (4) Please note that the total quality generated is not equivalent to the summation of the items in column (b) to (e) as part of the quality of the reused material (column c) had been counted already.

^{*} Very small quantity of aluminum can, cardboard package and plastic bottle generated from site office were collected by the local resident.