



Territory Development Department

Contract No. ST77/01

**Sha Tin New Town, Stage II
Road D15 Linking Lok Shun Path
and Tai Po Road**

**Monthly Environmental Monitoring & Audit Report -
April, 2004**

May, 2004

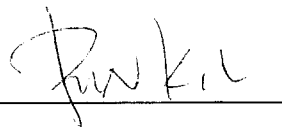


Environmental Management Limited
美華環協管理有限公司

**Sha Tin New Town, Stage II Road D15 Linking Lok Shun Path and
Tai Po Road (Contract No. ST 77/01)**

**Monthly Environmental Monitoring & Audit Report –
April 2004**

Checked in accordance with EML QA Procedure PQP-04
Environmental Team Leader

A handwritten signature in black ink, appearing to read 'Pun Kil', is written over a horizontal line.

EXECUTIVE SUMMARY

This impact environmental monitoring report has been prepared by Environmental Management Limited (EML) for Environmental Monitoring & Audit (EM&A) Services of Sha Tin New Town, Stage II Road D15 Linking Lok Shun Path and Tai Po Road. The EM&A services carried out in April 2004 are included in this report.

The environmental monitoring for this Project included both air quality and noise measurements. The parameters measured for air quality were 24-hour and 1-hour Total Suspended Particulate (TSP) and for noise monitoring were the A-weighted continuous sound pressure level (L_{eq}) and percentile levels (L_{10} and L_{90}).

Over the reporting period, all monitored 24-hour TSP, 1-hour TSP and noise ($Leq(5min)$) monitoring data were below the Action and Limit Levels and no remedial actions as listed in the Event and Action Plan (**Appendix G**) were required.

The major construction activities in this reporting period included:

- Construction of Bridges A, B and C, including bridge decks (Bridges A, B and C), installation of precast beams of Bridge A;
- Retaining walls 1, 2, 7 and 12;
- Noise barrier construction for noise barrier No. 1 and noise barrier No. 4B;
- Box culvert extension of 1500 pipe;
- Underground drainage and water pipes at Lok Shun Path Roundabout; and
- Construction of staircases 1, and 12.

Over the reporting period, one exceedance in Action Level was noted for the 24-hour TSP level. The exceedance was measured at Station A2 from 09:30 to 09:30 of next day on 19 April 2004. An ad-hoc site inspection was carried out on 21 April 2004 by ET, MCAL and BCCL to investigate the matter. It was noted that at the time of the site inspection, general site work was carried out near Station A2. No particular dust issues were observed on site. The high measured levels would be caused by the dust generated by the haulage and delivery vehicles crossing Bridge C on 19 April during the backfilling works of the abutment between B1 and B2.

The Contractor was reminded that proper dust control measures should be implemented as stated in Environment Monitoring Checklist Item nos. A8, A9 and A10, in particular where a vehicle leaving and entering the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure the dusty materials do not leak from the vehicle, and all dusty materials (except for cement and PFA and for cases where the moisture content is a matter of concern) shall be sprayed with water or a dust suppression chemical immediately prior to loading or unloading or transfer operation so as to maintain the dusty materials wet. Besides, every vehicle immediately before leaving the construction site shall be washed to remove any dusty materials from its body and wheels.

Regular site inspection was conducted in this reporting month and the mitigation measures, as discussed in Section 3.4, were assessed.

In regard to the environmental issues in the last reporting month, it was noted from site inspections that the sand and black mud at Lok Shun Path Roundabout were cleared. In addition, the watermain leakage near Retaining Wall No. 12 had been rectified. Also, construction debris within the site had either been covered with tarpaulin or removed.

In this month, however, stagnant water was observed near noise barrier NB1, Bridge C and retaining wall RW3 which was prone to mosquito breeding. Also, some of the existing u-channels near Staircase 2 were found blocked with debris which may cause flooding in heavy rains. Besides, the existing wheel washing bay had been disused but the new wheel washing bay is yet to be constructed.

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1. INTRODUCTION

1.1 Background

Environmental Management Limited (EML) was appointed by Maunsell Consultants Asia Ltd. as the Environmental Specialist for the project *Sha Tin New Town, Stage II Road Linking Lok Shun Path and Tai Po Road* (Contract No. ST 77/01).

The responsibilities of the Environmental Team are to:

- Monitor the noise and air quality data as required in the Environmental Monitoring and Audit (EM&A) Manual;
- Analyse the monitoring data and review the success of EM&A program to cost effectively confirm the adequacy of mitigatory measures implemented and validity of the Environmental Impact Assessment Study predictions and to identify any adverse environmental impacts arising;
- Carry out site inspection to investigate and audit the Contractor's site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and anticipate environmental issues for proactive action before problems arise;
- Review the proposal for mitigation measures submitted by Contractor in accordance with Event and Action Plans;
- Propose any improvement or other alternative mitigation measures should Contractor's proposal be found to be inadequate;
- Adhere to the procedures for carrying out complaint investigation;
- Audit and prepare EM&A reports on environmental monitoring data and site environmental conditions; and
- Report on EM&A results to Engineer, the ER and EPD.

This monthly EM&A report is for the monitoring period in April 2004. In this report, the results of the impact air quality and noise monitoring works in the reporting period as well as the environmental status and issues of Road D15 Construction Site are included. In addition, if required, any remedial/follow-up actions undertaken as a result of non-compliance with relevant environmental criteria or complaints related to Road D15 Construction Site would also be discussed.

The project area of Road D15 Construction Site is shown in **Figure 1.1**. **Appendix H** lists the project organization and contacts of key personnel.

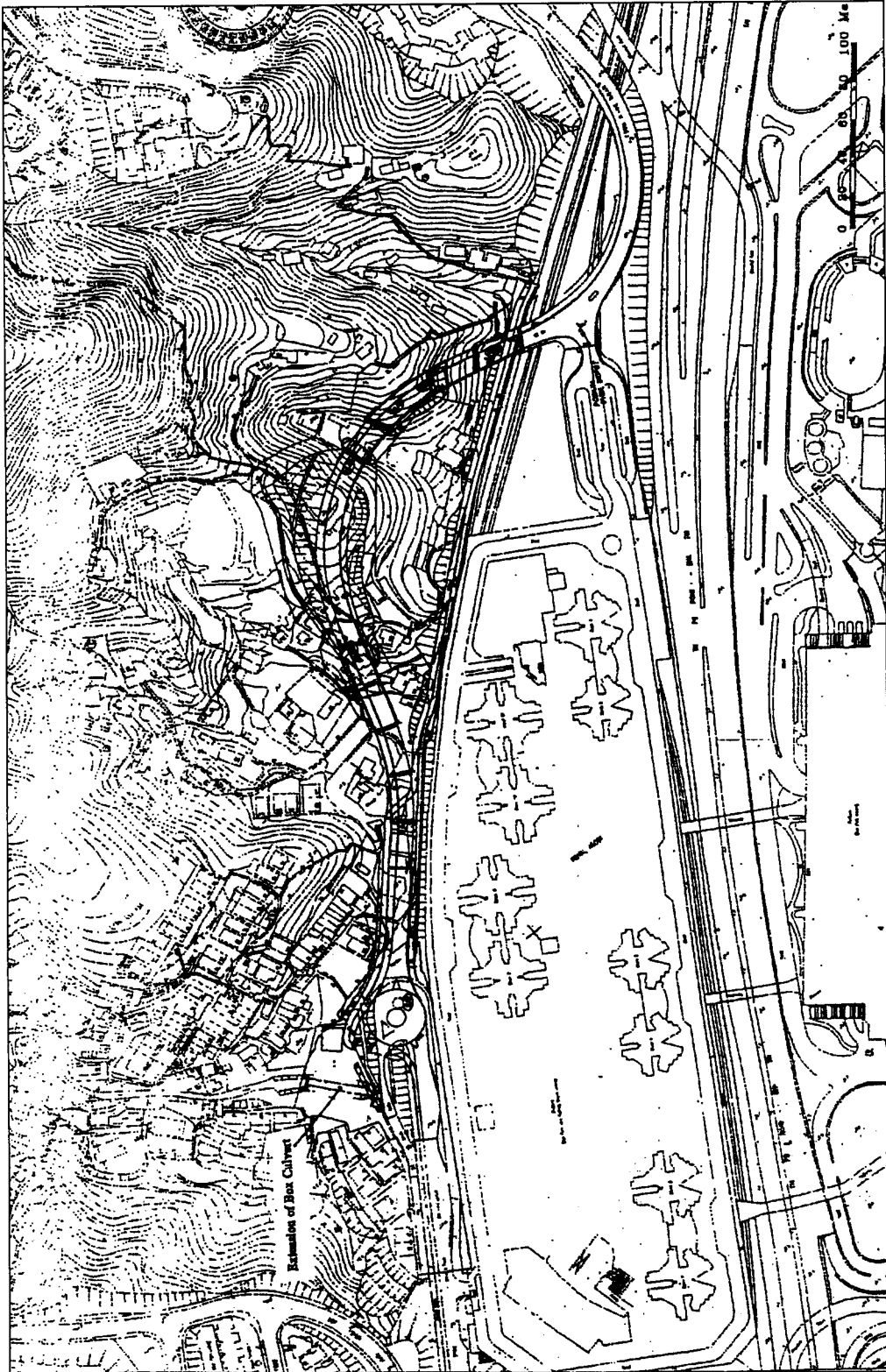


Figure 1.1 Project Area

2. ENVIRONMENTAL STATUS

2.1 Air Quality

2.1.1 Monitoring Requirements

In accordance with the EM&A Manual, air quality impact monitoring was conducted in terms of 1-hour and 24-hour TSP at the designated monitoring locations.

Continuous 24-hour TSP monitoring was performed once in every six days while 1-hour TSP monitoring was performed 3 times in every 6 days. The Action and Limit (AL) levels for air quality are included in **Appendix A**. The time schedule for the current reporting month and the tentative monitoring schedule for the next reporting month are attached in **Appendix B**.

2.1.2 Monitoring Locations

The designated impact air quality monitoring stations are listed in **Table 2.1** and are shown in **Figure 2.1**.

Table 2.1 Air Quality Monitoring Locations

Monitoring Station	Location
A1	Village house at Lok Lo Ha Village
A2	Lok Lo Ha Village House No. 104
A3	Village House near Tsun King Road

2.1.3 Summary of Monitoring Results

In this report, the results for the impact air quality monitoring conducted in April 2004 at the three designated locations were evaluated. **Table 2.2** summarises the ranges and mean of the 24-hour and 1-hour TSP monitoring results carried out in the reporting period. Detailed results, including graphical plots and relevant field logs, are presented in **Appendices C and D**. **Appendix F** shows the meteorological conditions during the monitoring days.

Table 2.2 Summary of 24 and 1-hour TSP Monitoring Results

Parameter	Monitoring Location	Mean TSP Levels ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	No. of Exceedance	
				Action Levels	Limit Levels
24 – hour TSP	A1	113.8	46 – 152	0	0
	A2	115.7	62 – 165	1	0
	A3	120.8	61 – 151	0	0
1 – hour TSP	A1	155.6	90 – 233	0	0
	A2	169.8	80 – 285	0	0
	A3	182.7	116 – 273	0	0

From **Table 2.2** above, one measured 24-hour TSP monitoring data at Station A2 had exceeded the relevant Action Level shown in **Appendix A**. The measured level of $165\mu\text{g}/\text{m}^3$ was $10\mu\text{g}/\text{m}^3$ above the Action Level on 19 April 2004 (Time: 09:30 to 09:30 of next day). Consequently, the Event and Action Plan for Air Quality as set out in **Appendix G** was triggered. Details are discussed in **Section 3.2** of this report.

Over the reporting period, the local weather conditions during the monitoring were mainly fine or cloudy. From field logs, the major dust sources during samplings near the designated stations

included road dusts, vehicle emissions from traffic in Lok Shun Path and construction works at Road D15 Site. The major construction works carried out at Road D15 Site over the reporting period included construction of Bridges A, B and C, retaining walls, noise barrier, box culvert extension, underground drainage and water pipes and staircases. It was also observed that there were construction activities carried out on the other construction sites that were not related to this Project in the vicinity of the monitoring stations.

Comparing with the monitoring results from those of the last month, the calculated mean 24-hour at all stations were slightly higher in this reporting month, while the calculated mean 1-hour TSP levels at all stations were lower. The highest mean TSP level was recorded at Station A3 (1-hour TSP) with a value of $182.7\mu\text{g}/\text{m}^3$ which was lower than the value of $202.8\mu\text{g}/\text{m}^3$ recorded in March.



Figure 2.1 Air Quality Monitoring Locations

2.2 Noise

2.2.1 Monitoring Requirements

Impact noise monitoring was conducted once in every six days at the five designated monitoring locations in accordance with the specifications in the EM&A Manual. The duration of sampling was 30 minutes. The Action and Limit levels for noise monitoring are attached in **Appendix A**. The time schedule for the current monitoring reporting month and the tentative monitoring schedule for the next reporting month are attached in **Appendix B**.

2.2.2 Monitoring Locations

The impact noise monitoring locations are presented in **Table 2.3** and are shown in **Figure 2.2**.

Table 2.3 Noise Monitoring Locations

Monitoring Location	Measurement	Location
N1	Façade	Lok Lo Ha Village House No. 3B
N2	Façade	Lok Lo Ha Village House No. 32A
N3	Façade	Royal Ascot Block 9, Flat C
N4	Façade	Lok Lo Ha Village House No. 97
N5	Façade	Village near Royal Ascot

2.2.3 Summary of Monitoring Results

In this report, the results for the impact noise monitoring conducted in April 2004 at the five designated locations were evaluated. The monitoring results obtained are summarised in **Table 2.4**. Detailed results, including graphical plots and relevant field logs, are presented in **Appendix E**. **Appendix F** shows the meteorological conditions during the monitoring days.

Table 2.4 Summary of Noise Monitoring Results

Parameter	Monitoring Location	Range of Results dB(A)	No. of Exceedance	
			Action Levels	Limit Levels
30-minute Noise Measurement (Leq)	N1	59.6 – 67.1	0	0
	N2	58.4 – 62.0	0	0
	N3	51.5 – 56.9	0	0
	N4	57.5 – 63.5	0	0
	N5	57.5 – 61.0	0	0

In **Table 2.4**, all the recorded noise monitoring data were below the criteria as set out in the Action and Limit Levels in **Appendix A**. There was no exceedance of noise level at all the monitoring stations during the month of April 2004.

Over the reporting period, the local weather conditions during the sampling were mainly fine or cloudy. All the monitoring was conducted with wind speeds of about 0.5 m/s. Traffic and construction activities were the major noise sources identified at the five monitoring locations. It was noted from field log that activities of excavating and breaking were present in the vicinity of the monitoring stations during the monitoring period.

Comparing with the monitoring results recorded in the last reporting period, the ranges of measured noise levels during this reporting month were not significantly different from those in

March. The highest level was recorded at Station N1 (67.1 dB(A)) and occurred in the morning of 20 April. According to the field log, the major noise source at that time was excavation work as well as traffic noise.



Figure 2.2 Noise Monitoring Locations

3. ENVIRONMENTAL AUDIT

3.1 General

In the last monthly EM&A report, the following three environmental issues were raised:

- Sand and black mud was found accumulated at Lok Shun Path Roundabout and should be cleared.
- Watermains leakage was found near Retaining Wall No. 12 and should be rectified immediately.
- Construction waste and debris near Bridge B, site boundary near headwall and between Piers C1 and C2 should be covered with tarpaulin and removed once the site access is reopened.

It was noted from site inspections that the sand and black mud at Lok Shun Path Roundabout were cleared. In addition, the watermains leakage near Retaining Wall No. 12 had been rectified. Also, construction debris within the site had either been covered with tarpaulin or removed.

Table 3.1 summarises the date and type of site inspections carried out during the reporting period.

Table 3.1 Summary of Site Inspection during the Reporting Period

Date	Type of Inspection
1 April 2004 (Thursday)	Regular Site Inspection
8 April 2004 (Thursday)	Regular Site Inspection
15 April 2004 (Thursday)	Regular Site Inspection
21 April 2004 (Wednesday)	Regular Site Inspection
29 April 2004 (Thursday)	Regular Site Inspection

Over the reporting period, the major construction work at the Site included:

- Construction of Bridges A, B and C, including bridge decks (Bridges A, B and C), installation of precast beams of Bridge A;
- Retaining walls 1, 2, 7 and 12;
- Noise barrier construction for noise barrier No. 1 and noise barrier No. 4B;
- Box culvert extension of 1500 pipe;
- Underground drainage and water pipes at Lok Shun Path Roundabout; and
- Construction of staircases 1, and 12

3.2 Assessment of Environmental Monitoring Results

In this reporting month, there was one incident where the monitoring results exceeded the Action Level specified in **Appendix A**. The exceedance occurred for 24-hour TSP was measured at Station A2 on 19 April 2004. The monitoring results were discussed in Section 2 of this report and are summarised in **Table 3.2** and **Table 3.3** below.

Table 3.2 Summary of Environmental Monitoring

Item	Parameter	Monitoring Period	Total No. of Samples Taken (on all stations)	No. of Exceedance	
				Action Levels	Limit Levels
1	24 – hour TSP	01/4/04 to 30/4/04	18	1	0
2	1 – hour TSP	01/4/04 to 30/4/04	54	0	0
3	30-minute Noise Measurement (Leq)	01/4/04 to 30/4/04	30	0	0

Table 3.3 Summary of Non-Compliance with Relevant Criteria

Location	Parameter	Data & Time of Exceedance	Measured Level ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Type of Exceedance
Lok Lo Ha Village House No.104	24 – hour TSP Measurement ($\mu\text{g}/\text{m}^3$)	19 April (09:30 to 09:30 of next day)	165	155	Action Level (by $10\mu\text{g}/\text{m}^3$)

As shown in **Table 3.3**, the measured level of $165.0 \mu\text{g}/\text{m}^3$ at Station A2 was $10 \mu\text{g}/\text{m}^3$ above the Action Level. Since exceedances in Action Levels had occurred, the Event and Action Plan for Air Quality attached in **Appendix G** was triggered. A site inspection was carried out on 21 April 2004 by ET, MCAL and BCCL to investigate the matter. It was noted that at the time of the site inspection, general site work was carried out near Stations A2 and A3. No particular dust issues were observed on site. The high measured levels would be caused by the dust generated by the haulage and delivery vehicles crossing bridge C on 19 April during the backfilling works of the abutment between B1 and B2.

The Contractor was reminded that proper dust control measures should be implemented as stated in Environment Monitoring Checklist Item nos. A8, A9 and A10, in particular where a vehicle leaving and entering the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure the dusty materials do not leak from the vehicle, and all dusty materials (except for cement and PFA and for cases where the moisture content is a matter of concern) shall be sprayed with water or a dust suppression chemical immediately prior to loading or unloading or transfer operation so as to maintain the dusty materials wet. Besides, every vehicle immediately before leaving the construction site shall be washed to remove any dusty materials from its body and wheels.

3.3 Environmental Complaints

No environmental complaint was received by the Environmental Team against the construction site in this reporting month. **Table 3.4** shows the summary record for this reporting month. **Table 3.5** summarises the complaint statistics from the commencement of the Project to date. **Appendix I** lists details of all the received complaints relating to the activities carried out on the construction site.

Table 3.4 Environmental Complaints / Enquiry Received in the Reporting Month

Complaint No.	Received date & Time	Description (inc. location/nature of complaint)	Follow-up Action Taken	Recommended Mitigation Measures	Status/Remarks
N/a	N/a	N/a	N/a	N/a	N/a

Table 3.5 Summary of Total Number of Complaints Received to date

Total No. of Complaints to date	No. of Complaints in this reporting period	No. of Active Complaints	No. of Inactive/Closed Complaints
2	0	N/a	2

3.4 Assessment of Mitigation Measures

Table 3.6 presents the status of the major mitigation measures identified during site inspection.

Table 3.6 Summary of Major Mitigation Measures at the Site

Type	Mitigation Measure	Comments
Noise	Temporary purposed-built Noise Barrier	No longer required
Water	Wheel Washing Facility	New wheel washing bay being constructed at new location
	Sand/Silt Removal Facilities	No longer required
	Measures along stream-banks north-east of Lok Shun Path Roundabout	No longer required
	Diversion of Stream Course via drainage pipe	Sand trap was installed at downstream end of stream course
Wastewater	Water reuse at wheel washing facility and site investigation drilling works.	No longer implemented
Land Contamination	Metal trays are placed underneath stationary machines where there are potential of oil leakage	Implemented
Air	Provide plastic sheeting covers on exposed soils	Implemented
	Regular water spraying on areas where there is likely generation of dust	Implemented
	Impervious sheeting was placed around the working area near monitoring station A1	Implemented as necessary

In this month, stagnant water was observed near noise barrier NB1, Bridge C and retaining wall RW3 which was prone to mosquito breeding. Also, some of the existing u-channels near Staircase 2 were found blocked with debris which may cause flooding in heavy rains. Besides, the existing wheel washing bay had been disused but the new wheel washing bay is yet to be constructed.

4. FUTURE KEY ISSUE AND RECOMMENDATION

There are three environmental issues that need to be addressed in the next reporting month:

- Stagnant water within the site, especially near noise barrier NB1, Bridge C and retaining wall RW3, shall be removed;
- The existing u-channel near Staircase 2 should be cleared of construction wastes and debris;
- The new wheel washing bay should be constructed as soon as possible.

The updated work program for the following months is attached in **Appendix J**. The monitoring tentative schedule for the next reporting month is attached in **Appendix B**.

APPENDIX A:

Action and Limit Levels

Action and Limit Levels for 24-hour TSP

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
A1	156	260
A2	155	
A3	153	

Action and Limit Levels for 1-hour TSP

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
A1	371	500
A2	378	
A3	368	

Action / Limit Levels for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hours on normal weekdays	When one documented complaint is received	75* dB(A)
0700-2300 hours on holidays; and 1900-2300 hours on all other days		60/65/70** dB(A)
2300- 0700 hours of next day		45/50/55** dB(A)

** to be selected based on Area Sensitivity Rating

Note: If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

APPENDIX B:

**Tentative Schedule for Impact
Air Quality and Noise
Monitoring**

1. Time Schedule for the Current Reporting Month – April 2004

Contract No. ST77/01

Sha Tin New Town, Stage II

Road D15 Linking Lok Shun Path and Tai Po Road

Time Schedule for Construction Phase Dust Monitoring for April 2004

Apr-04	Day	Start Time	
		24-hr TSP	1-hr TSP
1	Thu	09:30	08:00
2	Fri	x	09:50,11:00
3	Sat	x	x
4	Sun	x	x
5	Mon	x	x
6	Tue	x	x
7	Wed	09:30	08:00
8	Thu	x	09:50,11:00
9	Fri	x	x
10	Sat	x	x
11	Sun	x	x
12	Mon	x	x
13	Tue	09:30	08:00
14	Wed	x	09:50,11:00
15	Thu	x	x
16	Fri	x	x
17	Sat	x	x
18	Sun	x	x
19	Mon	09:30	08:00
20	Tue	x	09:50,11:00
21	Wed	x	x
22	Thu	x	x
23	Fri	09:30	08:00
24	Sat	x	x
25	Sun	x	x
26	Mon	x	09:00,11:00
27	Tue	x	x
28	Wed	x	x
29	Thu	09:30	08:00
30	Fri	x	09:50,11:00

Contract No. ST77/01

Sha Tin New Town, Stage II

Road D15 Linking Lok Shun Path and Tai Po Road

Time Schedule for Construction Phase Noise Monitoring for April 2004

Apr-04	Day	Start Time				
		N1	N2	N3	N4	N5
1	Thu	x	x	x	x	x
2	Fri	09:50	11:15	13:00	10:25	09:00
3	Sat	x	x	x	x	x
4	Sun	x	x	x	x	x
5	Mon	x	x	x	x	x
6	Tue	x	x	x	x	x
7	Wed	x	x	x	x	x
8	Thu	09:50	11:15	13:00	10:25	09:00
9	Fri	x	x	x	x	x
10	Sat	x	x	x	x	x
11	Sun	x	x	x	x	x
12	Mon	x	x	x	x	x
13	Tue	x	x	x	x	x
14	Wed	09:50	11:15	13:00	10:25	09:00
15	Thu	x	x	x	x	x
16	Fri	x	x	x	x	x
17	Sat	x	x	x	x	x
18	Sun	x	x	x	x	x
19	Mon	x	x	x	x	x
20	Tue	09:50	11:15	13:00	10:25	09:00
21	Wed	x	x	x	x	x
22	Thu	x	x	x	x	x
23	Fri	x	x	x	x	x
24	Sat	x	x	x	x	x
25	Sun	x	x	x	x	x
26	Mon	09:50	11:15	13:00	10:25	09:00
27	Tue	x	x	x	x	x
28	Wed	x	x	x	x	x
29	Thu	x	x	x	x	x
30	Fri	09:50	11:15	13:00	10:25	09:00

2. Tentative Schedule for the Next Reporting Month – May 2004

Contract No. ST77/01

Sha Tin New Town, Stage II

Road D15 Linking Lok Shun Path and Tai Po Road

Tentative Time Schedule for Construction Phase Dust Monitoring for May 2004

Apr-04	Day	Start Time	
		24-hr TSP	1-hr TSP
1	Sat	x	x
2	Sun	x	x
3	Mon	x	x
4	Tue	x	x
5	Wed	09:30	08:00
6	Thu	x	09:50,11:00
7	Fri	x	x
8	Sat	x	x
9	Sun	x	x
10	Mon	x	x
11	Tue	09:30	08:00
12	Wed	x	09:50,11:00
13	Thu	x	x
14	Fri	x	x
15	Sat	x	x
16	Sun	x	x
17	Mon	09:30	08:00
18	Tue	x	09:50,11:00
19	Wed	x	x
20	Thu	x	x
21	Fri	09:30	08:00
22	Sat	x	x
23	Sun	x	x
24	Mon	x	09:50,11:00
25	Tue	x	x
26	Wed	x	x
27	Thu	09:30	08:00
28	Fri	x	09:50,11:00
29	Sat	x	x
30	Sun	x	x
31	Mon	x	x

Contract No. ST77/01
 Sha Tin New Town, Stage II
 Road D15 Linking Lok Shun Path and Tai Po Road
 Tentative Time Schedule for Construction Phase Noise Monitoring for May 2004

Apr-04	Day	Start Time				
		N1	N2	N3	N4	N5
1	Sat	x	x	x	x	x
2	Sun	x	x	x	x	x
3	Mon	x	x	x	x	x
4	Tue	x	x	x	x	x
5	Wed	x	x	x	x	x
6	Thu	09:50	11:15	13:00	10:25	09:00
7	Fri	x	x	x	x	x
8	Sat	x	x	x	x	x
9	Sun	x	x	x	x	x
10	Mon	x	x	x	x	x
11	Tue	x	x	x	x	X
12	Wed	09:50	11:15	13:00	10:25	09:00
13	Thu	x	x	x	x	X
14	Fri	x	x	x	x	x
15	Sat	x	x	x	x	X
16	Sun	x	x	x	x	X
17	Mon	x	x	x	x	X
18	Tue	09:50	11:15	13:00	10:25	09:00
19	Wed	x	x	x	x	X
20	Thu	x	x	x	x	x
21	Fri	x	x	x	x	X
22	Sat	x	x	x	x	x
23	Sun	x	x	x	x	x
24	Mon	09:50	11:15	13:00	10:25	09:00
25	Tue	x	x	x	x	x
26	Wed	x	x	x	x	x
27	Thu	x	x	x	x	x
28	Fri	09:50	11:15	13:00	10:25	09:00
29	Sat	x	x	x	x	x
30	Sun	x	x	x	x	x
31	Mon	x	x	x	x	x

APPENDIX C:

**24-Hour TSP Impact
Monitoring Results and Plots**

1. 24-hour TSP Monitoring Results

Monitoring Station A1 (Lok Lo Ha Village House No. 3B)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Total Sampling Time (min.)	Conc. (µg/m ³)	Weather Condition
	Initial	Final	Initial	Final	Initial	Final			
1-Apr-04	2.8446	2.9187	1.11	1.11	13058.17	13082.17	1440	46	Cloudy
7-Apr-04	2.8485	2.9938	1.11	1.11	13085.17	13109.17	1440	91	Cloudy
13-Apr-04	2.8046	3.0116	1.11	1.11	13112.17	13136.17	1440	130	Cloudy
19-Apr-04	2.8674	3.1033	1.11	1.11	13139.17	13163.17	1440	148	Sunny
23-Apr-04	2.8780	3.1210	1.11	1.11	13166.17	13190.17	1440	152	Fine
29-Apr-04	2.9099	3.0959	1.11	1.11	13193.17	13217.17	1440	116	Cloudy
							Min	46	
							Max	152	
							Average	113.8	

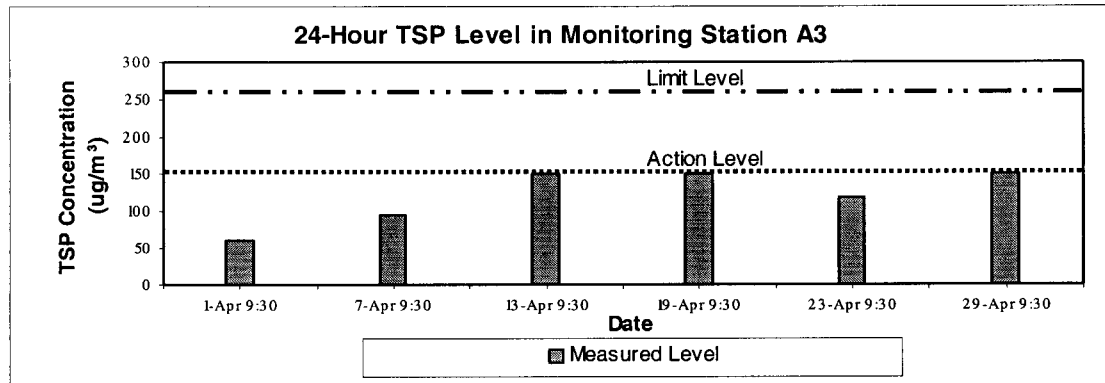
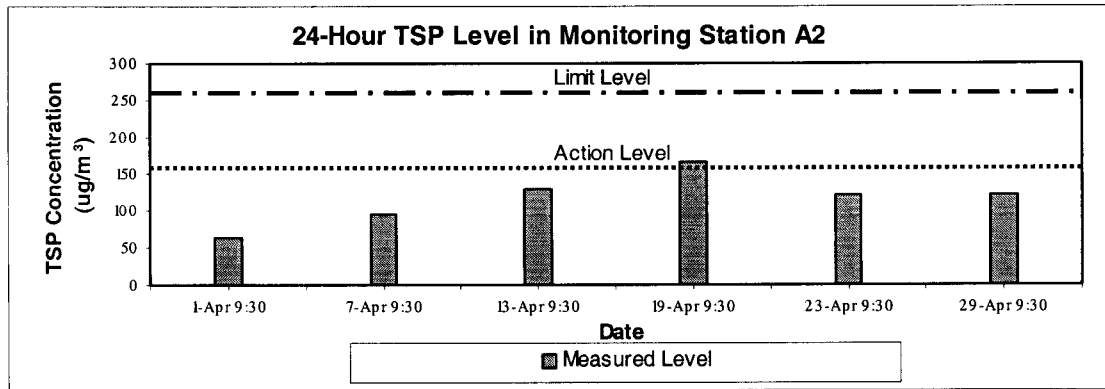
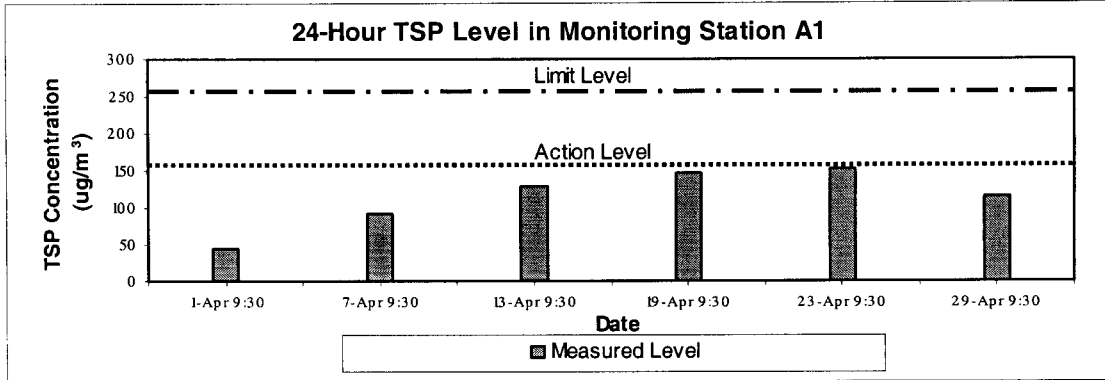
Monitoring Station A2 (Lok Lo Ha Village House No. 104)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Total Sampling Time (min.)	Conc. (µg/m ³)	Weather Condition
	Initial	Final	Initial	Final	Initial	Final			
1-Apr-04	2.8721	2.9716	1.11	1.11	3737.75	3755.75	1440	62	Cloudy
7-Apr-04	2.8548	3.0079	1.11	1.11	3758.75	3782.75	1440	96	Cloudy
13-Apr-04	2.8448	3.0527	1.11	1.11	3785.75	3809.75	1440	130	Cloudy
19-Apr-04	2.9130	3.1769	1.11	1.11	3812.75	3836.75	1440	165	Sunny
23-Apr-04	2.8513	3.0446	1.11	1.11	3839.75	3863.75	1440	121	Fine
29-Apr-04	2.8976	3.0897	1.11	1.11	3866.75	3890.75	1440	120	Cloudy
							Min	62	
							Max	165	
							Average	115.7	

Monitoring Station A3 (Village House near Tsun King Road)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Total Sampling Time (min.)	Conc. (µg/m ³)	Weather Condition
	Initial	Final	Initial	Final	Initial	Final			
1-Apr-04	2.8309	2.9281	1.11	1.11	1246.07	1270.07	1440	61	Cloudy
7-Apr-04	2.8575	3.0099	1.11	1.11	1273.07	1297.07	1440	95	Cloudy
13-Apr-04	2.8266	3.0656	1.11	1.11	1300.07	1324.07	1440	150	Cloudy
19-Apr-04	2.8899	3.1318	1.11	1.11	1327.07	1351.07	1440	151	Sunny
23-Apr-04	2.8818	3.0723	1.11	1.11	1354.07	1378.07	1440	119	Fine
29-Apr-04	2.8322	3.0706	1.11	1.11	1381.07	1405.07	1440	149	Cloudy
								Min	61
								Max	151
								Average	120.8

2. Plots for 24-hour Monitoring Results



APPENDIX D:

**1-Hour TSP Impact
Monitoring Results and Plots**

1. 1-hour TSP Monitoring Results

Station A1 (Lok Lo Ha Village House No. 3B)

Date	Time of sampling	Concentration, $\mu\text{g}/\text{m}^3$
1-Apr-04	0800 – 0900	90
2-Apr-04	0950 – 1050	128
2-Apr-04	1100 – 1200	113
7-Apr-04	0800 – 0900	137
8-Apr-04	0950 – 1050	158
8-Apr-04	1100 – 1200	233
13-Apr-04	0800 – 0900	150
14-Apr-04	0950 – 1050	140
14-Apr-04	1100 – 1200	110
19-Apr-04	0800 – 0900	104
20-Apr-04	0950 – 1050	195
20-Apr-04	1100 – 1200	216
23-Apr-04	0800 – 0900	222
26-Apr-04	0900 – 1000	152
26-Apr-04	1100 – 1200	170
29-Apr-04	0800 – 0900	161
30-Apr-04	0950 – 1050	140
30-Apr-04	1100 - 1200	182
Average		155.6
Min		90
Max		233

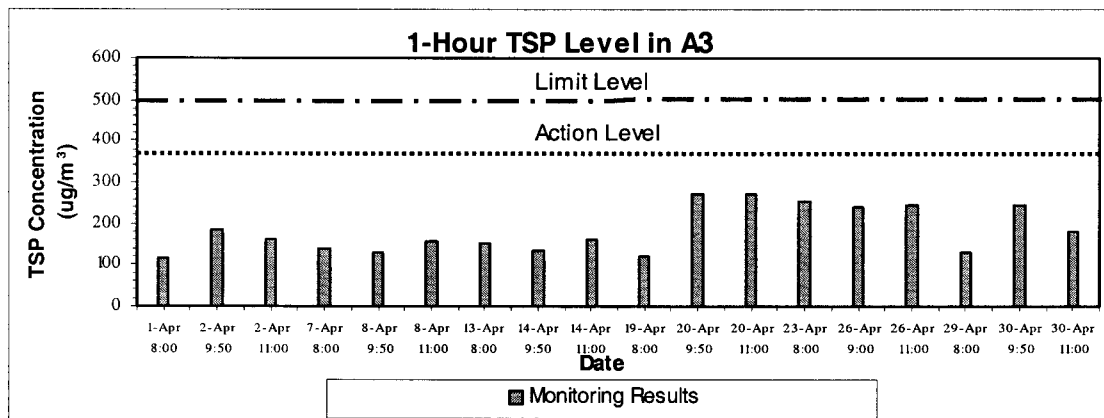
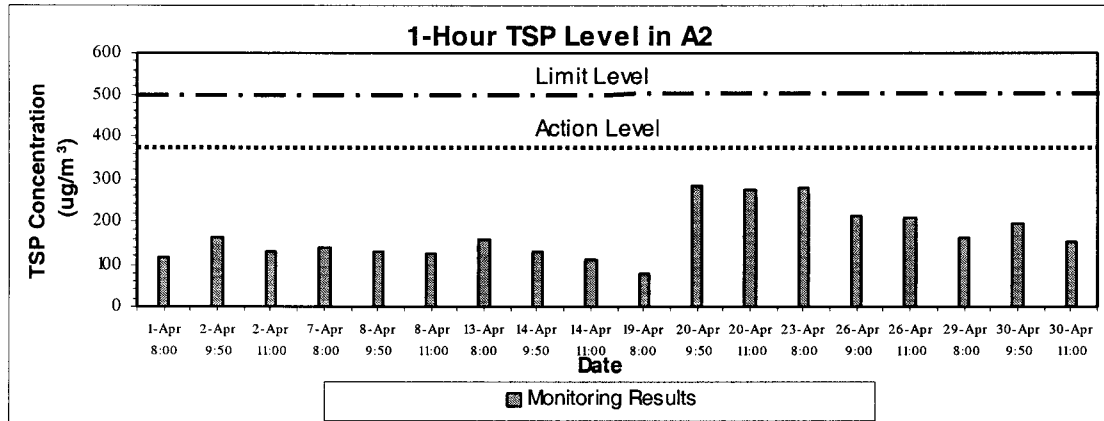
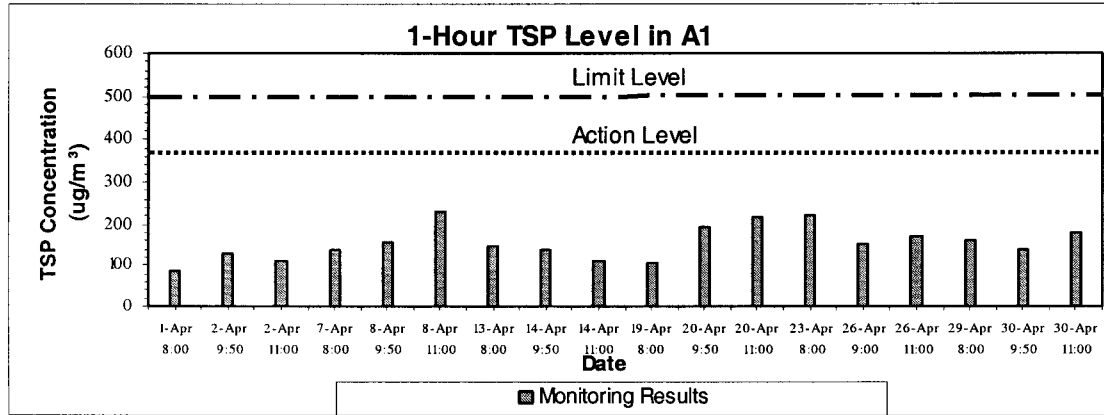
Station A2 (Lok Lo Ha Village House No. 104)

Date	Time of sampling	Concentration, $\mu\text{g}/\text{m}^3$
1-Apr-04	0800 – 0900	117
2-Apr-04	0950 – 1050	162
2-Apr-04	1100 – 1200	132
7-Apr-04	0800 – 0900	138
8-Apr-04	0950 – 1050	132
8-Apr-04	1100 – 1200	126
13-Apr-04	0800 – 0900	159
14-Apr-04	0950 – 1050	128
14-Apr-04	1100 – 1200	110
19-Apr-04	0800 – 0900	80
20-Apr-04	0950 – 1050	285
20-Apr-04	1100 – 1200	273
23-Apr-04	0800 – 0900	279
26-Apr-04	0900 – 1000	216
26-Apr-04	1100 – 1200	209
29-Apr-04	0800 – 0900	161
30-Apr-04	0950 – 1050	197
30-Apr-04	1100 - 1200	153
Average		169.8
Min		80
Max		285

Station A3 (Village House near Tsun King Road)

Date	Time of sampling	Concentration, $\mu\text{g}/\text{m}^3$
1-Apr-04	0800 – 0900	116
2-Apr-04	0950 – 1050	186
2-Apr-04	1100 – 1200	162
7-Apr-04	0800 – 0900	138
8-Apr-04	0950 – 1050	129
8-Apr-04	1100 – 1200	156
13-Apr-04	0800 – 0900	152
14-Apr-04	0950 – 1050	132
14-Apr-04	1100 – 1200	161
19-Apr-04	0800 – 0900	119
20-Apr-04	0950 – 1050	272
20-Apr-04	1100 – 1200	273
23-Apr-04	0800 – 0900	255
26-Apr-04	0900 – 1000	240
26-Apr-04	1100 – 1200	245
29-Apr-04	0800 – 0900	128
30-Apr-04	0950 – 1050	245
30-Apr-04	1100 - 1200	179
	Average	182.7
	Min	116
	Max	273

2. Plots of 1-hour TSP Monitoring Results



APPENDIX E:

**Daytime 07:00 -19:00Hrs
Impact Noise Monitoring
Results and Plots**

1. Noise Monitoring Results

Monitoring Station N1 (Lok Lo Ha Village House No.3B)

Date	Noise Level for 30 min, dB(A)			
	Time of Sampling	L _{eq}	L ₁₀	L ₉₀
2-Apr-04	0910 – 0940	65.3	67.8	63.1
8-Apr-04	0910 – 0940	59.6	61.7	56.9
14-Apr-04	0910 – 0940	60.1	62.9	57.8
20-Apr-04	0912 – 0942	67.1	69.1	64.8
26-Apr-04	0910 – 0940	65.0	67.4	61.8
30-Apr-04	0910 – 0940	63.0	68.0	66.0

Min	59.6	61.7	56.9
Max	67.1	69.1	66.0

Monitoring Station N2 (Lok Lo Ha Village House No.32A)

Date	Noise Level for 30 min, dB(A)			
	Time of Sampling	L _{eq}	L ₁₀	L ₉₀
2-Apr-04	1040 – 1110	58.4	60.6	56.4
8-Apr-04	1032 – 1102	61.6	63.5	58.8
14-Apr-04	1042 – 1112	62.0	63.8	58.9
20-Apr-04	1050 – 1120	60.2	62.8	57.3
26-Apr-04	1031 – 1101	59.5	61.7	56.3
30-Apr-04	1040 – 1110	61.9	66.3	64.3

Min	58.4	60.6	56.3
Max	62.0	66.3	64.3

Monitoring Station N3 (Royal Ascot Block 9, Flat C)

Date	Noise Level for 30 min, dB(A)			
	Time of Sampling	L _{eq}	L ₁₀	L ₉₀
2-Apr-04	1126 – 1156	56.1	57.7	53.9
8-Apr-04	1120 – 1150	55.5	57.5	52.3
14-Apr-04	1129 – 1159	56.9	58.8	54.4
20-Apr-04	1130 – 1200	56.2	58.1	54.1
26-Apr-04	1119 – 1149	54.4	56.4	51.2
30-Apr-04	1127 – 1157	51.5	56.6	54.8

Min	51.5	56.4	51.2
Max	56.9	58.8	54.8

Monitoring Station N4 (Lok Lo Ha Village House No.97)

Date	Noise Level for 30 min, dB(A)			
	Time of Sampling	L _{eq}	L ₁₀	L ₉₀
2-Apr-04	1002 – 1032	58.0	60.3	55.8
8-Apr-04	0952 – 1022	63.5	66.0	60.8
14-Apr-04	1007 – 1037	60.7	62.6	58.3
20-Apr-04	1012 – 1042	57.5	59.5	55.4
26-Apr-04	0947 – 1017	58.4	60.3	56.2
30-Apr-04	1002 – 1032	60.3	65.9	63.5

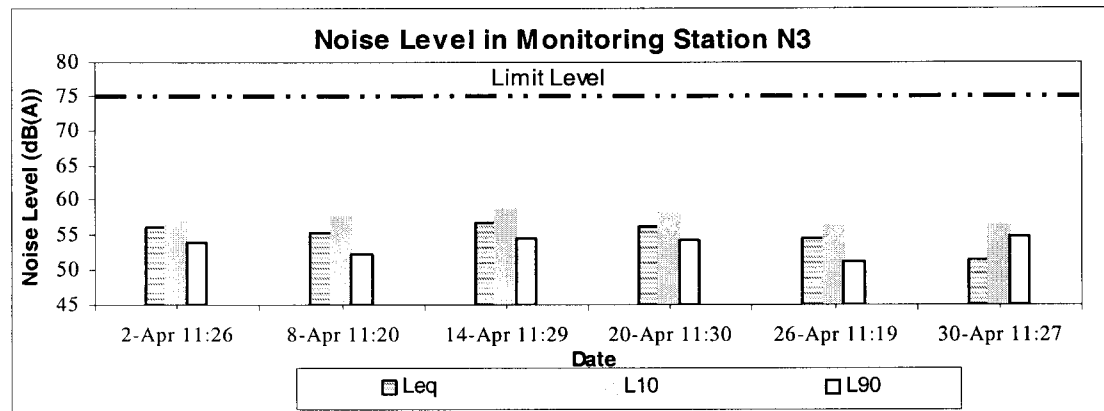
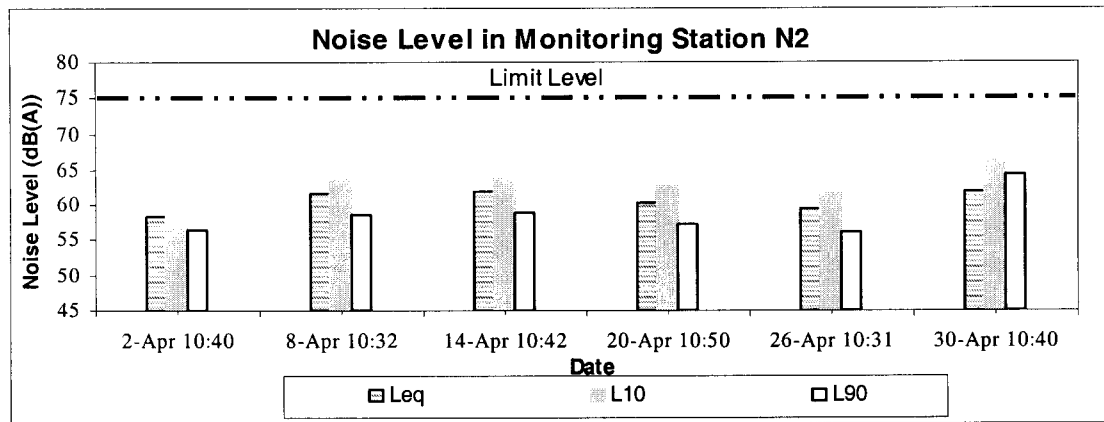
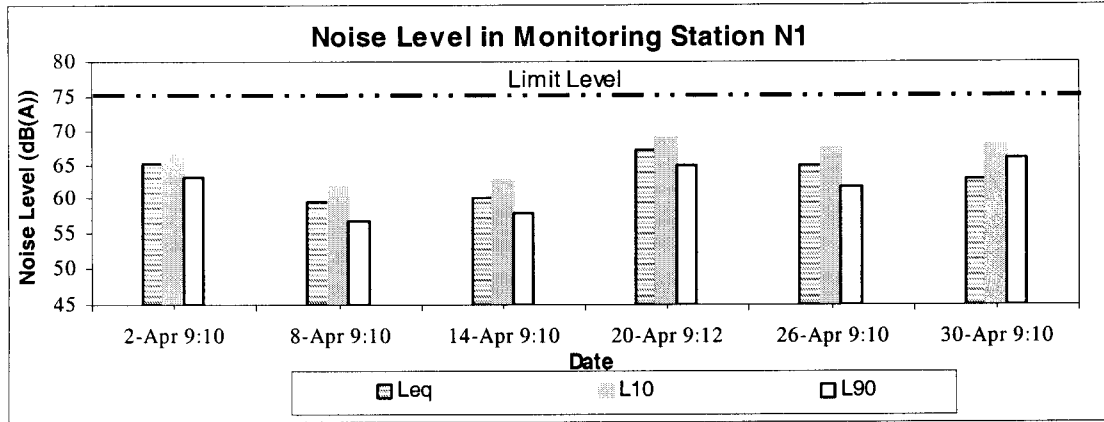
Min 57.5 59.5 55.4
 Max 63.5 66.0 63.5

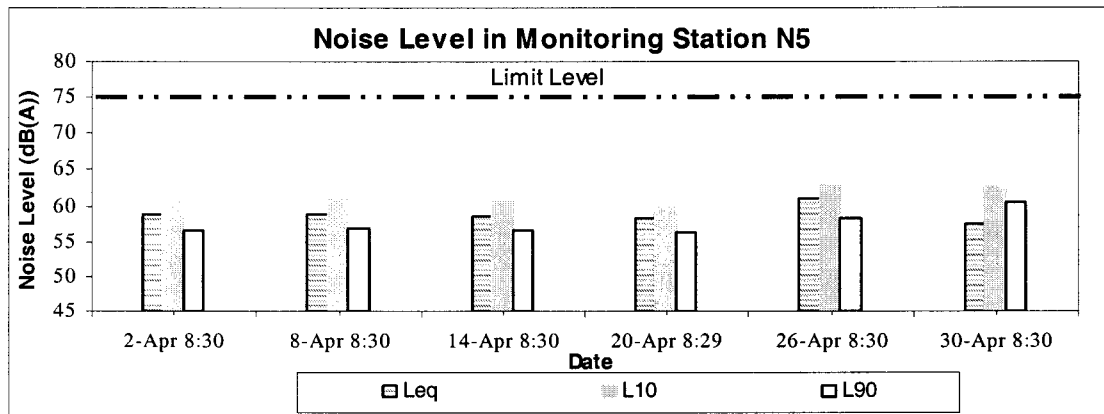
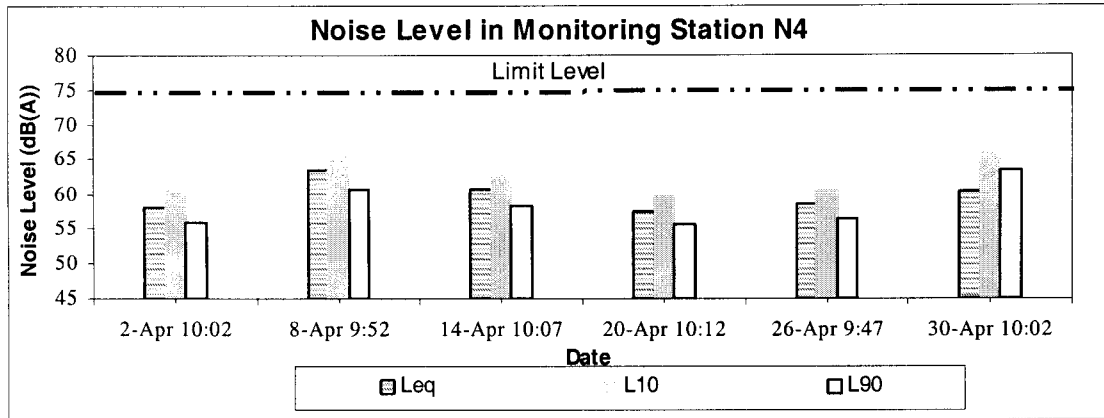
Monitoring Station N5 (Village House near Royal Ascot)

Date	Noise Level for 30 min, dB(A)			
	Time of Sampling	L _{eq}	L ₁₀	L ₉₀
2-Apr-04	0830 – 0900	58.9	61.2	56.6
8-Apr-04	0830 – 0900	58.9	60.9	56.8
14-Apr-04	0830 – 0900	58.5	60.6	56.6
20-Apr-04	0829 – 0859	58.2	59.9	56.3
26-Apr-04	0830 – 0900	61.0	62.9	58.1
30-Apr-04	0830 – 0900	57.5	62.6	60.3

Min 57.5 59.9 56.3
 Max 61.0 62.9 60.3

2. Plots of Noise Monitoring Results





APPENDIX F:

**Weather Conditions During
Monitoring Periods**

**Weather Condition during Monitoring Period
(From 1 to 30 April 2004)**

Date	Weather	Mean Air Temperature (°C)	Wind Speed (m/s)	Mean Relative Humidity (%)
1-Apr-04	Cloudy	20.2	0.5	93
2-Apr-04	Fine – Cloudy	19.9	0.5	79
7-Apr-04	Cloudy	22.8	0.5	90
8-Apr-04	Cloudy	19.0	0.5	76
13-Apr-04	Cloudy	25.5	0.5	84
14-Apr-04	Cloudy	22.4	0.5	93
19-Apr-04	Sunny	25.4	0.5	69
20-Apr-04	Sunny	25.2	0.5	79
23-Apr-04	Fine	27.4	0.5	80
26-Apr-04	Cloudy – Fine	24.8	0.5	87
29-Apr-04	Cloudy	22.9	0.5	89
30-Apr-04	Fine	25.2	0.5	86

APPENDIX G:

**Event and Action Plan for Air
Quality and Noise**

Event / Action Plan for Air Quality

EVENT	ACTION		
	ET	Engineer	CONTRACTOR
ACTION LEVEL			
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source; 2. Inform the Engineer and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Notify Contractor; and 2. Check monitoring data and Contractor's working methods. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice, if any; and 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source; 2. Inform the Engineer and Contractor; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily. 5. Discuss with Engineer for remedial actions required; 6. If exceedance continues, arrange meeting with the engineer; and 7. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Check monitoring data and Contractor's working methods; 4. Discuss with ET and Contractor on potential remedial actions; and 5. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for mitigation measures to the Engineer within 3 working days of notification; 2. Implement the agreed proposals; and 3. Amend proposal if appropriate.
LIMIT LEVEL			
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source; 2. Inform the Engineer and Contractor; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep EPD and the Engineer informed of results. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Check monitoring data and Contractor's working methods; 4. Discuss with ET and Contractor on potential remedial actions; and 5. Ensure remedial action properly implemented. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to the Engineer within 3 working days of notification; 3. Implement the agreed proposals; and 4. Amend proposal if appropriate.
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source; 2. Inform the Engineer and Contractor; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily. 5. Investigate the causes of exceedance; 6. Arrange meeting with EPD and the Engineer to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep EPD and the Engineer informed of the results; and 8. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 4. Discuss among ET and Contractor on potential remedial actions; 5. Review Contractor's remedial action whenever necessary to assure their effectiveness; and 6. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop portion of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to the Engineer within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the Engineer until the exceedance is abated.

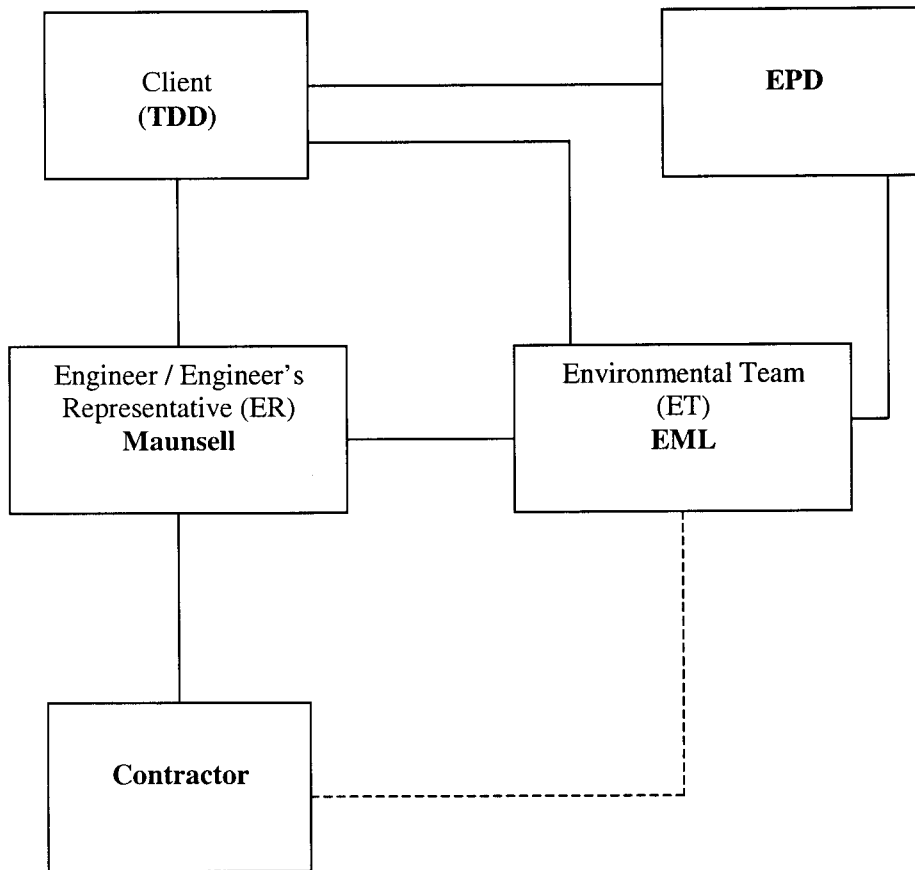
Event / Action Plan for Construction Noise

EVENT	ACTION	
	ET	Contractor
Action Level	<ol style="list-style-type: none"> 1. Notify the Engineer and Contractor; 2. Analyze investigation; 3. Require Contractor to propose measures for the analyzed noise problem; and 4. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to Environmental Team and the Engineer; and 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Notify the Engineer and Contractor; 2. Notify EPD; and 3. Require Contractor to implement mitigation measures; and increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Implement mitigation measures; and 2. Prove to Environmental Team and the Engineer effectiveness of measures applied.

APPENDIX H:

**Project Organization and
Contacts of Key Personnel**

Figure H.1: Project Management Structure



Contacts of Key Personnel:

Organisation	Nature of Duty	Contact Personnel	Contact Number	
			Telephone	Fax
Territory Development Department (TDD)	Client	Mr. K.K. Law	2301-1397	2739-0076
Maunsell Consultants Asia Ltd. (MCAL)	Engineer	Mr. Conrad Ng	2685-6107	2691-2649
Environmental Management Ltd. (EML)	Environmental Team	Mr. W. K. Ng	2839-2800	2890-6901

APPENDIX I:

**Summary Records of
Complaints Received**

Complaint No.	Received date & Time	Description (inc. location/ nature of complaint)	Follow-up Action Taken	Recommended Measures	Status/ Remarks
C02-N1	Morning, 29/7/2002	<p>Around 9:30am on 29/7/02, police came on site to investigate a complaint of noise pollution emitted during rock breaking which carried out by the Contractor near the Site Office (near the box culvert and north Lok Shun Path Roundabout). The Contractor immediately halted the activity in response to police's advice</p>	<ul style="list-style-type: none"> Ad hoc site inspection was carried out on 31/7/02, jointly with the Engineer and Contractor The complaint log sheet, the investigation findings and recommendations on mitigation measures were submitted to the Engineer and Contractor. A letter, addressing to the complainant, had been sent to the police. 	<p>Mitigation actions:</p> <ul style="list-style-type: none"> Excavator-mounted breaker shall not be carried out within 125m from any nearby noise sensitive receivers and; Temporary purposed built barrier should be installed whenever there are high noise level construction activities. 	<p>The complaint was considered as ad hoc rather than continuous. It was therefore considered not necessary to increase the noise monitoring frequency</p> <p>File Closed.</p>
C02-N2	Night-time, 7 April, 2002	<ul style="list-style-type: none"> Nearby residents complained to police that a generator in Road D15 Site was operating in night-time near Lok Lo Ha Village. Police came to the site to investigate the complaint and inform watchmen to turn off the operating generator at around 8:30pm. The complaint was valid as it concerned with construction noise during the restricted hours. 	<ul style="list-style-type: none"> Ad hoc site inspection was carried out on 8 April 02, jointly with the Engineer and Contractor and ET. The complaint log sheet, the investigation findings and recommendations on mitigation measures were submitted to the Engineer and Contractor. A letter in both English and Chinese, addressing to the complainant, had been sent to the police. 	<p>Mitigation actions:</p> <ul style="list-style-type: none"> Under the Noise Control Ordinance, the carrying out of general construction work using powered mechanical equipment (including generators) during the restricted hours (between 7 p.m. and 7 a.m. or at any time on a general holiday (including Sunday) is prohibited unless a valid Construction Noise Permit is in force; A watchmen or site staff should be employed to check daily that all generators and plats are switched off after the permissible working hours. 	<p>File Closed.</p>

APPENDIX J:

**Updated Construction
Program**

MASTER PROGRAMME (ST7701/MP/13B)

Sha Tin New Town Stage II Contract No. ST7701, Road D15 Linking Lok Shun Path and Tai Po Road

ID	Task Name	Duration	Start	Finish	2004	2005												
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
448	11.2.1.6 Bore Piles Coring Test (4nos)	10 days	Fri 22/08/03	Thu 04/09/03														
449	11.2.1.8 RW Panel 1	80 days	Thu 27/11/03	Fri 05/03/04														
457	11.2.1.9 RW Panel 2	80 days	Mon 01/12/03	Tue 09/03/04														
469	11.2.1.10 RW Panel 3	34 days	Sat 28/11/03	Sat 10/01/04														
484	11.2.1.11 RW Panel 4	65 days	Fri 10/10/03	Wed 24/12/03														
500	11.2.1.12 RW Panel 5	49 days	Mon 29/09/03	Tue 25/11/03														
515	11.2.1.13 RW Panel 6	49 days	Tue 28/10/03	Tue 23/12/03														
530	11.2.1.14 RW Panel 7	46 days	Wed 27/08/03	Tue 21/10/03														
545	11.2.2 Additional Bore Piles	70 days	Thu 10/07/03	Tue 30/09/03														
546	11.2.2.1 Mobilisation of RCD	9 days	Thu 10/07/03	Sat 19/07/03														
547	11.2.2.1 ABP1	11 days	Mon 21/07/03	Fri 01/08/03														
559	11.2.2.2 ABP2	17 days	Sat 02/08/03	Thu 21/08/03														
571	11.2.2.3 Bore Piles Tests	12 days	Wed 17/09/03	Tue 30/09/03														
572	11.2.2.3.1 Sonic Test	1 day	Wed 17/09/03	Wed 17/09/03														
573	11.2.2.3.2 Core Test (2nos)	7 days	Sat 20/09/03	Sat 27/09/03														
574	11.2.2.3.3 Grouting Sonic Tubes and core holes	2 days	Mon 29/09/03	Tue 30/09/03														
575	11.2.3 Noise Barrier No. 4B	120 days	Thu 08/01/04	Sat 05/06/04														
581	11.2.3a Concrete Footing for Noise Barrier 4C	45 days	Wed 30/03/02	Wed 15/05/02														
582	11.2.4 Noise Barrier No. 5	69 days	Thu 18/05/02	Wed 07/08/02														
583	11.2.4.1 Excavation	12 days	Thu 16/05/02	Thu 30/05/02														
584	11.2.4.2 Construct Footing and Walls	45 days	Fri 31/05/02	Wed 24/07/02														
585	11.2.4.3 Backfill to Foundation of Noise Barrier No 5	12 days	Thu 25/07/02	Wed 07/08/02														
586	11.3 Noise Barrier Steel Post & Panels	1029 days	Wed 12/12/01	Thu 02/06/05														
587	11.3.1 Procurement and Fabrication of Noise Barrier	150 days	Wed 12/12/01	Tue 18/05/02														
588	11.4.1 Design, Submission for approval	250 days	Wed 19/05/02	Wed 18/04/03														
589	11.4.2 Fabrication and Delivery	200 days	Thu 17/04/03	Tue 16/12/03														
590	11.4.3 Noise Barrier Installation	383 days	Wed 10/03/04	Thu 02/06/05														
591	11.4.3.1 Noise Barrier No.1	60 days	Wed 10/03/04	Mon 24/05/04														
592	11.4.3.2 Noise Barrier No.2	40 days	Mon 07/03/05	Tue 26/04/05														
593	11.4.3.3 Noise Barrier No.3	40 days	Mon 11/04/05	Thu 02/06/05														
594	11.4.3.4 Noise Barrier No.4A	18 days	Fri 29/04/05	Sat 21/05/05														
595	11.4.3.5 Noise Barrier No.4B	30 days	Mon 07/06/04	Tue 13/07/04														
596	11.4.3.6 Noise Barrier No.4B at Bridge A, A2 to A3	10 days	Wed 20/04/05	Sat 30/04/05														
597	11.4.3.6 Noise Barrier No.4C	30 days	Mon 03/05/04	Mon 07/06/04														
598	11.4.3.6 Noise Barrier No.5	40 days	Tue 08/06/04	Mon 26/07/04														
599	11.4.3.7 Noise Barrier No.5	745 days	Wed 12/12/01	Wed 18/06/04														
600	12.1 Remove existing inlet, water diversion	158 days	Wed 12/12/01	Thu 27/06/02														
601	12.2 Box culvert	156 days	Mon 31/12/01	Fri 12/07/02														
602	12.3 Flood Wall	29 days	Thu 30/05/02	Thu 04/07/02														
603	12.4 Construct 1400 box culvert (5 bays)	166 days	Thu 10/04/03	Wed 12/11/03														
604	12.5 Construct 1500 pipe	188 days	Tue 28/10/03	Wed 18/06/04														
605	12.5.1 Construct 1500 pipe CH 10 to CH 30 (MHA64 to MH31)	100 days	Tue 28/10/03	Fri 27/02/04														
606	12.5.2 Construct 1500 pipe CH 30 to CH 60	44 days	Sat 28/02/04	Fri 23/04/04														
607	12.5.3 Construct 1500 pipe CH 60 to CH 82	44 days	Sat 24/04/04	Wed 16/06/04														
608	12.6 Construct CP15 (Deleted)	0 days	Sat 15/03/03	Sat 15/03/03														
609	12.7 Construct M/H31	60 days	Mon 22/09/03	Mon 01/12/03														
610	12.8 Construct 1400 Box Culvert Extension (bay A, B & manhole)	90 days	Mon 14/04/03	Mon 04/08/03														
611																		
612	13.0 Underground Drainage & Utilities	655 days	Wed 15/01/03	Tue 29/03/05														
613	13.1 Drainage & Roadworks at Lok Ho Lo roundabout	651 days	Wed 15/01/03	Thu 24/03/05														

Date: 18/10/2003

Task Progress: Task: Milestone: Summary:

Critical Task Progress: Critical Task: Milestone: Summary:

Rollled Up Progress: Rollled Up Critical Task: Rollled Up Milestone:

Project Summary:

Split:

External Tasks:

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MASTER PROGRAMME (ST77/01/MP/13B)

Sha Tin New Town Stage II Contract No. ST77/01, Road D15 Linking Lok Shun Path and Tai Po Road

ID	Task Name	Duration	Start	Finish	2004												2005	
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
664	18.4 Section III Completion	0 days	Wed 12/12/01	Wed 12/12/01														

Task
Task Progress
Critical Task

Critical Task Progress
Milestone
Summary

Rolled Up Task
Rolled Up Critical Task
Rolled Up Milestone

Rolled Up Progress
Split
External Tasks

Project Summary

Date: 18/10/2003