Territory Development Department

NT EAST Development Office

Sha Tin New Town, Stage II

Route 9 between Cheung Sha Wan and Sha Tin – Entrusted Portion

Environmental Monitoring and Audit Monthly Report (Version 1)

March 2003

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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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

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 HVS	Environmental Team High Volume Sampler
IEC	Independent Environmental Checker
RE	Resident Engineer
RH	Relative Humidity
TSP	Total Suspended Particulates
TDD	Territory Development Department
QA/QC	Quality Assurance / Quality Control
SLM	Sound Level Meter
WMP	Waste Management Plan

EXECUTIVE SUMMARY

Introduction

This is the fourth monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the project "Sha Tin New Town, Stage II Route 9 between Cheung Sha Wan and Sha Tin – Entrusted Portion" (the Project). This report documents the findings of EM&A Works conducted in March 2003.

The construction activities undertaken in the reporting month were:

- Site clearance works
- Ground investigation works
- Tree felling works
- Excavation works

Environmental Monitoring Works

Environmental monitoring for the Project was performed regularly as stipulated in the EM&A Manuals 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.

Air Quality

1-hour TSP Monitoring

All 1-hour TSP monitoring was conducted as scheduled except for the monitoring at Station A3 on 4th March 2003. The monitoring was suspended due to bad weather and rescheduled to 5th March 2003. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

All 24-hour TSP monitoring was conducted as scheduled and all the results complied with the Action and Limit Levels in the reporting month.

Construction Noise

All construction noise monitoring was conducted as scheduled except for the monitoring at Station N6 on 4th March 2003. The monitoring was suspended due to bad weather and rescheduled to 5th March 2003. No Limit Level exceedance was recorded in the reporting month.

Environmental Licensing and Permitting

License/Permits granted to the Project include the Environmental Permit (EP), Construction Noise Permits (CNP) and Waste Disposal (Chemical Waste) License.

Complaints and Prosecutions

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

Future Key Issues

Excavation works, site clearance works and site formation works will be the major construction activities for the coming month. The anticipated environmental impact will be mainly on dust and noise due to earthworks.

1. INTRODUCTION

Background

1.1 Route 9 (Sha Tin Section) (R9S) (hereinafter call the Project) forms part of the Route 9 between Cheung Sha Wan and Sha Tin project, which will be a new expressway connecting west Kowloon and Sha Tin. It will be the fourth external link between Sha Tin and Kowloon and will form an important link between the northeast New Territories and the west Kowloon, Lantau Island and the western New Territories. The Project, the entrusted portion of the Route 9 project, is being managed and implemented by Territory Development Department (TDD).

1.2 The Project works mainly comprise the site formation for a toll plaza at the valley of Sha Tin Heights, the construction of 1 km long dual three-lane tunnels under Sha Tin Heights, a 0.6 km long dual two-lane tunnel approach road in Tai Wai, two slip road viaducts with approximately total length of 1 km connecting to Che Kung Miu Road, associated noise barriers and noise enclosures, drainage, slope works and landscape woks. The remainder of the Route 9 (Main Portion, R9K) project forms the Kowloon Section and is being managed and implemented separately by Highways Department.

1.3 The Route 9 (between Cheung Sha Wan and Sha Tin) project is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 449, EIAO). An environmental impact assessment (EIA) report has been prepared in 1998 for the Route 9 project to consider the key issues of noise, air quality, water quality, ecological, construction waste, landscape and visual, land use and culture impacts, and identify possible mitigation measures. An updated Final EIA report was subsequently completed in August 1999 to cater for some changes in the main portion. The 1998 and 1999 Route 9 EIA (R9 EIA Reports) reports were included in the EIA register under the EIAO as report number EIA-135/BC and AEIAR-022/1999 respectively. EM&A Manuals for each of the R9 EIA reports were also included as part of the EIA reports in the register.

1.4 Subsequent to the endorsement of the R9 EIA reports by EPD in November 1999, the R9 project was deferred to start in 2002/2003 for completion by 2006/07. The implementation of the Route 9 project was then separated into the R9S and R9K portions. Meanwhile further design amendments had also been proposed for the R9S during the detailed design stage to resolve various engineering constraints. In view of these changes, an Environmental Review on the R9S was undertaken to update the findings of the R9 EIA reports. The Environmental Review report for R9S was completed in September 2001 and an Environmental Permit No. EP-104/2001 was issued on 4th October 2001 for the Project.

1.5 The works of the R9S is constructed under TDD's construction Contract No. ST 89/02 "Route 9 – Sha Tin Heights Tunnel and Approaches". The site layout of the Project is shown in Figure 1. The Project works were commenced on 18th November 2002.

1.6 Cinotech Consultants Limited (Cinotech) was commissioned by TDD to undertake the Environmental Team (ET) Services for the Project. This is the fifth monthly EM&A report summarizes the EM&A works for the Project in March 2003.

Project Organizations

1.7 Different parties with different levels of involvement in the project organization include:

- Project Proponent – TDD, NT East Development Office
- Engineer or Engineer's Representative (E/ER) – Maunsell Consultants Asia Limited (MCAL)
- Environmental Team (ET) – Cinotech Consultants Limited
- Independent Environmental Checker (IEC) – CH2M HILL (China) Limited
- Contractor - China State – China Railway Joint Venture

1.8 The responsibilities of respective parties are detailed in Section 2 of the EM&A Manual (1998) and Section 1.8 of the EM&A Manual (1999). The project organization chart is presented in Figure 3.

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

Table 1.1 Key Project Contacts

Party	Name	Role	Phone No.	Fax No.
TDD	Mr. C.W. Kam	Permit Holder	2301 1383	2739 0076
	Mr. W.P. Fan	Project Coordinator	2301 1586	2721 8630
	Mr. Robert Choy		2301 1373	2721 8630
MCAL	Mr. John M Slater	The Engineer	2685 6517	2691 2649
	Ir. Y. H. Fung	Engineer's Representative	9400 8208	2602 2655
	Mr. Thomas Yan		9756 1055 / 2607 7336	2602 2655
ET	Dr. Priscilla Choy	The ET Leader	2151 2083	3107 1388
	Mr. K.K. Chan	Audit Team Leader	2151 2077	3107 1388
	Mr. Henry Leung	Monitoring Team Leader	9779 7340	3107 1388
IEC	Mr. David Yeung	Independent Environmental Checker	2507 2203	2507 2293
Contractor	Mr. Dave Chan	Construction Manager	9027 4422	2697 1592

Construction Programme

1.10 The construction activities undertaken in the reporting month were:

- Site clearance works
- Ground investigation works
- Tree felling works
- Excavation works

Summary of EM&A Requirements

1.11 The EM&A programme requires construction phase monitoring for air quality and construction noise and environmental site audit. The EM&A requirements for each parameter are described in following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event / Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report;
- Environmental requirements in contract documents.

1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.

1.13 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely dust and noise levels and audit works for the Project in March 2003.

2. AIR QUALITY

Monitoring Requirements

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

Monitoring Locations

2.2 Two designated monitoring stations, A2 and A3 were selected for impact dust monitoring. Table 2.1 describes the air quality monitoring locations, which are also depicted in Figures 2a and 2b.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Stations	Description
A2	Lau Pak Lok Secondary School
A3	Shatin Heights

Monitoring Equipment

2.3 Table 2.2 summarizes the equipment used in the impact air monitoring programme. Copies of calibration certificates are attached in Appendix B.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator	G25A; S/N: 1536	1
1-hour TSP Dust Meter	Laser Dust Monitor – Model LD3	2
HVS Sampler	GMWS 2310 c/w of TSP sampling inlet	2

Monitoring Parameters, Frequency and Duration

2.4 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	Three times / 6 days
24-hr TSP	Once / 6 days

Monitoring Methodology and QA/QC Procedure

1-hour TSP Monitoring

Measuring Procedures

2.5 The measuring procedures of the 1-hour dust meters were in accordance with the Manufacturer's Instruction Manual as follow:

- Pull up the air sampling inlet cover
- Change the Mode 0 to BG with once
- Push Start/Stop switch once
- Turn the knob to SENSI.ADJ and press it
- Push Start/Stop switch once
- Return the knob to the position MEASURE slowly
- Push the timer set switch to set measuring time
- Remove the cap and make a measurement

Maintenance/Calibration

2.6 The following maintenance/calibration was required for the direct dust meters:

- Check the meter at 3-month intervals and calibrate the meter at 1-year intervals throughout all stages of the air quality monitoring.

24-hour TSP Monitoring

Instrumentation

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

Operating/Analytical Procedures

2.8 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.

2.9 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m^3/min. and 1.4 m^3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

2.10 For TSP sampling, fiberglass filters (G810) were used [Note: these filters have a collection efficiency of > 99% for particles of 0.3 mm diameter].

2.11 The power supply was checked to ensure the sampler worked properly.

2.12 On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.

2.13 The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen.

2.14 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.

2.15 The shelter lid was closed and secured with the aluminum strip.

2.16 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).

2.17 After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.

2.18 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

2.19 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 3-month intervals using GMW-25 Calibration Kit throughout all stages of the air quality monitoring.

Results and Observations

2.20 Dust monitoring was conducted as scheduled in the reporting period, except for 1-hour TSP monitoring at Station A3 on 4th March 2003. The monitoring work was suspended due to bad weather and re-scheduled to 5th March. The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in Appendices D and E respectively.

2.21 Wind data monitoring equipment has been installed in monitoring station A3 for logging wind speed and wind direction. These wind data for the reporting month is summarized in Appendix G.

2.22 The weather during the monitoring session was mainly sunny or cloudy. Weather conditions on the monitoring days are provided in Appendices D and E.

1-hour and 24-hour TSP Monitoring

2.23 All monitoring data complied with the Action and Limit Levels. No exceedance was reported.

2.24 According to our field observations, the identified dust sources were mainly from construction activities at other sites.

3. NOISE

Monitoring Requirements

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

Monitoring Locations

3.2 Noise monitoring was conducted at four designated monitoring stations, namely N5, N6, N7 and N8, as summarized in Table 3.1. Figures 2a and 2b show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Description
N5	At the podium of Garden Villa
N6	On the roof of Shatin Heights
N7	On the roof of Lau Pak Lok Secondary School
N8	At the ground of 187 Tin Sam Tsuen

Monitoring Equipment

3.3 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	Qty.
Integrating Sound Level Meter	B&K Model 2238	4
Calibrator	B&K 4231	2
Wind Speed Anemometer	Vane Anemometer, Model 451104	1

Monitoring Parameters, Frequency and Duration

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

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2 m above the ground.
- The battery condition was checked to ensure the correct functioning of the meter.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency	Measurement
N5	L_{10}(30 min.)dB(A) L_{90}(30 min.)dB(A) L_{eq}(30 min.)dB(A)	0700-1900 hrs. on weekdays	Once per week	Facade
N6				Facade
N7				Facade
N8				Facade

- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - frequency weighting : A
  - time 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 re-calibration 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

3.5 The microphone head of the sound level meter and calibrator was cleaned with soft cloth regularly.

3.6 The meters were sent to the supplier to check and calibrate on yearly intervals.

Results and Observations

3.7 Noise monitoring was performed at the four designated locations during the daytime period (0700 to 1900) as scheduled in the reporting month, except for the monitoring at Station N6 on 4th March 2003. The monitoring was suspended due to bad weather and re-scheduled to 5th March 2003. Results and graphical presentations are shown in Appendix F.

3.8 The weather during the monitoring sessions was mainly sunny or cloudy. Weather conditions are provided in Appendix F.

3.9 No Limit Level exceedance was reported at all designated monitoring stations in the reporting month. The major noise source identified at these designated stations was traffic noise.

4. ENVIRONMENTAL AUDIT

Site Audits

4.1 Site audits were carried out on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.

4.2 Site audits were conducted on 6th, 13th, 20th and 27th March 2003. The summaries of site audits are attached in Appendix H.

Review of Environmental Monitoring Procedures

4.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been 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 and weather conditions on the monitoring days.

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.

Status of Environmental Licensing and Permitting

4.4 All permits/licenses obtained are summarized in Table 4.1.

Implementation Status of Environmental Mitigation Measures

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

Water Quality

4.6 It was observed that stand water was accumulated in the site office area and in Portion 3A on 27th March 2003.

Table 4.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Section	Status
	From	To		
Environmental Permit				
EP-104/2001 * a copy was attached in the monthly report of November 2002	04/10/01	N/A	Site formation, drainage, geotechnical and landscape works for the toll plaza. Construction of the Sha Tin Heights Tunnels, the Sha Tin Approach Roads and the Slip Road Connecting to Che Kung Miu Road including all formation, structure, road, geotechnical, drainage and landscape work. Construction of the structure of the portal buildings of the Sha Tin Heights Tunnel and noise mitigation measures.	Valid
Construction Noise Permit				
GW-TN0504-2002 * a copy was attached in the monthly report of December 2002	29/12/02	28/6/03	The use of powered mechanical equipment for the purpose of carrying out construction work other than percussive piling at Portion 2C.	Valid
GW-TN0038-2003 * a copy was attached in the monthly report of February 2003	21/2/03	20/8/03	The use of powered mechanical equipment for the purpose of carrying out construction work other than percussive piling at Portion 1.	Valid
Waste Disposal (Chemical Waste)				
WPN: 5213-754-C3250-01 * a copy was attached in the monthly report of February 2003	N/A	N/A	Disposal of chemical waste such as waste lubricating oil and diesel oil arising from construction work.	Valid

Air Quality

4.7 No violation was observed during site inspections.

Noise

4.8 No violation was observed during site inspections.

Chemical and Waste Management

4.9 It was observed that rubbish was accumulated on 6th March 2003 and 27th March 2003.

4.10 Oil leakage from an excavator and oil tanks placed on bare ground were observed on 20th March 2003.

Permit / Licenses

4.11 The obtained permit and licenses were found not posting at the site office entrance on 6th March 2003. The situation has been rectified in the follow-up audit session.

Environmental Mitigation Implementation Schedule (EMIS)

4.12 According to the Environmental Permit and the EM&A Manuals, the mitigation measures detailed in the documents are required to be implemented. An updated summary of the EMIS is presented in Appendix J.

Summary of Exceedances of the Environmental Quality Performance Limit

4.13 No non-compliance (exceedance) was recorded during the reporting period.

Implementation Status of Event Action Plans

4.14 The Event Action Plans for air quality and noise are presented in Appendix I.

4.15 No exceedance of Action/Limit Levels for 1-hour TSP and 24-hour TSP concentrations was reported in the month.

4.16 No exceedance of noise limit level was recorded. No action was required to be carried out.

Summary of Complaints and Prosecutions

4.17 No environmental complaint and prosecution related to the Project works was received since the commencement of the Project.

5. FUTURE KEY ISSUES

Key Issues for the Coming Month

5.1 Key issues to be considered in the coming month include:

- Generation of dust from stockpiles, haul road and vehicles movement on-site.
- Noise from operation of the equipment and machinery on-site.
- Ineffective use of sand traps and/or baffles.
- Regular removal of mud, sand and silt along u-channels.
- Wastewater discharge from site.
- Storage of chemicals/fuel and chemical waste/waste oil on site.

Monitoring Schedule for the Next Month

5.2 The tentative environmental monitoring schedule for the next month is shown in Appendix C.

Construction Program for the Next Month

5.3 The tentative construction program for the Project is provided in Appendix K.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

6.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.

6.2 Environmental monitoring of air quality for the Project was performed as scheduled, except 1-hour monitoring at Station A3 on 4th March 2003. No exceedance of Action and Limit Levels was recorded.

6.3 Construction noise monitoring was performed as scheduled except the monitoring at Station N6 on 4th March 2003. No exceedance of noise Limit Level was recorded in the reporting month.

6.4 No environmental complaint and prosecution was received since the commencement of the Project.

Recommendations

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

Dust Impact

- To prohibit any open burning on site.
- To regularly maintain the machinery and vehicles on site.
- To follow up any exceedance caused by the construction works.
- To implement dust suppression measures on all haul roads, stockpiles and dry surfaces.
- To provide hoarding in Che Kung Miu Road.

Noise Impact

- To inspect the noise sources from inside and outside of the site.
- To follow up any exceedance caused by the construction works.
- To space out noisy equipment and position as far away as possible from sensitive receivers.
- To provide temporary noise barriers for operations of noisy equipment near the noise sensitive receivers.

Water Impact

- To identify any wastewater discharges from site.
- To regularly maintain the condition of u-channel, catch pits and wheel washing facilities on site.
- To regularly maintain the sediment control measures after rainstorms.

Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site.
- To avoid any discharge of chemical waste or oil directly from the site.
- To remove ponding water regularly in drip trips on site.

Table 1.1 Key Project Contacts

Party	Name	Role	Phone No.	Fax No.
TDD	Mr. C.W. Kam	Permit Holder	2301 1383	2739 0076
	Mr. W.P. Fan	Project Coordinator	2301 1586	2721 8630
	Mr. Robert Choy		2301 1373	2721 8630
MCAL	Mr. John M Slater	The Engineer	2685 6517	2691 2649
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IEC	Mr. David Yeung	Independent Environmental Checker	2507 2203	2507 2293
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Table 2.1 Locations for Air Quality Monitoring

Monitoring Stations	Description
A2	Lau Pak Lok Secondary School
A3	Shatin Heights

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator	G25A; S/N: 1536	1
1-hour TSP Dust Meter	Laser Dust Monitor – Model LD3	2
HVS Sampler	GMWS 2310 c/w of TSP sampling inlet	2

Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration

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

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Description
N5	Garden Villa
N6	Shatin Heights
N7	Lau Pak Lok Secondary School
N8	187 Tin Sam Tsuen

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Equipment	Model and Make	Qty.
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Construction Noise Permit				
GW-TN0504-2002 * a copy was attached in the monthly report of December 2002	29/12/02	28/6/03	The use of powered mechanical equipment for the purpose of carrying out construction work other than percussive piling at Portion 2C.	Valid
GW-TN0038-2003 * a copy was attached in the monthly report of February 2003	21/2/03	20/8/03	The use of powered mechanical equipment for the purpose of carrying out construction work other than percussive piling at Portion 1.	Valid
Waste Disposal (Chemical Waste)				
WPN: 5213-754-C3250-01 * a copy was attached in the monthly report of February 2003	N/A	N/A	Disposal of chemical waste such as waste lubricating oil and diesel oil arising from construction work.	Valid