



Territory Development Department  
NT East Development Office

**SHA TIN NEW TOWN STAGE II  
CONTRACT NO. ST 86/2000  
CONSTRUCTION OF ROAD T7 IN MA ON SHAN  
ENVIRONMENTAL MONITORING AND AUDIT**

**QUARTERLY EM&A SUMMARY REPORT**

**OCTOBER 2003 TO DECEMBER 2003**

*Prepared For:*

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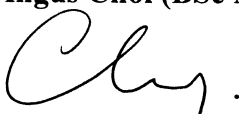
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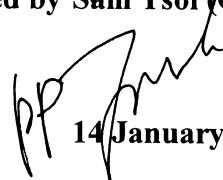
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**CONTENT**

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1. INTRODUCTION</b>	<b>1-1</b>
1.1 Purpose of the Report	1-1
1.2 Site Description	1-1
<b>2. ENVIRONMENTAL STATUS</b>	<b>2-1</b>
2.1 Construction Activities in the Quarter	2-1
2.2 Environmental Sensitive Receivers	2-1
<b>3. SUMMARY OF EM&amp;A REQUIREMENTS</b>	<b>3-1</b>
3.1 Construction Noise Monitoring	3-1
3.1.1 Monitoring Parameters	3-1
3.1.2 Monitoring Frequency	3-1
3.1.3 Monitoring Locations	3-1
3.2 Air Quality Monitoring	3-2
3.2.1 Monitoring Parameters	3-2
3.2.2 Monitoring Frequency	3-2
3.2.3 Monitoring Locations	3-2
3.3 Performance Limits and Event-Action Plans	3-3
3.3.1 Construction Noise Impact	3-4
3.3.2 Air Quality	3-5
<b>4. CONSTRUCTION NOISE MONITORING</b>	<b>4-1</b>
4.1 Monitoring Results	4-1
<b>5. AIR QUALITY MONITORING</b>	<b>5-1</b>
5.1 24-hour TSP Monitoring Results	5-1
5.2 1-hour Monitoring Results	5-2
<b>6. QUARTERLY SUMMARY, ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE RECORDS</b>	<b>6-1</b>
6.1 Waste Disposal	6-1
6.2 EPD Site Inspection	6-2
6.3 Complaint Record	6-2
6.4 Non-compliance Record	6-4
<b>7. REFERENCES</b>	<b>7-1</b>

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**LIST OF APPENDICES**

- Appendix 1 - Noise Impact Monitoring Details from October 2003 to December 2003
- Appendix 2 - 24-hour TSP Monitoring Details from October 2003 to December 2003
- Appendix 3 - 1-hour TSP Monitoring Details from October 2003 to December 2003
- Appendix 4 - Correspondences of the Public Complaints from October 2003 to December 2003

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**ABBREVIATIONS AND ACRONYMS**

AQO	Air Quality Objectives
Arup	Ove Arup & Partners Hong Kong Limited
ASR	Area Sensitive Rating
BOD <sub>5</sub>	Biochemical Oxygen Demand (5 days)
B&K	Brüel & Kjær
CFM	Cubic Feet per Minute
CHEC	China Harbour Engineering Company
CNP	Construction Noise Permit
CT	Contractor
EA	Environmental Auditor
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ER	Engineer / Engineer's Representative
ET	Environmental Team
HKSAR	Hong Kong Special Administrative Region
HOKLAS	The Hong Kong Laboratory Accreditation Scheme
HVS	High Volume Sampler
IEC	International Electrotechnical Commission Publications
K	Degrees Kelvin
MCAL	Maunsell Consultants Asia Limited
NAMAS	National Measurement Accreditation Service
NSR	Noise Sensitive Receiver
TDD NTE	Territory Development Department New Territory East Office
TSP	Total Suspended Particulates



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## EXECUTIVE SUMMARY

This quarterly EM&A report summaries the site inspection findings, air quality and noise impact monitoring works for the period between October 2003 to December 2003.

For noise monitoring,  $L_{eq(30min)}$  level was recorded once a week between the period of 0700 and 2300 at Ma On Shan Lutheran Primary School (NM2), Heng Shan House, Heng On Estate (NM3), Kam Yiu House, Kam Ying Court (NM4), Symphony Bay (NM6), Podium of block 15, Monte Vista (NM7) and Roof of block 15, Monte Vista (NM8).

Thirteen measurements were taken at each location during 0700-1900 and thirteen measurements were taken at NM3, NM4, NM6 and NM8 during 1900-2300 from October 2003 to December 2003. The recorded noise levels were in the range from 63.0 to 69.5 dB(A) during 0700-1900 and from 60.0 to 66.8 dB(A) during 1900-2300. All measurements were below the Limit Level of 70dB(A) at NM2 and 75dB(A) at other locations during 0700-1900, and below the Limited Level of 70 dB(A) during 1900-2300 for monitoring locations.

1-hour Total Suspended Particulate (TSP) was recorded three times per every six days between the period of 0700 and 1900, and 24-hour TSP was recorded once every six days from 0000 to 2400. Air quality monitoring was conducted at Ma On Shan Lutheran Primary School (AM2), Ma On Shan Joseph's Primary School (AM3), Villa Concerta, Symphony Bay (AM4) and Club House, Monte Vista (AM5) and Kam Yiu House, Kam Ying Court (AM6).

A total of fifteen 24-hour TSP monitoring were conducted at each location October 2003 to December 2003. The recorded 24-hour TSP levels were in the range from 17.8 to 243.3  $\mu\text{g}/\text{m}^3$  and were below the Action and Limit Levels.

A total of forty-five 1-hour TSP monitoring were conducted at each location from October 2003 to December 2003. The recorded 1-hour TSP levels were in the range from 100.5 to 238.1  $\mu\text{g}/\text{m}^3$  and were below the Action and Limit Levels.

A total of 98 loads of Construction and Demolition Waste (C&D waste) had been disposed of at NENT Landfill October 2003 to December 2003. The total tonnage of the waste disposal from July 2003 to September 2003 was 714.2 tonnes.

A total of 5129 loads of rocks ( $\phi > 400\text{mm}$ ) have been disposed of at the follow government project sites from October 2003 to December 2003:

- *Contract No. FL 26/01 River Training for Upper River Indus – Completion of the Remaining Works between Man Kam To Road and KCRC Bridges*
- *Contract No. CV/2001/01- Maintenance and Repairs to Seawalls, Piers and Other Port Works*
- *Tseung Kwan O Area 137 Public Filling Area*
- *Tuen Mun Area 38 public Filling Area*

The total quantity of the disposed rocks was 36672.5  $\text{m}^3$  from October 2003 to December 2003.

A total of 4757 loads of inert material have been disposed of at Public Filling Area in October 2003 to December 2003. The total quantity of the disposed inert materials was 28542 m<sup>3</sup> from October 2003 to December 2003.

ET was informed by the CT that there was no EPD visit during the reporting period.

A total of seven public complaints regarding construction noise was received on 10/10/03 (3 times), 13/10/03, 16/10/03, 24/11/03 and 22/12/03 respectively through the EPD. All complaints had been resolved.

## 1. INTRODUCTION

OAP was commissioned by the Territory Development Department New Territory East Office (TDD NTE) via Maunsell Consultant Asia Limited (MCAL) to conduct the Environmental Monitoring and Audit (EM&A) for the project “*Shatin New Town, Stage II Contract No. ST 86/2000 Construction of Road 7 in Ma On Shan*” with the contract commencement on 10 January 2000.

Truck Road T7 in Ma On Shan is constructed as part of the development of the Sha Tin New Town, Stage II, which is managed by the TDD NTE. The project was commenced in January 2001 and anticipated to be completed by the January 2004. The trunk road will connect the existing Ma On Shan Road and Sai Sha Road, allowing traffic destined for north Ma On Shan, Lok Wo Sha and Sai Kung to by-pass the busy Ma On Shan Town Centre.

The Environmental Impact Assessment (EIA) Report<sup>[1]</sup> has identified the environmental impacts during various stages of the construction and operational stages. These include construction noise and fugitive dust during the construction stage, and the traffic noise and tunnel air quality during the operational stage. The monitoring of these environmental issues is required during the construction and operational stages and in accordance with the Brief for Environmental Monitoring and Audit<sup>[2]</sup>.

The Environmental Permit (EP)<sup>[3]</sup> has been issued for the Road T7 project under the EIA Ordinance. The EM&A programme has commenced from January 2001 and is anticipated to be completed by the February 2005.

### 1.1 Purpose of the Report

The purpose of the quarterly EM&A report is to summarise the monitoring and audit results of the environmental issues, air quality and noise impacts due to the captioned road construction project for the period October 2003 to December 2003.

### 1.2 Site Description

The site starts from the existing Ma On Shan Road (close to Heng On Estate), runs along the boundary of Ma On Shan Country Park, and terminates at Sai Sha Road (close to Symphony Bay). The site location plan is shown in Figure 1-1.

Figure 1-1 - Site location plan of construction of Road T7.



## 2. ENVIRONMENTAL STATUS

### 2.1 Construction Activities in the Quarter

The main construction activities in the period from October 2003 to December 2003 were slope formation and bridge construction. Construction works for the retaining wall were carried out near the casting yard. The rock excavation was still in progress at the slope behind Monte Vista. Construction works of tunnel were in progress at Portal D area near Cheung Muk Tau Village. Bridge construction works were in progress at TC bridge area. Backfilling slope between Monte Vista and Lee On Estate and bore piling at TD bridge area was in progress since end of May 2003.

### 2.2 Environmental Sensitive Receivers

Several residential buildings and schools close to the site have been identified as environmental sensitive receivers in the EIA Report. They included:

- Ma On Shan Lutheran Primary School;
- Ma On Shan St. Joseph's Primary School;
- Heng On Estate;
- Kam Ying Court;
- Monte Vista; and
- Villa Concerto, Symphony Bay.

Detailed locations of the environmental sensitive receivers are shown in Figure 2-1.

**Figure 2-1** - Locations of construction site and environmental sensitive receivers.



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### 3. SUMMARY OF EM&A REQUIREMENTS

Constructions noise and air quality were significant environmental impacts identified for the construction period of the project. In accordance with the Brief for EM&A, air quality and noise impact monitoring shall be performed by an ET at all specified monitoring locations during this stage.

#### 3.1 Construction Noise Monitoring

##### 3.1.1 Monitoring Parameters

Construction noise monitoring shall be measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ).  $L_{10}$  and  $L_{90}$  will also be recorded as supplementary reference information for data auditing.

##### 3.1.2 Monitoring Frequency

Construction noise measurements were required to be taken on a weekly basis according to the Brief for EM&A. The monitoring time periods, monitoring parameters and frequency are specified in Table 3-1.

Table 3-1 - Construction noise monitoring parameters and frequency requirements.

Time Period (when construction activity is found)	Parameters	Monitoring Frequency	No. of measurements for each monitoring
Between 0700-1900 hours on normal weekdays	$L_{eq(30\ min)}$	Once per week	1
Between 1900-2300 hours on normal weekdays	$L_{eq(5\ min)}$ *		3 (consecutive)
Between 2300-0700 hours of next day			
Between 0700-1900 hours on holidays			

Remarks: \* The  $L_{eq(5\ min)}$  will only be measured if construction activities are conducted in holidays and between the period of 1900 and 0700 hours during normal weekdays.

##### 3.1.3 Monitoring Locations

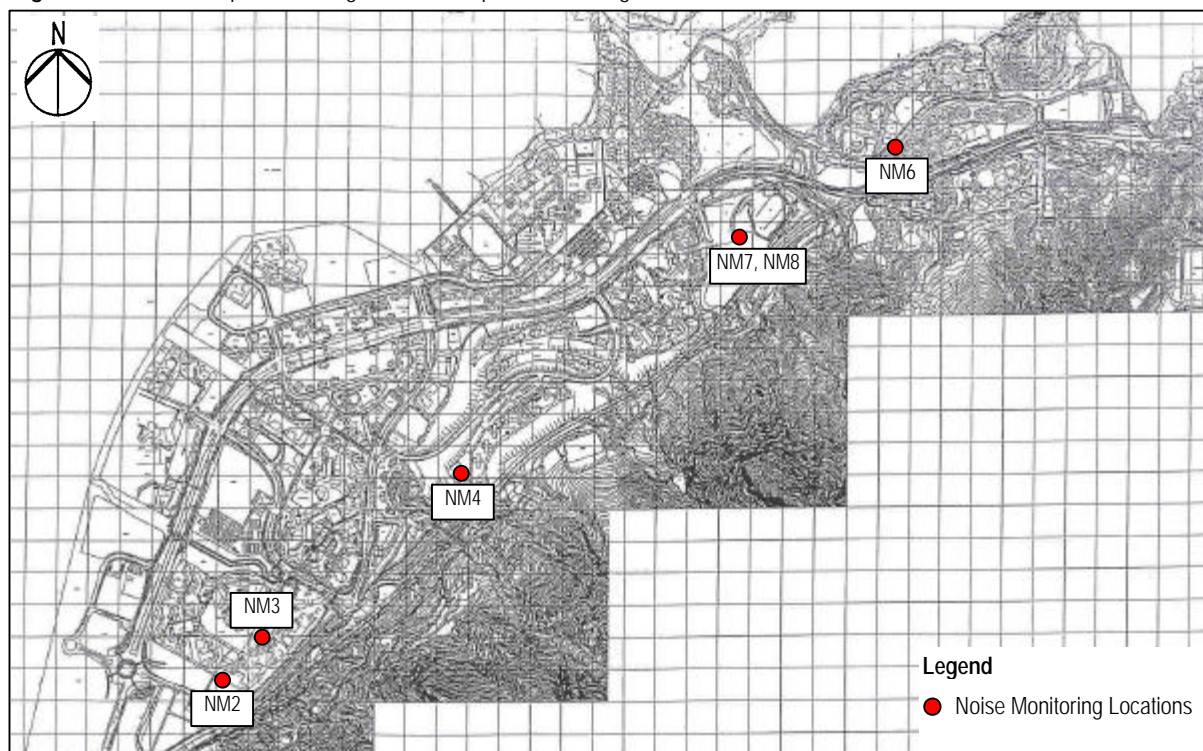
A total of six monitoring locations were specified. They are given in Table 3-2 and shown in Figure 3-1. The measurements shall be taken away from any nearby reflective surface and at a position of 1.2m above ground. No façade correction is required.

Table 3-2 - Noise impact monitoring locations.

NSR No.	Location	Monitoring Point
NM2	Ma On Shan Lutheran Primary School	Roof-top of the school
NM3	Heng Shan House, Heng On Estate	Podium floor of Heng Shan House
NM4	Kam Yiu House, Kam Ying Court	Roof-top of Kam Yiu House
NM6	Villa Concerto, Symphony Bay	Roof-top of Block 1
NM7	Monte Vista, Block 15	Podium floor of Block 15
NM8	Monte Vista, Block 15	Roof of Block 15



Figure 3-1 - Location plan showing the noise impact monitoring locations.



## 3.2 Air Quality Monitoring

### 3.2.1 Monitoring Parameters

Air monitoring shall be measured in terms of the TSP levels for both 24-hour and 1-hour periods.

### 3.2.2 Monitoring Frequency

24-hour TSP and 1-hour TSP levels shall be monitored during the course of construction according to the Brief for EM&A. The monitoring parameters and frequencies are specific in Table 3-3.

Table 3-3 - TSP monitoring parameters and frequency.

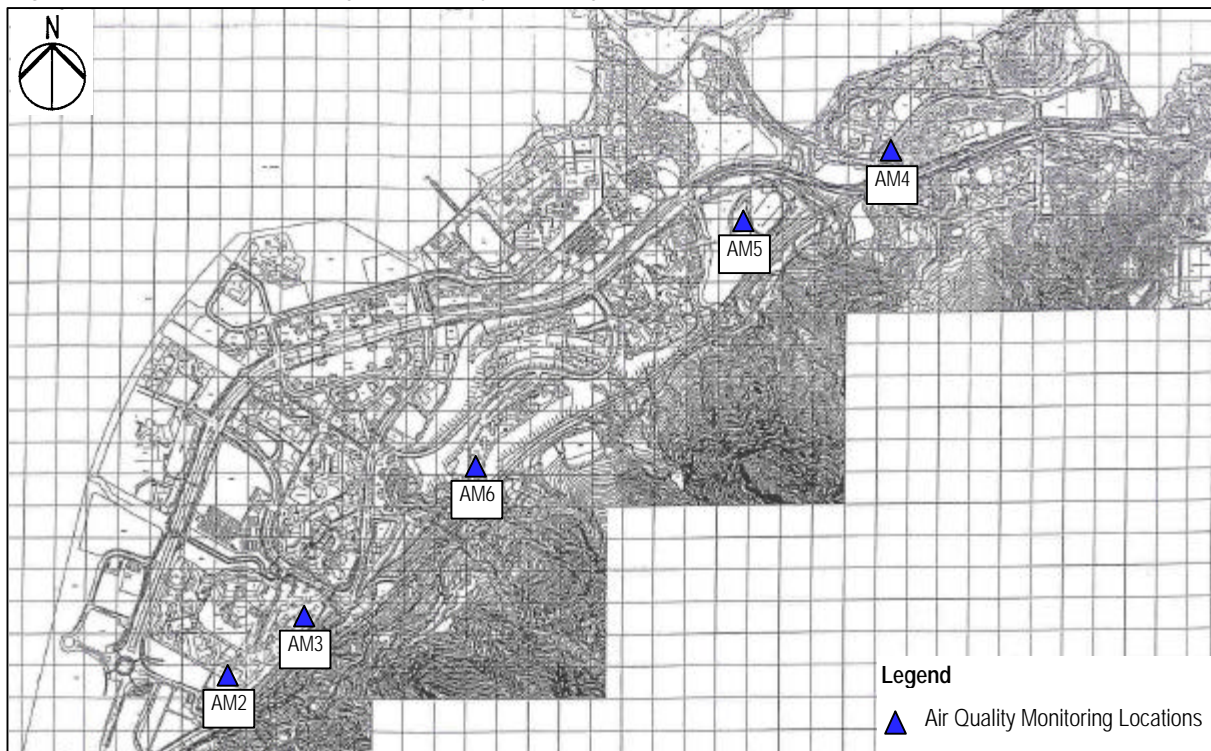
Parameters	Monitoring Frequency	Time Period	No. of measurement for each monitoring
24-hour TSP	Once every six days	0000 – 2400	1
1-hour TSP	Three times per every six days	0700 – 1900	1

### 3.2.3 Monitoring Locations

Five monitoring locations nearest to the construction site were specified. They are tabulated in Table 3-4 and shown in Figure 3-2.

**Table 3-4** - Air quality monitoring locations.

Sensitive Receptors No.	Location	Monitoring Point
AM2	Ma On Shan Lutheran Primary School	Roof-top of the school
AM3	Ma On Shan St. Joseph's Primary School	Roof-top of the school
AM4	Villa Concerto, Symphony Bay	Roof-top of Block 1
AM5	Monte Vista	Roof-top of Club House
AM6	Kam Ying Court	G/F. Kam Yiu House

**Figure 3-2** - Location plan showing the air quality monitoring locations.

### 3.3 Performance Limits and Event-Action Plans

The monitoring results shall be checked against appropriate standards and requirements. A two-tier system performance limits has been established in the Project Specific EM&A Manual<sup>[4]</sup>. The “Action Level” and the “Limit Level” are established according to the EPD requirements. Corresponding actions will be taken by ET, ER and CT in accordance with the Event-Action Plans if the monitoring results exceed the performance limits.

### 3.3.1 Construction Noise Impact

The action and limit levels for the construction noise have been established in Project Specific EM&A Manual<sup>[4]</sup> and are tabulated in Table 3-5.

**Table 3-5** - Action and limit levels for construction noise.

Time Period	Action Level	Limit Level dB(A)
0700 – 1900 hours on weekdays	When one documented complaint is received	75 *
0700 – 2300 hours on General Holidays; & 1900 – 2300 hours on all other days		50 or 55** <sup>(1)</sup> 65 or 70** <sup>(2)</sup>
2300 – 0700 hours of next day		55 or 40** <sup>(1)</sup> 50 or 55** <sup>(2)</sup>

**Remarks:** \* reduced to 70dB(A) for schools and 65dB(A) during school examination periods.  
 \*\* to be selected based on Area Sensitivity Rating  
 (1) for the SPME and prescribed works  
 (2) for non-SPME and prescribed works  
 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.

Table 3-6a and Table 3-6b detail the actions required to be carried out by different parties in the case of an exceedance of performance limits being detected.

**Table 3-6a** - Event-action plan for construction noise (Action Level).

ET	Action	
	ER	CT
1. Notify ER and CT 2. Carry out investigation 3. Report the result of investigation to ER 4. Increase monitoring frequency to check mitigation effectiveness 5. Review the proposed remedial measures by CT and advise ER accordingly 6. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective 7. Supervise the implementation of remedial measures 8. If exceedance stops, cease additional monitoring	1. Confirm receipt of notification of failure in writing 2. Notify CT 3. Require CT to propose remedial measures for the noise exceedance 4. Ensure remedial measures are properly implemented	1. Submit noise mitigation proposals to ET 2. Implement noise mitigation proposals

**Table 3-6b** - Event-action plan for construction noise (Limit Level).

Action		
ET	ER	CT
<ol style="list-style-type: none"> <li>1. Notify ER and EPD</li> <li>2. Identify source</li> <li>3. Repeat measurement to confirm findings</li> <li>4. Increase monitoring frequency</li> <li>5. Discuss amongst ER and CT on the potential remedial actions</li> <li>6. Review CT's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly</li> <li>7. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective</li> <li>8. Supervise the implementation of remedial measures</li> <li>9. Inform ER and EPD of the causes for the exceedance</li> <li>10. Assess effectiveness of CT's remedial actions and keep EPD and ER informed of the results</li> <li>11. If exceedance stops, cease additional monitoring</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing</li> <li>2. Notify CT</li> <li>3. Require CT to propose remedial measures for the noise exceedance</li> <li>4. Ensure remedial measures are properly implemented</li> <li>5. If exceedance continues, consider what portion of the work is responsible and instruct CT to stop that portion of work until the exceedance is abated</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance.</li> <li>2. Inform ET, ER and EPD of the actions taken for the exceedance.</li> <li>3. Submit proposals for remedial actions to ET within 3 working days of notification</li> <li>4. Implement the agreed proposals</li> <li>5. Resubmit proposals if problem still not under control</li> <li>6. Stop the relevant portion of works as determined by the ER until the exceedance is abated</li> </ol>

### 3.3.2 Air Quality

The action and limit levels for air quality have been established in the Project Specific EM&A Manual<sup>[4]</sup> and are tabulated in Table 3-7.

**Table 3-7** - Action and limit levels for air quality.

Parameters	Action Level	Limit Level
24 Hour TSP Level in $\mu\text{g}/\text{m}^3$	<ul style="list-style-type: none"> <li>• For baseline level <math>&lt; 108\mu\text{g}/\text{m}^3</math>, Action Level = average of baseline level plus 30% and Limit Level</li> <li>• For <math>108\mu\text{g}/\text{m}^3 &lt; \text{baseline level} &lt; 154\mu\text{g}/\text{m}^3</math>, Action Level = <math>200\mu\text{g}/\text{m}^3</math></li> <li>• For baseline level <math>&gt; 154\mu\text{g}/\text{m}^3</math>, Action Level = 130% of baseline level</li> </ul>	260
1 Hour TSP Level in $\mu\text{g}/\text{m}^3$	<ul style="list-style-type: none"> <li>• For baseline level <math>&lt; 154\mu\text{g}/\text{m}^3</math>, Action Level = average of baseline level plus 30% and Limit Level</li> <li>• For <math>154\mu\text{g}/\text{m}^3 &lt; \text{baseline level} &lt; 269\mu\text{g}/\text{m}^3</math>, Action Level = <math>350\mu\text{g}/\text{m}^3</math></li> <li>• For baseline level <math>&gt; 269\mu\text{g}/\text{m}^3</math>, Action Level = 130% of baseline level</li> </ul>	500

The baseline checking was conducted in September 2003. There was no significant difference when comparing the baseline checking results of September 2003 with previous baseline checking results. Therefore, the current A/L levels for 24-hour TSP and 1-hour TSP monitoring are still representative and valid. In accordance with the Baseline Monitoring Report<sup>[5]</sup> and Baseline Checking Results in March 2002, the action and limit levels for 24-hour TSP and 1-hour TSP at different locations were established and are tabulated in Table 3-8 and Table 3-9 respectively.

Table 3-8 - Action and limit levels for 24-hour TSP.

Monitoring Location	24-hour TSP Level in mg/m <sup>3</sup>		
	Baseline Level *	Action Level	Limit Level
Ma On Shan Lutheran Primary School	66.0	173	260
Ma On Shan St. Joseph's Primary School	57.7	168	
Villa Concerto, Symphony Bay	60.8	170	
Club House, Monte Vista <sup>#</sup>	-	185	
Kam Yiu House, Kam Ying Court <sup>#</sup>	-	194	

**Remarks:** \* Baseline levels were obtained from the Baseline Monitoring Report prepared by Manusell Consultant Asia Limited<sup>[5]</sup>.

# No baseline monitoring was conducted for Monte Vista (AM5) and Kam Ying Court (AM6) as these two locations were established after the commencement of the construction works. The Action Levels of AM5 and AM6 are established in accordance with the baseline checking results in March 2002.

Table 3-9 - Action and limit levels for 1-hour TSP.

Monitoring Location	1-hour TSP Level in mg/m <sup>3</sup>		
	Baseline Level *	Action Level <sup>#</sup>	Limit Level
Ma On Shan Lutheran Primary School	274	350	500
Ma On Shan St. Joseph's Primary School	274	350	
Villa Concerto, Symphony Bay	273	347	
Club House, Monte Vista	-	350	
Kam Yiu House, Kam Ying Court	-	349	

**Remarks:** \* Baseline levels were obtained from the Baseline Monitoring Report prepared by Maunsell Consultant Asia Limited<sup>[5]</sup>.

# The Action Levels of AM2, AM3 and AM4 have been revised in accordance with the baseline checking results in March 2002.

# No baseline monitoring was conducted for Monte Vista (AM5) and Kam Ying Court (AM6) as these two locations were established after the commencement of the construction works. The Action Level of AM5 and AM6 are established in accordance with the baseline checking results in March 2002.

Table 3-10a and Table 3-10b detail the actions required to be carried out by different parties in case of an exceedance of performance limits being detected.

**Table 3-10a** - Event-action plan for air quality (Action Level).

Action		
ET	ER	CT
Action Level 1 – Exceedance for one sample		
<ol style="list-style-type: none"> <li>1. Identify source</li> <li>2. Inform ER</li> <li>3. Repeat measurement to confirm findings</li> <li>4. Review the proposed remedial measures by CT and advise ER accordingly</li> <li>5. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective</li> <li>6. Supervise the implementation of remedial measures</li> <li>7. Increase monitoring frequency to demonstrate efficacy of remedial measures</li> <li>8. If exceedance stops, cease additional monitoring</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify CT</li> <li>2. Check monitoring data and CT's working methods</li> </ol>	<ol style="list-style-type: none"> <li>1. Rectify any unacceptable practice</li> <li>2. Amend working methods if appropriate</li> </ol>
Action Level 2 –Exceedance for two or more consecutive samples		
<ol style="list-style-type: none"> <li>1. Identify source</li> <li>2. Inform ER</li> <li>3. Repeat measurement to confirm findings</li> <li>4. Review the proposed remedial measures by CT and advise ER accordingly</li> <li>5. Discuss with ER for remedial actions required</li> <li>6. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective</li> <li>7. Supervise the implementation of remedial measures</li> <li>8. Increase monitoring frequency to demonstrate efficacy of remedial measures</li> <li>9. If exceedance continues, arrange meeting with ER</li> <li>10. If exceedance stops, cease additional monitoring</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing</li> <li>2. Notify CT</li> <li>3. Check monitoring data and CT's working methods</li> <li>4. Discuss with Environmental Supervisor and CT on potential remedial actions</li> <li>5. Ensure remedial actions are properly implemented</li> </ol>	<ol style="list-style-type: none"> <li>1. Submit proposals for remedial actions to ER within 3 working days of notification</li> <li>2. Implement the agreed proposals</li> <li>3. Amend proposal if appropriate</li> </ol>

**Note:** If source of exceedance is clearly identified as being not works related no further action is necessary by any party.

Table 3-10b - Event-action plan for air quality (Limit Level).

Action		
ET	ER	CT
Limit Level 1 – Exceedance for one sample		
<ol style="list-style-type: none"> <li>1. Identify source</li> <li>2. Inform ER</li> <li>3. Repeat measurement to confirm findings</li> <li>4. Discuss with ER for remedial actions required</li> <li>5. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective</li> <li>6. Supervise the implementation of remedial measures</li> <li>7. Increase monitoring frequency to demonstrate efficacy of remedial measures</li> <li>8. If exceedance stops, cease additional monitoring</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing</li> <li>2. Notify CT</li> <li>3. Check monitoring data and CT's working methods</li> <li>4. Discuss with ET and CT on potential remedial actions</li> <li>5. Ensure remedial actions are properly implemented</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance</li> <li>2. Submit proposals for remedial actions to ER within 3 working days of notification</li> <li>3. Implement the agreed proposals</li> <li>4. Amend proposal if appropriate</li> </ol>
Limit Level 2 – Exceedance for two or more consecutive samples		
<ol style="list-style-type: none"> <li>1. Identify source</li> <li>2. Inform ER the causes and actions taken for the exceedance</li> <li>3. Repeat measurement to confirm findings</li> <li>4. Investigate the causes of exceedance</li> <li>5. Arrange meeting with ER to discuss the remedial actions to be taken</li> <li>6. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective</li> <li>7. Supervise the implementation of remedial measures</li> <li>8. Increase monitoring frequency to demonstrate efficacy of remedial measures</li> <li>9. If exceedance stops, cease additional monitoring</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing</li> <li>2. Notify CT</li> <li>3. Carry out analysis of CT's working procedures to determine possible mitigation to be implemented</li> <li>4. Discuss amongst ET and CT on potential remedial actions</li> <li>5. Review CT's remedial actions whenever necessary to assure their effectiveness</li> <li>6. If exceedance continues, consider what portion of the work is responsible and instruct CT to stop that portion of work until the exceedance is abated</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance</li> <li>2. Submit proposals for remedial actions to ER within 3 working days of notification</li> <li>3. Implement the agreed proposals</li> <li>4. Resubmit proposals if problem still not under control</li> <li>5. Stop the relevant portion of works as determined by ER until the exceedance is abated</li> </ol>

**Note:** If source of exceedance is clearly identified as being not works related no further action is necessary by any party.

## 4. CONSTRUCTION NOISE MONITORING

### 4.1 Monitoring Results

Thirteen measurements were taken at each location during 0700-1900 and thirteen measurements were taken at NM3, NM4, NM6 and NM8 respectively during 1900-2300 October 2003 to December 2003. All the noise measurements were taken between 0700-2300 hours on normal weekdays during which the construction site was under normal operation. The construction daytime and evening time noise monitoring results in the period October 2003 to December 2003 are tabulated in Table 4-1 and Table 4-2 respectively. Detailed weather conditions and the monitoring period are given in Appendix 1. The trend of the noise levels at each monitoring location were plotted and presented in Figure 4-1 and Figure 4-2.

Table 4-1 - Construction noise monitoring results from October 2003 to December 2003.

Date of Monitoring	Monitoring Parameters	Monitoring Results, dB(A) (30 min)						
		NM2	NM3	NM4	NM6	NM7	NM8	
06/10/03 (Mon)		65.9	64.8	66.3	67.8	68.5	66.8	65.9
		68.0	67.3	69.0	69.5	70.0	69.5	68.0
		62.5	61.5	59.0	62.5	65.5	61.5	62.5
14/10/03 (Tue)		65.3	66.0	68.5	69.5	69.3	67.5	65.3
		68.5	69.5	71.5	72.0	72.5	70.0	68.5
		62.0	62.5	65.0	64.5	63.0	64.5	62.0
23/10/03 (Thu)		65.8	66.5	65.5	68.5	69.0	66.0	65.8
		67.5	69.0	68.0	69.5	73.0	69.5	67.5
		65.0	63.0	63.5	66.0	64.0	63.0	65.0
29/10/03 (Wed)		66.5	67.5	65.0	68.5	69.0	65.5	66.5
		69.0	69.0	69.0	70.5	71.5	69.5	69.0
		63.5	64.0	63.5	65.5	65.5	62.0	63.5
05/11/03 (Wed)		66.0	65.8	66.5	67.3	67.8	65.5	66.0
		69.5	68.5	69.0	69.5	69.0	68.0	69.5
		62.0	61.0	63.0	63.0	65.5	61.5	62.0
12/11/03 (Wed)		66.5	65.5	66.0	67.5	66.5	66.0	66.5
		68.5	69.0	69.5	70.0	69.5	68.5	68.5
		63.0	62.5	62.0	64.0	61.5	62.0	63.0
21/11/03 (Fri)		63.0	63.5	67.5	67.0	65.0	64.5	63.0
		65.5	67.0	72.0	71.5	68.5	67.5	65.5
		60.0	61.5	64.5	65.0	63.0	62.0	60.0
28/11/03 (Fri)		64.5	64.8	68.5	69.0	66.0	64.5	64.5
		67.5	69.0	72.0	74.0	69.5	68.0	67.5
		61.5	60.5	63.5	65.5	62.0	62.0	61.5
03/12/03 (Wed)		64.5	66.0	65.8	69.5	68.5	66.0	64.5
		67.0	68.5	68.0	73.0	72.0	69.5	67.0
		61.0	62.0	60.5	65.5	65.0	61.0	61.0



Date of Monitoring	Monitoring Parameters	Monitoring Results, dB(A) (30 min)					
		NM2	NM3	NM4	NM6	NM7	NM8
09/12/03 (Tue)	64.5	66.0	65.8	69.5	68.5	66.0	64.5
	67.0	68.5	68.0	73.0	72.0	69.5	67.0
	61.0	62.0	60.5	65.5	65.0	61.0	61.0
19/12/03 (Fri)	65.0	66.5	66.8	69.3	68.5	66.5	65.0
	68.0	73.5	73.0	72.5	71.5	69.5	68.0
	61.0	61.5	61.5	62.0	63.5	61.5	61.0
24/12/03 (Wed)	64.0	66.0	65.3	68.5	69.0	65.0	64.0
	68.5	69.5	69.0	71.5	72.5	68.5	68.5
	61.5	62.0	62.5	64.0	64.5	61.5	61.5
31/12/03 (Wed)	63.5	65.5	66.0	68.5	67.0	65.0	63.5
	68.5	69.0	68.5	70.5	69.5	68.5	68.5
	60.5	61.0	61.5	62.5	63.0	61.5	60.5

Figure 4-1 - Trend of Noise Level for daytime monitoring from October 2003 to December 2003.

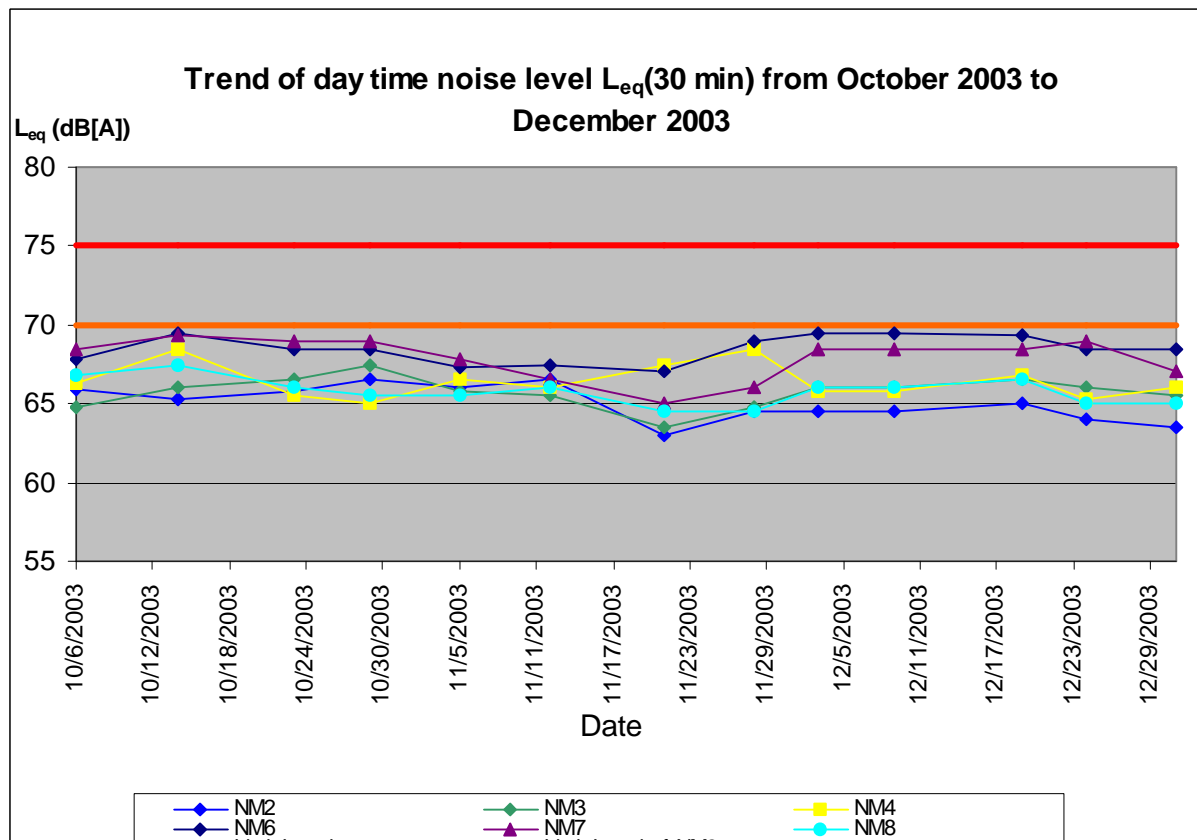


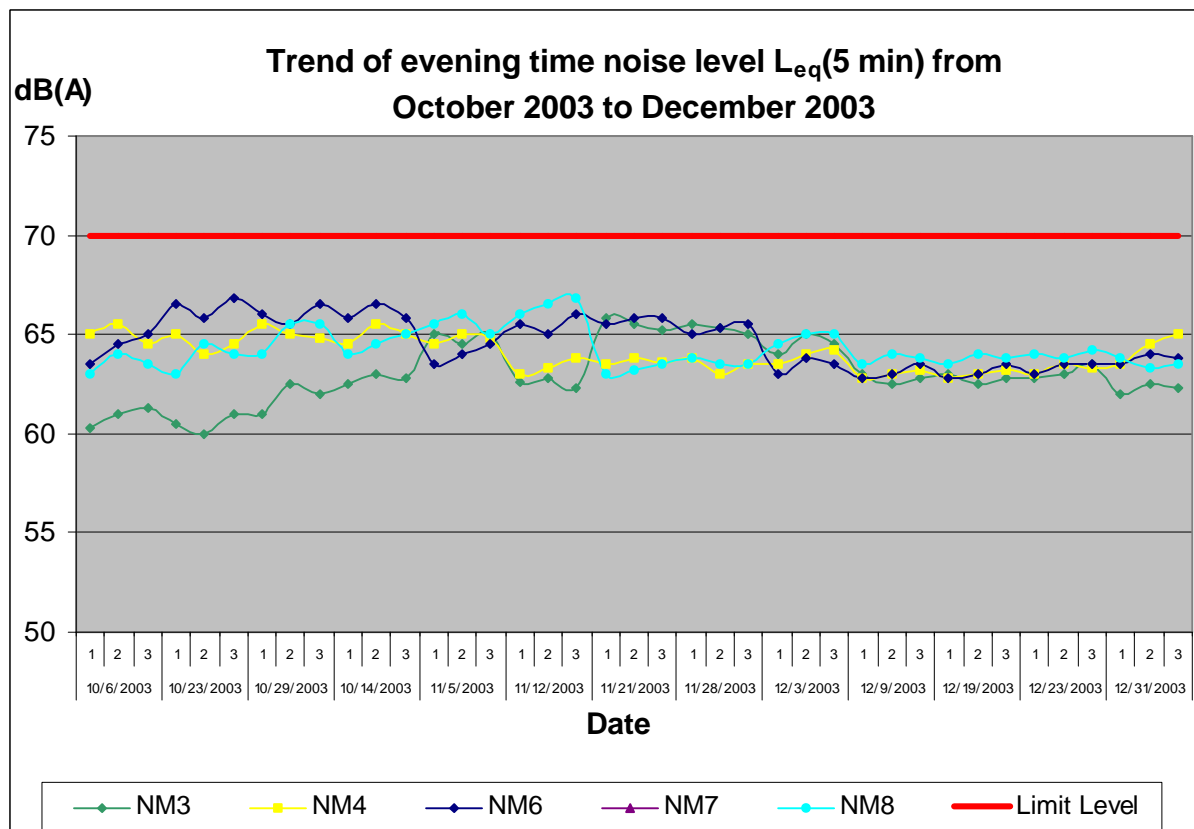
Table 4-2 - Construction evening time noise monitoring results from October 2003 to December 2003.

Date of Monitoring	Monitoring Results, $L_{eq}$ dB(A) (5 min)				
	NM3	NM4	NM6	NM7*	NM8
06/10/03 (Mon)	60.3	65.0	63.5	-	63.0
	61.0	65.5	64.5	-	64.0
	61.3	64.5	65.0	-	63.5
14/10/03 (Tue)	62.5	64.5	65.8	-	64.0
	63.0	65.5	66.5	-	64.5
	62.8	65.0	65.8	-	65.0
23/10/03 (Thu)	60.5	65.0	66.5	-	63.0
	60.0	64.0	65.8	-	64.5
	61.0	64.5	66.8	-	64.0
29/10/03 (Wed)	61.0	65.5	66.0	-	64.0
	62.5	65.0	65.5	-	65.5
	62.0	64.8	66.5	-	65.5
05/11/03 (Wed)	65.0	64.5	63.5	-	65.5
	64.5	65.0	64.0	-	66.0
	65.0	64.8	64.5	-	65.0
12/11/03 (Wed)	62.6	63.0	65.5	-	66.0
	62.8	63.3	65.0	-	66.5
	62.3	63.8	66.0	-	66.8
21/11/03 (Fri)	65.8	63.5	65.5	-	63.0
	65.5	63.8	65.8	-	63.2
	65.2	63.6	65.8	-	63.5
28/11/03 (Fri)	65.5	63.8	65.0	-	63.8
	65.3	63.0	65.3	-	63.5
	65.0	63.5	65.5	-	63.5
03/12/03 (Wed)	64.0	63.5	63.0	-	64.5
	65.0	64.0	63.8	-	65.0
	64.5	64.2	63.5	-	65.0
09/12/03 (Tue)	63.0	62.8	62.8	-	63.5
	62.5	63.0	63.0	-	64.0
	62.8	63.2	63.5	-	63.8
19/12/03 (Fri)	63.0	62.8	62.8	-	63.5
	62.5	63.0	63.0	-	64.0
	62.8	63.2	63.5	-	63.8
24/12/03 (Wed)	62.8	63.0	63.0	-	64.0
	63.0	63.5	63.5	-	63.8
	63.5	63.3	63.5	-	64.2

Date of Monitoring	Monitoring Results, $L_{eq}$ dB(A) (5 min)				
	NM3	NM4	NM6	NM7*	NM8
31/12/03 (Wed)	62.0	63.5	63.5	-	63.8
	62.5	64.5	64.0	-	63.3
	62.3	65.0	63.8	-	63.5

**Noted:** \* Evening time noise monitoring is not required at monitoring station NM7 as no construction works was conducted near this station.

Figure 4-2 - Trend of evening time noise monitoring level from September 2003 to December 2003.



## 5. AIR QUALITY MONITORING

### 5.1 24-hour TSP Monitoring Results

A total of fifteen 24-hour TSP monitoring were conducted at each location October 2003 to December 2003. The 24-hour TSP monitoring results are tabulated in Table 5-1. Detailed monitoring data are given in Appendix 2. The trend of the 24-hours TSP levels at each monitoring location were plotted and presented in Figure 5-1.

Table 5-1 - 24-hour TSP monitoring results for October 2003 to December 2003.

Date of Monitoring	24-hour TSP Monitoring Results, ( $\mu\text{g}/\text{m}^3$ )				
	AM2	AM3	AM4	AM5	AM6
03/10/2003 (Fri)	65.0	69.1	35.6	58.1	71.5
10/10/2003 (Fri)	39.6	42.1	36.7	41.2	40.8
16/10/2003 (Thu)	70.6	77.1	49.2	69.7	74.8
22/10/2003 (Wed)	110.0	118.5	79.6	107.8	108.2
28/10/2003 (Tue)	122.5	127.0	44.5	122.0	135.9
03/11/2003 (Mon)	206.9	205.2	82.0	178.4	243.3
08/11/2003 (Sat)	17.8	50.0	51.0	23.7	30.6
14/11/2003 (Fri)	90.8	106.8	55.0	69.3	102.4
20/11/2003 (Thu)	48.2	48.6	65.8	40.5	41.2
26/11/2003 (Wed)	84.5	84.5	58.2	104.4	85.0
02/12/2003 (Tue)	109.0	92.4	101.4	91.5	109.7
08/12/2003 (Mon)	131.0	124.2	137.1	109.2	130.9
13/12/2003 (Sat)	100.4	99.7	104.5	95.6	103.4
20/12/2003 (Sat)	155.5	148.7	112.7	62.3	153.0
27/12/2003 (Sat)	143.1	140.4	146.8	121.5	137.2

## 5.2 1-hour Monitoring Results

A total of forty-five 1-hour TSP monitoring were conducted at each location from October 2003 to December 2003. The 1-hour TSP monitoring results are tabulated in Table 5-2 and the detailed monitoring data are given in Appendix 3. The trend of the 1-hour TSP levels at each monitoring location were plotted and presented in Figure 5-2.

**Table 5-2** - 1-hour TSP monitoring results for October 2003 to December 2003.

Date of Monitoring	1-hour TSP Monitoring Results, ( $\mu\text{g}/\text{m}^3$ )				
	AM2	AM3	AM4	AM5	AM6
06/10/03	206.6	194.5	205.1	214.5	228.5
	186.2	186.0	190.3	200.4	220.9
	161.4	157.5	162.1	186.0	196.4
14/10/03	187.3	146.6	148.0	170.5	147.3
	181.2	149.5	154.8	164.3	147.1
	161.4	96.3	91.3	130.9	142.5
17/10/03	199.9	162.5	213.8	164.1	187.2
	199.2	163.6	213.0	163.6	184.8
	198.2	156.3	210.8	161.3	182.9
23/10/03	200.6	196.1	225.1	194.5	206.8
	186.0	175.3	211.0	177.0	190.2
	166.4	168.8	203.8	176.2	186.2
29/10/03	209.1	213.5	200.9	225.9	233.7
	204.5	209.9	198.8	225.2	230.7
	200.0	205.9	195.3	219.3	227.3
05/11/03	178.4	167.8	210.5	188.5	174.0
	186.4	170.4	208.7	186.5	175.3
	182.4	180.2	226.5	198.7	192.9
12/11/03	199.5	162.5	213.8	164.1	187.2
	199.2	163.6	213.0	163.6	184.9
	198.0	160.2	210.8	159.8	178.5
21/11/03	199.7	197.4	228.2	200.1	183.2
	195.5	178.0	218.8	198.6	182.3
	188.0	173.3	203.0	197.7	193.1
27/11/03	209.1	213.7	200.9	226.1	234.0
	205.3	210.4	198.8	225.3	231.6
	200.8	206.2	195.3	219.9	228.0
03/12/03	202.5	213.5	203.1	226.8	234.7
	204.5	209.9	199.7	226.7	230.6
	200.5	205.9	197.0	221.4	229.9

Date of Monitoring	1-hour TSP Monitoring Results, ( $\mu\text{g}/\text{m}^3$ )				
	AM2	AM3	AM4	AM5	AM6
09/12/03	196.0	173.5	212.3	230.1	207.8
	191.5	174.7	208.0	238.1	188.1
	197.6	182.4	215.7	235.3	192.4
11/12/03	172.0	141.5	157.6	140.7	136.1
	172.1	139.9	158.4	139.6	135.0
	169.7	139.0	154.9	139.4	133.2
19/12/03	187.2	184.5	183.2	171.6	185.0
	187.9	184.8	192.4	174.2	187.1
	187.9	185.4	193.5	173.2	187.0
24/12/03	170.1	222.0	201.5	193.1	142.5
	171.0	215.7	179.2	218.3	144.0
	168.4	223.2	185.8	226.0	145.7
31/12/03	189.6	180.3	135.6	183.2	135.4
	181.6	175.2	135.1	189.6	134.9
	183.9	177.2	134.2	191.4	133.6

Figure 5-1 - Trend of 24-hours TSP levels from October 2003 to December 2003.

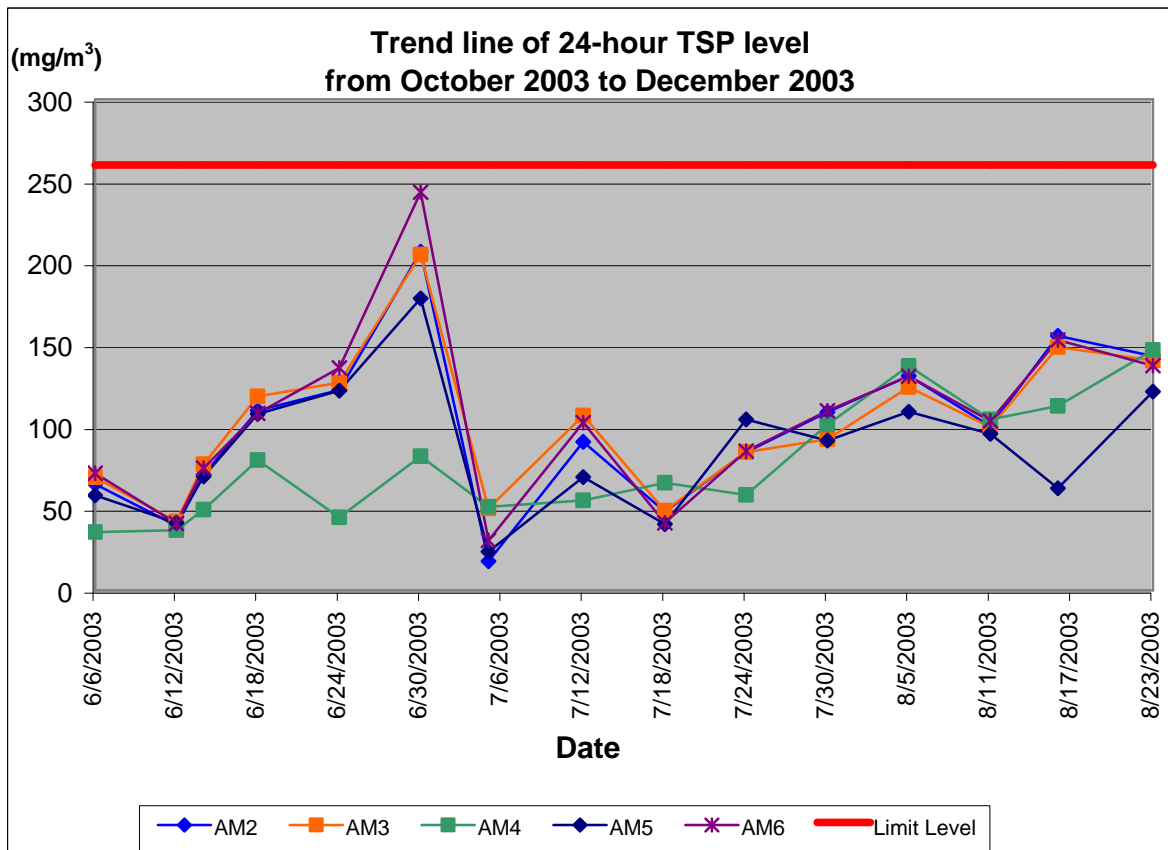
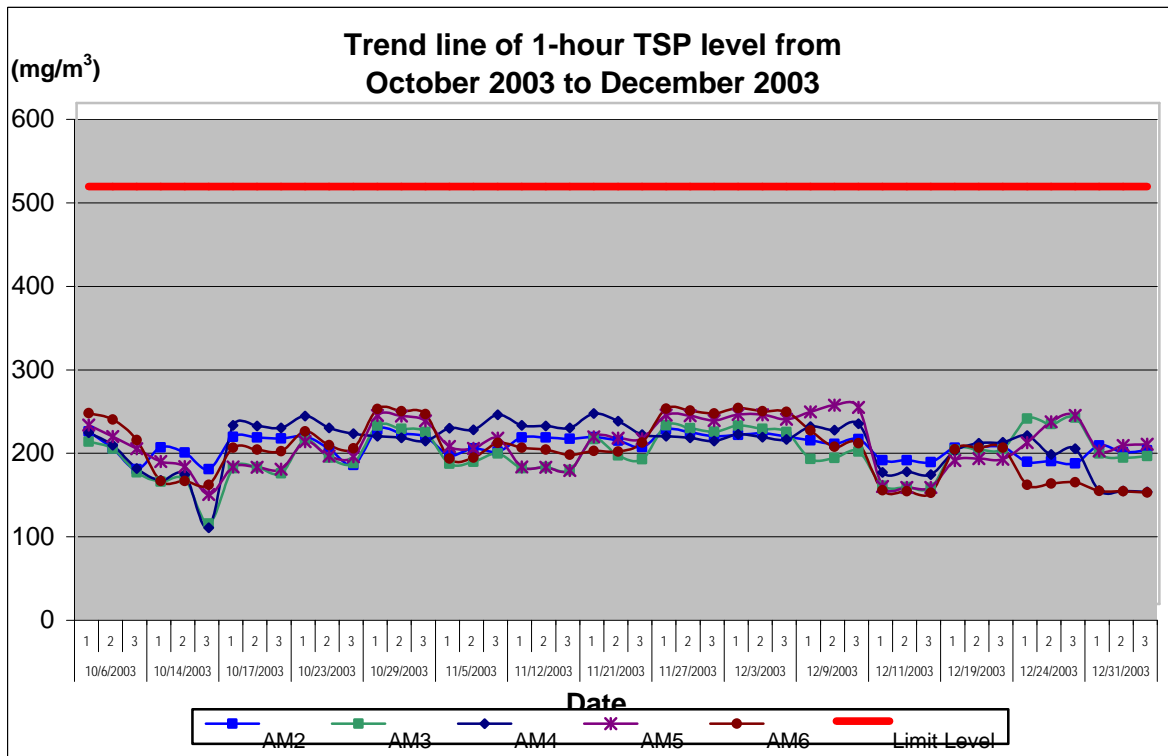


Figure 5-2 - Trend of 1-hour TSP levels from October 2003 to December 2003.



## 6. QUARTERLY SUMMARY, ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE RECORDS

### 6.1 Waste Disposal

A total of 98 loads of Construction and Demolition Waste (C&D waste) had been disposed of at NENT Landfill October 2003 to December 2003. The total tonnage of the waste disposal from July 2003 to September 2003 was 714.2 tonnes.

A total of 5129 loads of rocks ( $\phi > 400\text{mm}$ ) have been disposed of at the follow government project sites from October 2003 to December 2003:

- *Contract No. FL 26/01 River Training for Upper River Indus – Completion of the Remaining Works between Man Kam To Road and KCRC Bridges*
- *Contract No. CV/2001/01- Maintenance and Repairs to Seawalls, Piers and Other Port Works*
- *Tseung Kwan O Area 137 Public Filling Area*
- *Tuen Mun Area 38 public Filling Area*

The total quantity of the disposed rocks was 36672.5 m<sup>3</sup> from October 2003 to December 2003.

The total quantities of the waste disposal to Landfill and Public Fill are summarised in Table 6-1.

Table 6-1 - Waste Disposal Summary.

Month	Number of Loads to NENT	Total Disposed Tonnage (tonnes)	Number of Loads to others Gov. designated projects <sup>#</sup>	Total Disposed Quantity (m <sup>3</sup> )	Number of Loads to Public Filling Area	Total Disposed Quantity (m <sup>3</sup> )
May 2001	83	588.3	-	-	-	-
June 2001	48	326.1	-	-	-	-
July 2001	82	723.4	-	-	-	-
August 2001*	62	513.8	-	-	14	96.0
September 2001*	114	772.2	-	-	456	2,718.0
October 2001*	60	478.8	-	-	431	2,586.0
November 2001*	131	863.3	-	-	853	5,154.0
December 2001*	123	822.5	-	-	790	3,990.0
January 2002*	204	822.3	410	3,114.0	688	4,128.0
February 2002*	73	483.6	362	2,260.0	287	1,722.0
March 2002*	88	645.1	737	5,018.4	437	2,622.0
April 2002*	29	169.8	2,265	24,881.5	492	2,946.0
May 2002*	10	773.3	2,478	17,295.9	351	2,460.0
June 2002*	81	624.7	2,077	14,850.6	451	2,712.0
July 2002*	45	327.4	372	2,659.8	112	672.0
August 2002*	-	-	548	3,390.6	63	372.0
September 2002	42	225.6	3,732	22,719.8	9	54.0
October 2002	48	378.0	2,989	18,740.2	69	414.0



Month	Number of Loads to NENT	Total Disposed Tonnage (tonnes)	Number of Loads to others Gov. designated projects <sup>#</sup>	Total Disposed Quantity (m <sup>3</sup> )	Number of Loads to Public Filling Area	Total Disposed Quantity (m <sup>3</sup> )
November 2002	94	725.0	1,232	7,565.7	80	480.0
December 2002	21	147.3	3,035	21,668.1	66	396.0
January 2003	7	45.5	2,351	16,809.7	150	900.0
February 2003	7	77.9	1,929	13,792.4	56	336.0
March 2003	39	267.5	740	5,291.0	49	294.0
April 2003	9	38.4	613	4,383.0	152	912.0
May 2003*	14	141.7	835	5,970.3	286	1,716.0
June 2003*	29	238.7	1,738	11,826.1	172	1,914.0
July 2003	30	184.8	1,563	11,175.5	114	684.0
August 2003	29	210.3	1,708	12,212.2	276	1,656.0
September 2003	16	133.8	2,015	14,407.3	1,292	7,752.0
October 2003	25	123.3	1,277	9,130.6	3,307	19,842.0
November 2003	25	159.0	1,521	10,875.2	591	3,546.0
December 2003	48	431.94	2331	16666.7	859	5154.0
<b>Total</b>	<b>1716</b>	<b>12463.34</b>	<b>38858</b>	<b>276704.6</b>	<b>12953</b>	<b>58386</b>

**Note:**

- <sup>#</sup> -TDD Contract No. YL 46/99 Tin Shui Wai Further Development - Road D3 and Constructed Wetland,  
 -Contract No. FL 27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai  
 -TDD Contract No. FL 26/01 River Training for Upper River Indus - Completion of the Remaining Works between Man Kam To Road and KCRC Bridges  
 -CED Contract No. CV/99/10 Pak Shek Kok Reclamation for Public Filling, Remaining Works  
 -HD Contract No. HY/2001/18 Sai Sha Road Widening between Kam Ying Road and Future Truck Road T7 Junction  
 -CED Contract No. CV/2001/01 Maintenance and Repairs to Seawalls, Piers and Other Port Works  
 -Tseung Kwan O Area 137 Public Filling Area  
 -Tuen Mun Area 38 Public Filling Area

\*The updated waste disposal data was provided by CT in December 2003

## 6.2 EPD Site Inspection

ET was informed by the CT that EPD visited the site on.

## 6.3 Complaint Record

A total of seven public complaints regarding construction noise was received on 10/10/03 (3 times), 13/10/03, 16/10/03, 24/11/03 and 22/12/03 respectively through the EPD. All complaints had been resolved. The details of the complaint and the implemented mitigation measures are summarised in the memorandums of public complaints given in Appendix 4. A summary of the complaint record is tabulated in Table 6-2.

Table 6-2 - Compliant Record Summary.

Date Received	Source of Complaint	Complaint Issue	Status
15/03/01	Public (Kam Ying Court)	Noise	Resolved
30/03/01	Public (Kam Ying Court)	Noise	Resolved
26/04/01	Public (Kam Ying Court)	Noise	Resolved
26,27,28 /04/01	Public (Kam Ying Court)	Noise	Resolved
21/06/01	Public (District Councillor for Shatin District Board)	Water	Resolved
12/07/01	Public (District Councillor for Shatin District Board)	Noise	Resolved
20/10/01	Public (Monte Vista)	Noise	Resolved
23/10/01	Public (Monte Vista)	Noise	Resolved
27/10/01	Public (Monte Vista)	Noise	Resolved
30/10/01	Public (Kam Ying Court)	Noise	Resolved
14/11/01	-	Noise	-
15/11/01	-	Noise	-
18/11/01	Public (Kam Ying Court)	Noise	Resolved
20/11/01	Public (Lee On Estate)	Noise	Resolved
26/11/01	Public (Monte Vista)	Dust	Resolved
02/12/01	Public (Kam Ying Court)	Noise	Resolved
03/12/01	Public (Kam Ying Court)	Dust, Noise	Resolved
07/12/01	Public (Heng On Estate)	Noise	Resolved
14/12/01	Public (Kam Ying Court)	Dust, Noise	Resolved
08/01/02	Public (Monte Vista, Kam Ying Court)	Dust, Noise	Resolved
09/01/02	Public (Kam Ying Court)	Noise	Resolved
10/01/02	Public (Monte Vista)	Noise	Resolved
16/01/02	Public (Kam Ying Court)	Noise	Resolved
22/01/02	Public (Lok Wo Sha)	Dust, Waste	Resolved
01/02/02	Public (Monte Vista)	Noise	Resolved
20/03/02	Public (Kam Ying Court)	Noise	Resolved
26/03/02	Public (Monte Vista)	Dust	Resolved
16/04/02	Public (Monte Vista)	Dust	Resolved
13/05/02	Public (Lee On Estate)	Water	Resolved
26/06/02	Public (Monte Vista)	Noise	Resolved
10/09/02	Public (Cheung Muk Tau Village)	Noise	Resolved
30/09/02	Public (Monte Vista)	Dust	Resolved
23/10/02	Public (Monte Vista)	Noise	Resolved
05/11/02	Public (Lee On Estate)	Noise	Resolved
23/11/02	Public (Heng On Estate)	Noise	Resolved
30/11/02	Public (Kam Ying Court)	Noise	Resolved
16/12/02	Public (Kam Ying Court)	Noise	Resolved
27/12/02	Public (Kam Ying Court)	Noise	Resolved
09/01/03	Public (Kam Ying Court)	Noise	Resolved
13/01/03	Public (Kam Ying Court)	Noise	Resolved
18/01/03	Public (Monte Vista)	Noise	Resolved
20/01/03	Public (Cheung Muk Tau Village)	Noise	Resolved

Date Received	Source of Complaint	Complaint Issue	Status
06/02/03	Public (Monte Vista)	Noise	Resolved
06/04/03	Public (Ridge Garden)	Noise	Resolved
24/04/03	Public (Monte Vista)	Noise	Resolved
30/05/03	Public (District Councillor for Shatin District Board)	Water	Resolved
16/06/03	Public (Monte Vista)	Noise	Resolved
23/06/03	Public (Monte Vista)	Noise	Resolved
23/06/03	Public (Monte Vista)	Dust, Noise	Resolved
27/06/03	Public (Lee On Estate)	Noise	Resolved
27/06/03	Public (Kam Ying Court)	Noise	Resolved
21/08/03	Monte Vista	Noise	Resolved
23/08/03	Kam Ying	Noise	Resolved
15/09/03	Monte Vista	Noise	Resolved
10/10/03	Kam Ying Court	Noise	Resolved
10/10/03	Kam Ying Court	Noise	Resolved
10/10/03	Kam Ying Court	Noise	Resolved
13/10/03	Monte Vista	Noise	Resolved
16/10/03	Kam Ying Court	Noise	Resolved
24/11/03	Monte Vista	Noise	Resolved
22/12/03	Monte Vista	Noise	Resolved

#### 6.4 Non-compliance Record

There was no exceedance recorded in the period from October 2003 to December 2003. The compliance percentage of noise, 24-hours TSP and 1-hour TSP monitoring are summarised in Table 6-3 to Table 6-5 respectively.

**Table 6-3** - The Summary of Compliance Percentage of Noise Monitoring from February 2001 to December 2003.

Period	Noise Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
February 2001	3	3	100
March 2002	5	5	100
April 2001	4	4	100
May 2001	5	5	100
June 2001	4	4	100
July 2001	5	5	100
August 2001	4	4	100
September 2001	4	4	100
October 2001	5	4	100
November 2001	4	4	100
December 2001	4	4	100
January 2002	5	5	100
February 2002	4	4	100
March 2002	4	4	100

Period	Noise Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
April 2002	4	4	100
April 2003	5	5	100
June 2002	4	4	100
July 2002	5	5	100
August 2002	4	4	100
September 2002	5	5	100
October 2002	4	4	100
November 2002	4	4	100
December 2002	5	5	100
January 2003	4	4	100
February 2003	4	4	100
March 2003	4	4	100
April 2003	5	5	100
May 2003	4	4	100
June 2003	4	4	100
July 2003	5	5	100
August 2003	4	4	100
September 2003	5	5	100
October 2003	4	4	100
November 2003	4	4	100
December 2003	5	5	100

**Table 6-4** - The Summary of Compliance Percentage of 24-hours TSP monitoring from February 2001 to December 2003.

Period	24-hours TSP Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
February 2001	-	-	-
March 2002	5	5	100
April 2001	5	5	100
May 2001	5	5	100
June 2001	5	5	100
July 2001	5	5	100
August 2001	5	5	100
September 2001	5	5	100
October 2001	5	5	100
November 2001	5	5	100
December 2001	5	4*	80
January 2002	5	4*	80
February 2002	5	5	100
March 2002	5	5	100
April 2002	6	5*	83.3
April 2003	5	5	100

Period	24-hours TSP Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
June 2002	5	5	100
July 2002	5	5	100
August 2002	5	5	100
September 2002	5	5	100
October 2002	5	5	100
November 2002	5	5	100
December 2002	5	5	100
January 2003	5	5	100
February 2003	5	5	100
March 2003	5	5	100
April 2003	5	5	100
May 2003	6	6	100
June 2003	5	5	100
July 2003	5	5	100
August 2003	5	5	100
September 2003	5	5	100
October 2003	5	5	100
November 2003	5	4	80
December 2003	5	5	100

**Note:** The 24-hours TSP monitoring was commenced in March 2001.

\* The exceedances of 24-hour TSP level at AM2 in December 2001, January 2002 and April 2002 were due to the waterproofing works at the roof level as confirmed by the Principal of Ma On Shan Lutheran Primary School.

**Table 6-5 - The Summary of Compliance Percentage of 1-hour TSP monitoring from February 2001 to December 2003.**

Period	1-hour TSP Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
February 2001	-	-	-
March 2002	3	3	100
April 2001	15	15	100
May 2001	18	18	100
June 2001	15	15	100
July 2001	15	15	100
August 2001	15	15	100
September 2001	15	15	100
October 2001	15	15	100
November 2001	15	15	100
December 2001	15	15	100
January 2002	15	15	100
February 2002	15	15	100
March 2002	15	15	100
April 2002	15	15	100
April 2003	15	15	100

Period	1-hour TSP Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
June 2002	15	15	100
July 2002	18	18	100
August 2002	15	15	100
September 2002	15	15	100
October 2002	15	15	100
November 2002	15	15	100
December 2002	15	15	100
January 2003	15	15	100
February 2003	15	15	100
March 2003	15	15	100
April 2003	15	15	100
May 2003	15	15	100
June 2003	15	15	100
July 2003	18	18	100
August 2003	12	12	100
September 2003	18	18	100
October 2003	15	15	100
November 2003	12	12	100
December 2003	18	18	100

**Note:** The 1-hour TSP monitoring was commenced in March 2001.

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**7. REFERENCES**

- [1] Truck Road T7 in Ma On Shan - Environmental Impact Assessment Study, Final Assessment Report, Maunsell Consultants Asia Limited.
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