

# 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**

**APRIL 2003 TO JUNE 2003** 

Prepared For:

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ARUP

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Job No 23156

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# QUARTERLY EM&A SUMMARY REPORT FOR APRIL 2003 TO JUNE 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 April 2003 to June 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 April 2003 to June 2003. The recorded noise levels were in the range from 60.0 to 73.8 dB(A) during 0700-1900 and from 58.5 to 65.0 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 sixteen 24-hour TSP monitoring were conducted at each location from April 2003 to June 2003. The recorded 24-hour TSP levels were in the range from 20.4 to  $183.5~\mu g/m^3$  and were below the Action and Limit Levels.

A total of forty-five 1-hour TSP monitoring were conducted at each location from April 2003 to June 2003. The recorded 1-hour TSP levels were in the range from 104.3 to  $276.0 \,\mu\text{g/m}^3$  and were below the Action and Limit Levels.

A total of 52 loads of waste from site clearance (i.e. felled trees) have been disposed of at NENT Landfill from April 2003 to June 2003. The total tonnage of the waste disposal from April 2003 to June 2003 was 403.8 tonnes.

A total of 3,186 loads of rocks ( $\phi$  > 400mm) have been disposed of at the follow government project sites from April 2003 to June 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, and
- Contract No. FL27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai

The total quantity of the disposed rocks was 22,780.0 m<sup>3</sup> from April 2003 to June 2003.

A total of 610 loads of inert material have been disposed of at Public Filling Area from April 2003 to June 2003. The total quantity of the disposed inert materials was 3,660.0 m<sup>3</sup> from April 2003 to June 2003.

ET was informed by the CT that EPD visited the site on 10/04/03 and 24/06/03.

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A total of eight public complaints regarding construction noise were received on 06/04/03, 24/04/03, 30/05/03, 09/06/03, 23/06/03 and 27/06/03 respectively through the District Councillor for Shatin District Board and 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 from April 2003 to June 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.

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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 April 2003 to June 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.

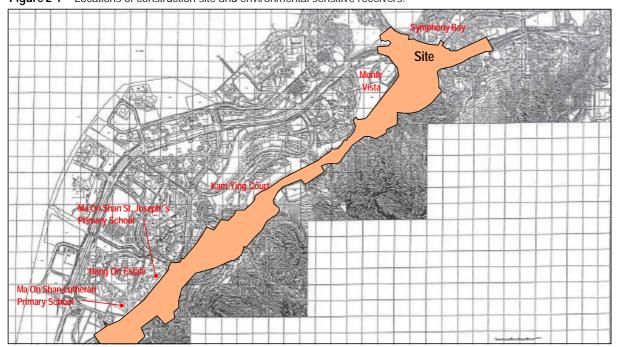


Figure 2-1 - Locations of construction site and environmental sensitive receivers.

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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 <sub>eq(30 min)</sub>		1	
Between 1900-2300 hours on normal weekdays		Once per week		
Between 2300-0700 hours of next day	Leq(5 min)*	Office per week	3 (consecutive)	
Between 0700-1900 hours on holidays				

**Remarks:** The L<sub>eq(5 min)</sub> 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

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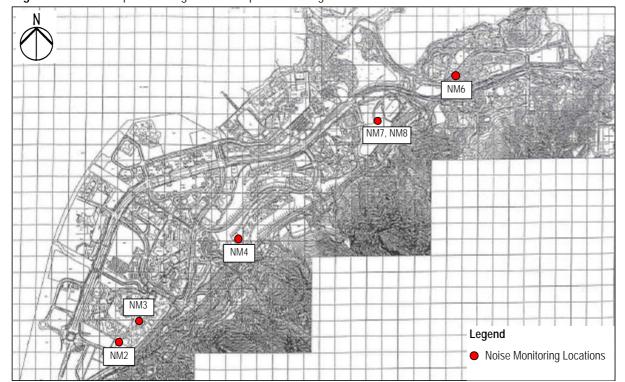


Figure 3-1 - Location plan showing the noise impact monitoring locations.

# 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

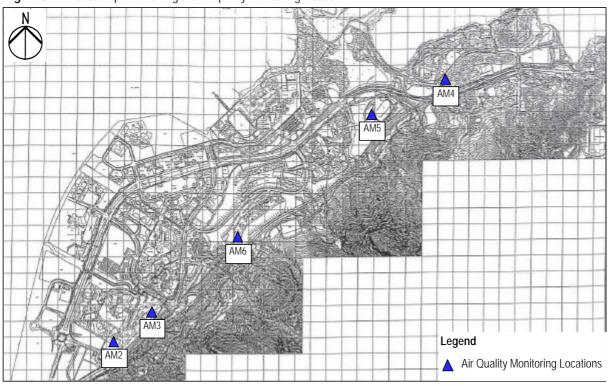
# 3.2.3 Monitoring Locations

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.

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# 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		75 *
0700 – 2300 hours on General Holidays; & 1900 – 2300 hours on all other days	When one documented complaint is received	50 or 55** (1) 65 or 70** (2)
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).

		Action		
	ET	ER		СТ
1. 2.	Notify ER and CT Carry out investigation	Confirm receipt of notification of failure in writing	1.	to ET
3.	Report the result of investigation to ER	<ol> <li>Notify CT</li> <li>Require CT to propose remedial</li> </ol>	2.	Implement noise mitigation proposals
4.	Increase monitoring frequency to check mitigation effectiveness	measures for the noise exceedance		
5.	Review the proposed remedial measures by CT and advise ER accordingly	Ensure remedial measures are properly implemented		
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			

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

	Action				
	ET	ER		СТ	
1. 2. 3. 4. 5.	Notify ER and EPD Identify source Repeat measurement to confirm findings Increase monitoring frequency Discuss amongst ER and CT on the potential remedial actions Review CT's remedial actions whenever necessary to assure their effectiveness and advise ER	<ol> <li>Confirm receipt of notification of failure in writing</li> <li>Notify CT</li> <li>Require CT to propose remedial measures for the noise exceedance</li> <li>Ensure remedial measures are properly implemented</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct CT to stop</li> </ol>	1. 2. 3. 4. 5.	further exceedance.  Inform ET, ER and EPD of the actions taken for the exceedance.  Submit proposals for remedial actions to ET within 3 working days of notification  Implement the agreed proposals  Resubmit proposals if problem still not under control	
7.	accordingly Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective	that portion of work until the exceedance is abated	0.	Stop the relevant portion of works as determined by the ER until the exceedance is abated	
8.	Supervise the implementation of remedial measures				
9.	Inform ER and EPD of the causes for the exceedance				
10	. Assess effectiveness of CT's remedial actions and keep EPD and ER informed of the results				
11	. If exceedance stops, cease additional monitoring				

# 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
	<ul> <li>For baseline level &lt; 108μg/m³,</li> <li>Action Level = average of baseline level plus 30% and Limit Level</li> </ul>	
24 Hour TSP Level in μg/m <sup>3</sup>	<ul> <li>For 108μg/m³ &lt; baseline level &lt; 154μg/m³,</li> <li>Action Level = 200μg/m³</li> </ul>	260
	<ul> <li>For baseline level &gt; 154 μg/m<sup>3</sup>,</li> <li>Action Level = 130% of baseline level</li> </ul>	
	• For baseline level < 154 µg/m³, Action Level = average of baseline level plus 30% and Limit Level	
1 Hour TSP Level in μg/m³	<ul> <li>For 154μg/m³ &lt; baseline level &lt; 269μg/m³,</li> <li>Action Level = 350μg/m³</li> </ul>	500
	<ul> <li>For baseline level &gt; 269 μg/m<sup>3</sup>,</li> <li>Action Level = 130% of baseline level</li> </ul>	

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The baseline checking was conducted on 15 June 2003. There was no significant difference when comparing the baseline checking results of June 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>				
Worldwing Education	Baseline Level *	Action Level	Limit Level		
Ma On Shan Lutheran Primary School	66.0	173			
Ma On Shan St. Joseph's Primary School	57.7	168			
Villa Concerto, Symphony Bay	60.8	170	260		
Club House, Monte Vista#	-	185			
Kam Yiu House, Kam Ying Court#	-	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>						
Monitoring Education	Baseline Level *	Action Level #	Limit Level				
Ma On Shan Lutheran Primary School	274	350					
Ma On Shan St. Joseph's Primary School	274	350					
Villa Concerto, Symphony Bay	273	347	500				
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	СТ							
Action Level 1 – Exceedance for one sam	nple								
<ol> <li>Identify source</li> <li>Inform ER</li> <li>Repeat measurement to confirm findings</li> <li>Review the proposed remedial measures by CT and advise ER accordingly</li> <li>Suggest any improvement or other alternative mitigation measures</li> </ol>	<ol> <li>Notify CT</li> <li>Check monitoring data and CT's working methods</li> </ol>	Rectify any unacceptable practice     Amend working methods if appropriate							
alternative mitigation measures should the CT's proposal be found ineffective  6. Supervise the implementation of remedial measures  7. Increase monitoring frequency to demonstrate efficacy of remedial measures  8. If exceedance stops, cease additional monitoring									
findings 4. Review the proposed remedial	1. Confirm receipt of notification of failure in writing 2. Notify CT 3. Check monitoring data and CT's working methods 4. Discuss with Environmental Supervisor and CT on potential remedial actions 5. Ensure remedial actions are properly implemented	<ol> <li>Submit proposals for remedial actions to ER within 3 working days of notification</li> <li>Implement the agreed proposals</li> <li>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.

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

	Action									
	ET		ER		СТ					
Lin	nit Level 1 – Exceedance for one samp	ole								
<ul><li>2.</li><li>3.</li><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>	actions required	4.	Confirm receipt of notification of failure in writing Notify CT Check monitoring data and CT's working methods Discuss with ET and CT on potential remedial actions Ensure remedial actions are properly implemented	3.	Take immediate action to avoid further exceedance Submit proposals for remedial actions to ER within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate					
Lin	nit Level 2 – Exceedance for two or mo	ore (	consecutive samples							
	Identify source Inform ER the causes and actions taken for the exceedance		Confirm receipt of notification of failure in writing Notify CT		Take immediate action to avoid further exceedance Submit proposals for remedial					
3.	Repeat measurement to confirm findings	3.	Carry out analysis of CT's working procedures to determine possible		actions to ER within 3 working days of notification					
	Investigate the causes of exceedance	4.	mitigation to be implemented  Discuss amongst ET and CT on	3. 4.	Implement the agreed proposals Resubmit proposals if problem still					
	Arrange meeting with ER to discuss the remedial actions to be taken	5.	potential remedial actions Review CT's remedial actions whenever necessary to assure their effectiveness	5.	not under control  Stop the relevant portion of works as determined by ER until the exceedance is abated					
6.	alternative mitigation measures should the CT's proposal be found ineffective	6.	If exceedance continues, consider what portion of the work is responsible and instruct CT to stop		exceendrice is abdied					
7.	Supervise the implementation of remedial measures		that portion of work until the exceedance is abated							
8.	Increase monitoring frequency to demonstrate efficacy of remedial measures									
9.	additional monitoring		ntified as heing not works related no fi							

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 from April 2003 to June 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 from April 2003 to June 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 April 2003 to June 2003.

Date of Monitoring	Monitoring	Monitoring Results, dB(A) (30 min)						
Date of Worldoning	Parameters	NM2	NM3	NM4	NM6	NM7	NM8	
	Leq	61.8	65.5	65.6	68.6	70.1	67.8	
02/04/03 (Wed)	L <sub>10</sub>	62.1	68.5	67.1	71.5	72.5	69.6	
	L <sub>90</sub>	59.5	61.0	64.6	61.0	66.5	64.6	
	Leq	60.5	63.0	66.5	66.9	64.6	68.5	
08/04/03 (Tue)	L <sub>10</sub>	64.0	65.5	69.0	68.1	67.6	70.1	
	L <sub>90</sub>	57.5	59.0	62.0	63.6	59.6	63.5	
	Leq	60.0	62.0	64.5	67.0	66.5	68.0	
16/04/03 (Wed)	L <sub>10</sub>	65.5	64.5	69.8	69.5	69.8	70.5	
	L <sub>90</sub>	58.0	59.0	60.5	62.0	61.5	63.0	
	Leq	63.0	61.5	67.0	67.5	68.0	66.7	
23/04/03 (Wed)	L <sub>10</sub>	65.0	64.7	69.5	72.3	72.5	70.0	
	L <sub>90</sub>	58.0	57.5	62.5	61.5	73.5	62.	
	Leq	63.0	62.6	67.5	68.7	71.5	73.8	
28/04/03 (Mon)	L <sub>10</sub>	64.5	64.4	70.5	71.9	76.0	78.	
	L <sub>90</sub>	60.5	58.9	63.5	64.4	62.8	64.	
	Leq	61.2	65.0	69.5	67.0	70.5	71.0	
06/05/03 (Tue)	L <sub>10</sub>	63.5	68.5	74.5	70.5	73.0	76.	
	L <sub>90</sub>	58.0	60.0	61.5	62.8	64.5	62.5	
	L <sub>eq</sub>	63.7	64.0	66.5	68.5	69.5	72.0	
15/05/03 (Thu)	L <sub>10</sub>	67.5	66.5	69.0	72.0	72.5	74.	
	L <sub>90</sub>	61.0	60.0	61.5	62.5	64.0	65.0	
	Leq	63.8	64.1	67.4	63.3	62.2	61.4	
22/05/03 (Thu)	L <sub>10</sub>	65.5	65.5	68.0	64.5	64.5	62.	
	L <sub>90</sub>	61.0	61.5	60.0	61.0	58.5	58.0	
	L <sub>eq</sub>	68.2	63.6	65.8	65.1	63.9	72.9	
28/05/03 (Wed)	L <sub>10</sub>	69.5	66.0	67.5	66.5	65.5	76.5	
	L <sub>90</sub>	66.0	57.5	57.0	61.5	60.5	59.5	

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Date of Monitoring	Monitoring	Monitoring Results, dB(A) (30 min)							
Date of Monitoring	Parameters	NM2	NM3	NM4	NM6	NM7	NM8		
	L <sub>eq</sub>	64.5	60.0	65.0	68.5	70.5	69.5		
03/06/03 (Tue)	L <sub>10</sub>	66.0	62.5	67.0	71.0	73.0	72.0		
	L <sub>90</sub>	60.0	58.5	60.5	61.5	62.5	64.0		
	L <sub>eq</sub>	61.0	62.0	65.0	64.0	62.5	65.5		
10/06/03 (Tue)	L <sub>10</sub>	63.0	63.5	68.5	67.0	64.0	68.0		
	L <sub>90</sub>	59.0	58.0	61.5	60.5	60.0	61.0		
	L <sub>eq</sub>	63.5	62.0	64.5	69.0	67.5	72.0		
17/06/03 (Tue)	L <sub>10</sub>	66.0	64.5	67.5	73.5	70.5	76.8		
	L <sub>90</sub>	59.5	58.0	60.5	63.0	60.5	63.0		
	Leq	63.0	61.5	67.0	67.0	64.5	69.5		
26/06/03 (Thu)	L <sub>10</sub>	65.5	64.0	71.5	70.5	66.0	75.0		
	L <sub>90</sub>	60.0	58.0	60.5	62.0	60.5	64.0		

Figure 4-1 – Trend of Noise Level for daytime monitoring from March 2003 to June 2003.

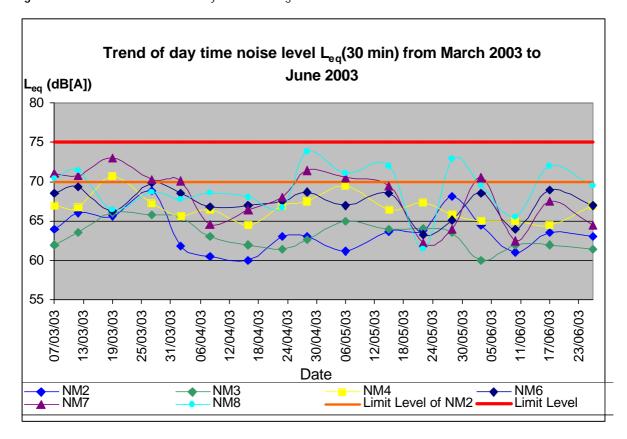


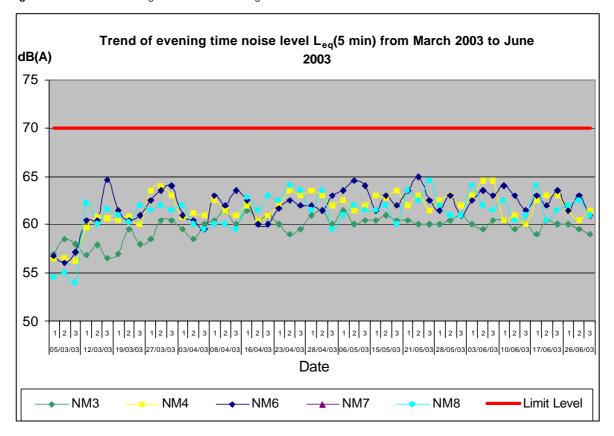
 Table 4-2 - Construction evening time noise monitoring results from April 2003 to June 2003.

ate of Monitoring	Monitoring Results, L <sub>eq</sub> dB(A) (5 min)								
ate of Monitoring	NM3	NM4	NM6	NM7*	NM8				
	59.5	60.8	61.0	-	62.0				
02/04/03 (Wed)	58.5	61.2	60.5	-	60.0				
	60.0	61.0	59.5	-	59.5				
	60.5	62.5	63.0	-	60.0				
08/04/03 (Tue)	61.5	61.5	62.0	-	60.0				
	60.0	61.0	63.5	-	59.5				
	61.5	62.0	62.5	-	62.8				
16/04/03 (Wed)	60.5	60.5	60.0	-	61.5				
	61.0	61.0	60.0	-	63.0				
	60.0	62.0	61.7	-	62.5				
23/04/03 (Wed)	59.0	63.5	62.5	-	64.0				
	59.5	63.0	62.0	-	63.5				
	61.0	63.5	62.0	-	61.5				
28/04/03 (Mon)	61.5	63.0	61.5	-	63.5				
	60.0	62.0	63.0	-	59.5				
	61.5	62.5	63.5	-	61.0				
06/05/03 (Tue)	60.0	61.5	64.5	-	62.0				
	60.5	62.0	64.0	-	61.5				
	60.5	63.0	61.5	-	61.5				
15/05/03 (Thu)	61.0	62.8	63.0	-	62.0				
	60.5	63.5	62.0	-	60.0				
	60.5	62.0	63.5	-	63.5				
21/05/03 (Wed)	60.0	63.0	65.0	-	62.5				
	60.0	61.5	62.5	-	64.5				
	60.0	62.5	61.5	-	62.0				
28/05/03 (Wed)	60.5	63.0	63.0	-	61.0				
	61.0	62.0	61.0	-	61.0				
	60.0	63.0	62.5	-	64.0				
03/06/03 (Tue)	59.5	64.5	63.5	-	62.0				
	60.5	64.5	63.0	-	61.5				
	60.5	60.5	64.0	-	62.5				
10/06/03 (Tue)	59.5	61.0	63.0	-	60.5				
	60.0	60.0	61.5	-	61.0				
	59.0	62.5	63.0	-	64.0				
17/06/03 (Tue)	60.5	63.0	62.0	-	60.5				
	60.0	63.0	63.5	-	61.5				
	60.0	61.5	61.5	-	62.0				
26/06/03 (Thu)	59.5	60.5	63.0	-	62.5				
	59.0	61.5	61.0	-	61.0				

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

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Figure 4-2 - Trend of evening time noise monitoring level from March 2003 to June 2003.



### 5. AIR QUALITY MONITORING

# 5.1 24-hour TSP Monitoring Results

A total of sixteen 24-hour TSP monitoring were conducted at each location from April 2003 to June 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 April 2003 to June 2003.

Date of Manitoring	24-hour TSP Monitoring Results,(µg/m³)							
Date of Monitoring	AM2	AM3	AM4	AM5	AM6			
01/04/03 (Tue)	44.9	42.7	51.0	56.7	41.5			
07/04/03 (Mon)	68.6	65.2	56.6	63.3	58.7			
12/04/03 (Sat)	43.2	46.4	46.3	31.4	39.8			
22/04/03 (Tue)*	70.8	67.1	59.9	22.7	-			
23/04/03 (Wed)	-	-	-	-	64.9			
25/04/03 (Fri)	130.0	119.9	145.8	136.2	113.9			
02/05/03 (Fri)	86.1	79.6	-	98.5	80.4			
06/05/03 (Tue)*	-	-	42.4	-	-			
07/05/03 (Wed)	34.5	31.9	41.0	32.8	31.9			
13/05/03 (Tue)	47.7	-	57.1	67.5	46.8			
15/05/03 (Thu)*	-	52.2	-	-	-			
19/05/03 (Mon)	37.1	35.6	40.3	50.5	39.4			
24/05/03 (Sat)	41.6	47.3	42.7	47.6	45.5			
31/05/03 (Sat)	90.8	93.0	86.5	108.7	88.5			
06/06/03 (Fri)	47.2	51.5	42.5	183.5	41.5			
12/06/03 (Thu)	41.3	40.9	42.0	-	35.8			
14/06/03 (Sat)#	-	-	-	42.6	-			
18/06/03 (Wed)	128.6	123.2	158.5	151.8	126.7			
24/06/03 (Tue)	27.4	41.7	35.3	32.1	28.8			
30/06/03 (Mon)	21.6	22.6	20.4	24.3	24.2			

Note: \* The 24-hour TSP monitoring at AM6, AM4 and AM3 was postponed from 22/04/03, 02/05/03 and 13/05/03 to 23/04/03, 06/05/03 and 15/05/03 respectively due to shortage of power supply.

<sup>#</sup> The 24-hour TSP monitoring at AM5 was postponed from 12/06/03 to 14/06/03 due to equipment failure.

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# 5.2 1-hour Monitoring Results

A total of forty-five 1-hour TSP monitoring were conducted at each location from April 2003 to June 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 April 2003 to June 2003.

Data of Manitorina	1-hour TSP Monitoring Results, (µg/m³)								
Date of Monitoring	AM2	AM3	AM4	AM5	AM6				
	219.1	214.7	199.8	224.7	196.7				
02/04/03 (Wed)	206.0	200.8	177.5	193.0	173.6				
	200.1	196.5	176.7	198.4	174.7				
	166.5	193.8	170.5	171.4	162.8				
08/04/03 (Tue)	144.8	193.5	145.0	158.8	163.6				
	151.2	194.7	155.1	172.2	167.2				
	204.7	193.0	168.4	184.1	194.0				
16/04/03 (Wed)	227.8	222.3	197.1	182.2	177.8				
	226.3	204.6	190.6	199.4	191.4				
	188.6	187.3	214.2	219.6	198.7				
23/04/03 (Wed)	199.6	199.2	224.2	229.0	208.1				
	206.7	207.4	231.9	239.1	223.7				
	204.2	209.2	213.7	199.2	227.1				
28/04/03 (Mon)	193.4	204.1	206.2	190.9	219.4				
	185.5	198.1	196.0	183.4	213.0				
	164.7	153.0	159.0	153.2	156.3				
06/05/03 (Tue)	150.3	145.0	146.9	155.9	154.8				
	142.6	137.8	133.2	163.2	169.2				
	201.7	189.7	202.7	226.8	210.5				
09/05/03 (Fri)	201.0	186.2	194.9	217.4	208.7				
	206.6	195.2	203.7	228.8	210.5				
	196.0	186.0	183.3	209.3	186.2				
15/05/03 (Thu)	217.8	182.5	172.5	205.2	181.7				
	231.4	129.6	160.8	174.7	142.1				
	181.0	204.3	194.8	187.1	205.8				
22/05/03 (Thu)	193.0	196.6	202.4	179.8	185.3				
	178.5	226.7	204.4	201.6	212.7				
	183.5	210.8	201.7	202.0	224.0				
28/05/03 (Wed)	183.3	209.8	198.2	199.9	222.9				
	184.5	211.2	198.9	201.8	232.1				

Date of Manitoring		1-hour TSP Monitoring Results, (μg/m³)							
Date of Monitoring	AM2	AM3	AM4	AM5	AM6				
	222.7	196.2	200.3	266.2	213.7				
03/06/03 (Tue)	217.4	192.8	197.1	276.0	205.1				
	207.5	183.8	180.6	259.7	193.5				
	179.9	154.6	141.0	150.9	168.7				
10/06/03 (Tue)	178.0	151.2	135.4	146.7	164.1				
	169.5	134.5	154.2	125.2	152.1				
	215.7	216.2	236.2	196.0	209.9				
17/06/03 (Tue)	193.5	190.4	213.6	174.9	191.4				
	185.2	182.3	205.1	162.8	183.1				
	177.8	189.4	173.4	163.2	145.9				
23/06/03 (Mon)	162.2	159.2	138.0	144.3	125.1				
	165.6	182.7	146.8	149.3	129.6				
	154.7	120.7	121.2	138.6	116.2				
26/06/03 (Thu)	146.7	130.9	107.6	132.1	104.3				
	147.3	157.0	132.7	146.4	132.7				

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Figure 5-1 - Trend of 24-hours TSP levels from March 2003 to June 2003.

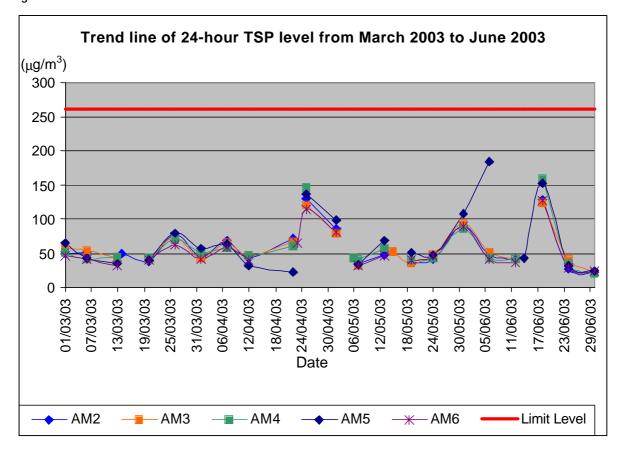
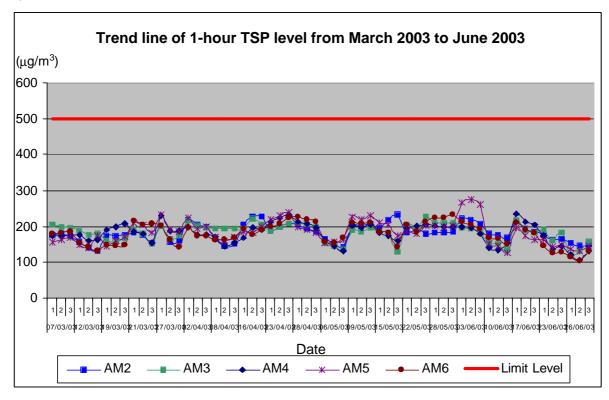


Figure 5-2 - Trend of 1-hour TSP levels from March 2003 to June 2003.



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

### 6.1 Waste Disposal

A total of 52 loads of waste from site clearance (i.e. felled trees) have been disposed of at NENT Landfill from April 2003 to June 2003. The total tonnage of the waste disposal from April 2003 to June 2003 was 403.8 tonnes.

A total of 3,186 loads of rocks ( $\phi$  > 400mm) have been disposed of at the follow government project sites from April 2003 to June 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, and
- Contract No. FL27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai

The total quantity of the disposed rocks was 22,780.0 m<sup>3</sup> from April 2003 to June 2003.

A total of 610 loads of inert material have been disposed of at Public Filling Area from April 2003 to June 2003. The total quantity of the disposed inert materials was 3,660.0 m<sup>3</sup> from April 2003 to June 2003.

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

Table 6-1	- Waste	Disposal	Summar	у.
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Month	Number of Loads to NENT	Total Disposed Tonnage (tonnes)	Number of Loads to others gov. designated project#	Total Disposed Quantity (m³)	Number of Loads to Public Filling Area	Total Disposed Quantity (m³)
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

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Month	Number of Loads to NENT	Total Disposed Tonnage (tonnes)	Number of Loads to others gov. designated project#	Total Disposed Quantity (m³)	Number of Loads to Public Filling Area	Total Disposed Quantity (m³)
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
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	121.7	835	5,970.3	286	1,716.0
June 2003	29	243.7	1,738	12,426.7	172	1,032.0
Total	1,543	11,205.2	28,443	202,837.7	6,514	38,712.0

Note:

- -TDD Contract No. YL 46/99 Tin Shui Wai Further Development Road D3 and Constructed Wetland,
  - -Contract No. FL27/02 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 and
  - -CED Contract No. CV/99/10 Pak Shek Kok Reclamation for Public Filling, Remaining Works.
- \* The updated waste disposal data was provided by CT in March 2003

# 6.2 EPD Site Inspection

ET was informed by the CT that EPD visited the site on 10/04/03 and 24/06/03.

### 6.3 Complaint Record

A total of eight public complaints regarding construction noise were received on 06/04/03, 24/04/03, 30/05/03, 09/06/03, 23/06/03 and 27/06/03 respectively through the District Councillor for Shatin District Board and 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

Date Received	Source of Complaint	Complaint Issue	Status
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

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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

# 6.4 Non-compliance Record

There was no exceedance recorded in the period from April 2003 to June 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 June 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	
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	

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Period		Noise Monitoring	
renou	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
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

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

Period		24-hours TSP Monitoring	
Periou	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
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

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Period		24-hours TSP Monitoring	
renou	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
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

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

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

Period		1-hour TSP Monitoring	
Period	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
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

<sup>\*</sup> 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.

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Period		1-hour TSP Monitoring	
renou	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
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

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.

- [2] Brief for Environmental Monitoring and Audit for the Sha Tin New Town, stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan, Maunsell Consultants Asia Limited.
- [3] Environmental Permit No. EP-057/2000 for the Designated Project "Truck Road T7 in Ma On Shan", Environmental Protection Department, HKSAR.
- [4] Trunk Road T7 in Ma On Shan Environmental Monitoring and Audit Manual, Maunsell Consultant Asia Limited, HKSAR.
- [5] Sha Tin New Town, Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Baseline Monitoring Report, Maunsell Consultants Asia Ltd.

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# APPENDIX 1

Noise Impact Monitoring Results for April 2003 to June 2003

#### **Details of Day Time Noise Impact Monitoring**

		NSR	Time p	eriods	Weather	Avg. wind	No	ise Level dE	B(A)
Month	Date	No.	Start	Finish	condition	speed (m/s)	Leq	L <sub>10</sub>	L <sub>90</sub>
Apr-03	02-Apr-03	NM2	13:50	14:20	Fine	0.5	61.8	62.1	59.5
Арг-03	02-Apr-03	NM3	14:35	15:05	Fine	0.6	65.5	68.5	61.0
Арг-03	02-Apr-03	NM4	13:00	13:30	Fine	0.4	65.6	67.1	64.6
Apr-03	02-Apr-03	NM6	11:20	11:50	Fine	0.5	68.6	71.5	61.0
Apr-03	02-Apr-03	NM7	10:00	10:30	Fine	0.5	70.1	72.5	66.5
Apr-03	02-Apr-03	NM8	10:35	11:05	Fine	0.6	67.8	69.6	64.6
Apr-03	08-Apr-03	NM2	11:30	12:00	Fine	0.5	60.5	64.0	57.5
Apr-03	08-Apr-03	NM3	10:50	11:20	Fine	0.3	63.0	65.5	59.0
Apr-03	08-Apr-03	NM4	13:00	13:30	Fine	0.4	66.5	69.0	62.0
Apr-03	08-Apr-03	NM6	8:40	9:10	Fine	0.4	66.9	68.1	63.6
Apr-03	08-Apr-03	NM7	9:25	9:55	Fine	0.5	64.6	67 <i>.</i> 6	59.6
Apr-03	08-Apr-03	NM8	10:00	10:30	Fine	0.4	68.5	70.1	63.5
Apr-03	16-Apr-03	NM2	16:15	16:45	sunny	0.4	60.0	65.5	58.0
Apr-03	16-Apr-03	NM3	15:40	16:10	sunny	0.3	62.0	64.5	59.0
Apr-03	16-Арг-03	NM4	15:00	15:30	sunny	0.5	64.5	69.8	60.5
Apr-03	16-Apr-03	NM6	14:15	14:45	sunny	0.6	67.0	69.5	62.0
Apr-03	16-Apr-03	NM7	13:35	14:05	sunny	0.6	66.5	69.8	61.5
Apr-03	16-Apr-03	NM8	13:00	13:30	sunny	0.5	68.0	70.5	63.0
Apr-03	23-Apr-03	NM2	8:00	8:30	sunny	0.4	63.0	65.0	58.0
Apr-03	23-Apr-03	NM3	8:40	9:10	sunny	0.3	61.5	64.7	57.5
Apr-03	23-Apr-03	NM4	9:25	9:55	sunny	0.5	67.0	69.5	62.5
Арг-03	23-Apr-03	NM6	11:30	12:00	sunny	0.6	67.5	72.3	61.5
Apr-03	23-Apr-03	NM7	10:05	10:35	sunny	0.6	68.0	72.5	73.5
Apr-03	23-Apr-03	NM8	10:40	11:10	sunny	0.5	66.7	70.0	62.5
Apr-03	28-Apr-03 28-Apr-03	NM2	13:15	13:45	Sunny	0.4	63.0	64.5	60.5
Apr-03	•	NM3	14:00	14:30	Sunny	0.3	62.6	64.4	58.9
Apr-03	28-Apr-03 28-Apr-03	NM4 NM6	14:55	15:25 15:30	Sunny	0.5	67.5	70.5	63.5
Apr-03	28-Apr-03 28-Apr-03	NM7	15:00 8:20	8:50	Sunny	0.6	68.7	71.9	64.4
Apr-03 Apr-03	28-Apr-03	NM8	9:00	9:30	Sunny Sunny	0.4 0.6	71.5 73.8	76.0 78.5	62.8
May-03	06-May-03	NM2	8:30	9:00	Fine	0.5			64.7
May-03	06-May-03	NM3	11:30	12:00	Fine	0.5	61.2 65.0	63.5 68.5	58.0 60.0
May-03	06-May-03	NM4	10:55	11:25	Fine	0.4	69.5	74.5	61.5
May-03	06-May-03	NM6	10:35	10:45	Fine	0.5	67.0	74.5	62.8
May-03	06-May-03	NM7	9:00	9:30	Fine	0.5	70.5	73.0	64.5
May-03	06-May-03	NM8	9:35	10:05	Fine	0.4	70.5	76.5	62.5
May-03	15-May-03	NM2	8:00	8:30	Sunny	0.4	63.7	67.5	61.0
May-03	15-May-03	NM3	8:45	9:15	Sunny	0.4	64.0	66.5	60.0
May-03	15-May-03	NM4	9:20	9:50	Sunny	0.6	66.5	69.0	61.5
May-03	15-May-03	NM6	11:20	11:50	Sunny	0.5	68.5	72.0	62.5
May-03	15-May-03	NM7	10:00	10:30	Sunny	0.6	69.5	72.5	64.0
May-03	15-May-03	NM8	10:35	11:05	Sunny	0.5	72.0	74.5	65.0
May-03	22-May-03	NM2	13:40	14:10	sunny	0.5	63.8	65.5	61.0
May-03	22-May-03	NM3	13:00	13:30	sunny	0.4	64.1	65.5	61.5
May-03	22-May-03	NM4	11:30	12:00	sunny	0.5	67.4	68.0	60.0
May-03	22-May-03	NM6	9:13	9:43	sunny	0.6	63.3	64.5	61.0
May-03	22-May-03	NM7	9:55	10:25	sunny	0.8	62.2	64.5	58.5
May-03	22-May-03	NM8	10:35	11:05	sunny	0.8	61.4	62.5	58.0
May-03	28-May-03	NM2	9:00	9:30	sunny	0.6	68.2	69.5	66.0
May-03	28-May-03	NM3	11:15	11:45	sunny	0.4	63.6	66.0	57.5
May-03	28-May-03	NM4	13:05	13:35	sunny	0.4	65.8	67.5	57.0
May-03	28-May-03	NM6	9:10	9:40	sunny	0.6	65.1	66.5	61.5
May-03	28-May-03	NM7	9:50	10:20	sunny	0.4	63.9	65.5	60.5
May-03	28-May-03	8MM	10:30	11:00	sunny	0.6	72.9	76.5	59.5
Jun-03	03-Jun-03	NM2	13:00	13:30	sunny	0.4	64.5	66.0	60.0
Jun-03	03-Jun-03	NM3	13:40	14:10	sunny	0.3	60.0	62.5	58.5
Jun-03	03-Jun-03	NM4	14:15	14:45	sunny	0.5	65.0	67.0	60.5
Jun-03	03-Jun-03	NM6	16:00	16:30	sunny	0.6	68.5	71.0	61.5
Jun-03	03-Jun-03	NM7	14:50	15:20	sunny	0.5	70.5	73.0	62.5
Jun-03	03-Jun-03	NM8	15:25	15:55	sunny	0.5	69.5	72.0	64.0
Jun-03	10-Jun-03	NM2	10:50	11:20	Cloudy	0.5	61.0	63.0	59.0
Jun-03	10-Jun-03	NM3	11:00	11:30	Cloudy	0.4	62.0	63.5	58.0
Jun-03	10-Jun-03	NM4	10:55	11:25	Cloudy	0.5	65.0	68.5	61.5
Jun-03	10-Jun-03	NM6	10:10	10:40	Cloudy	0.5	64.0	67.0	60.5
Jun-03	10-Jun-03	NM7	10:05	10:35	Cloudy	0.5	62.5	64.0	60.0
Jun-03	10-Jun-03	NM8	10:00	10:30	Cloudy	0.4	65.5	68.0	61.0

#### **Details of Day Time Noise Impact Monitoring**

		NSR	Time p	eriods	Weather	Avg. wind	No	ise Level dE	3(A)
Month	Date	No.	Start	Finish	condition	speed (m/s)	Leq	L <sub>10</sub>	L <sub>90</sub>
Jun-03	17-Jun-03	NM2	8:00	8:30	Fine	0.4	63.5	66.0	59.5
Jun-03	17-Jun-03	NM3	8:40	9:10	Fine	0.4	62.0	64.5	58.0
Jun-03	17-Jun-03	NM4	9:30	10:00	Fine	0.4	64.5	67.5	60.5
Jun-03	17-Jun-03	NM6	13:00	13:30	Fine	0.5	69.0	73.5	63.0
Jun-03	17-Jun-03	NM7	10:10	10:40	Fine	0.6	67.5	70.5	60.5
Jun-03	17-Jun-03	NM8	10:35	11:05	Fine	0.6	72.0	76.8	63.0
Jun-03	26-Jun-03	NM2	13:00	13:30	sunny	0.5	63.0	65.5	60.0
Jun-03	26-Jun-03	NM3	0:00	0:30	sunny	0.4	61.5	64.0	58.0
Jun-03	26-Jun-03	NM4	10:30	11:00	sunny	0.4	67.0	71.5	60.5
Jun-03	26-Jun-03	NM6	8:30	9:00	sunny	0.5	67.0	70.5	62.0
Jun-03	26-Jun-03	NM7	9:15	9:45	sunny	0.4	64.5	66.0	60.5
Jun-03	26-Jun-03	NM8	9:50	10:20	sunny	0.5	69.5	75.0	64.0

#### **Details of Evening time Noise Impact Monitoring**

			NSR	Time p	eriods	Weather	Avg. wind	No	ise Level dB	(A)
Month	Date	Set No.	No.	Start	Finish	condition	speed (m/s)	L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
Apr-03	03-Apr-03	1	NM3	19:00	19:05	fine	0.3	59.5	61.5	55.0
Apr-03	03-Apr-03	2	NM3	19:05	19:10	fine	0.3	58.5	61.0	55.0
Apr-03	03-Apr-03	3	NM3	19:10	19:15	fine	0.3	60.0	63.0	57.5
Apr-03	03-Apr-03	1	NM4	19:30	19:35	fine	0.3	8.09	63.0	57 <i>.</i> 5
Apr-03	03-Apr-03	2	NM4	19:35	19:40	fine	0.3	61.2	63.5	57.0
Apr-03	03-Apr-03	3	NM4	19:40	19:45	fine	0.3	61.0	64.0	57.0
Apr-03	03-Apr-03	1	NM6	20:30	20:35	fine	0.4	61.0	61.8	56.0
Apr-03	03-Apr-03	2	NM6	20:35	20:40	fine	0.4	60.5	62.0	56.5
Apr-03	03-Apr-03	3	NM6	20:40	20:45	fine	0.4	59.5	61.5	56.0
Apr-03	03-Apr-03	1	NM8	20:00	20:05	fine	0.4	62.0	64.5	59.0
Apr-03	03-Apr-03	2	NM8	20:05	20:10	fine	0.4	60.0	63.0	57.0
Apr-03	03-Apr-03	3	NM8	20:10	20:15	fine	0.4	59.5	61.5	57.0
Apr-03	08-Apr-03	1 1	NM3	19:00	19:05	fine	0.3	60.5	63.0	57.5
Apr-03	08-Apr-03	2	NM3	19:05	19:10	fine	0.3	61.5	63.5	57.0 57.0
Apr-03	08-Apr-03 08-Apr-03	3	NM3 NM4	19:10 19:25	19:15 19:30	fine fine	0.3 0.4	60.0	62.5 65.0	
Apr-03 Apr-03	08-Apr-03 08-Apr-03	2	NM4	19:25	19:30	fine	0.4	62.5 61.5	63.5	59.5 60.0
Apr-03	08-Apr-03	3	NM4	19:35	19.33	fine	0.4	61.0	63.0	58.5
Apr-03 Apr-03	08-Apr-03	1	NM6	20:20	20:25	fine	0.4	63.0	64.5	56.5 59.5
Apr-03	08-Apr-03	2	NM6	20:25	20:30	fine	0.6	62.0	64.5	60.0
Apr-03	08-Apr-03	3	NM6	20:23	20:35	fine	0.6	63.5	65.8	60.0
Apr-03	08-Apr-03	1 1	NM8	19:55	20:00	fine	0.5	60.0	63.0	57.5
Apr-03	08-Apr-03	2	NM8	20:00	20:05	fine	0.5	60.0	63.5	58.0
Apr-03	08-Apr-03	3	NM8	20:05	20:10	fine	0.5	59.5	63.0	58.0
Apr-03	16-Apr-03	1 1	NM3	19:00	19:05	fine	0.3	61.5	63.7	57.0
Apr-03	16-Apr-03	2	NM3	19:05	19:10	fine	0.3	60.5	62.0	57.0
Apr-03	16-Apr-03	3	NM3	19:10	19:15	fine	0.3	61.0	62.5	56.5
Apr-03	16-Apr-03	1	NM4	19:25	19:30	fine	0.4	62.0	64.5	60.0
Apr-03	16-Apr-03	2	NM4	19:30	19:35	fine	0.4	60.5	63.0	59.5
Apr-03	16-Apr-03	3	NM4	19:35	19:40	fine	0.4	61.0	64.0	60.0
Apr-03	16-Apr-03	1	NM6	20:25	20:30	fine	0.5	62.5	65.8	60.5
Apr-03	16-Apr-03	2	NM6	20:30	20:35	fine	0.5	60.0	63.0	58.0
Apr-03	16-Apr-03	3	NM6	20:35	20:40	fine	0.5	60.0	63.5	58.5
Apr-03	16-Apr-03	1	NM8	19:55	20:00	fine	0.5	62.8	65.0	56.8
Арг-03	16-Apr-03	2	NM8	20:00	20:05	fine	0.5	61.5	63.0	57.0
Apr-03	16-Apr-03	3	NM8	20:05	20:10	fine	0.5	63.0	64.5	57.5
Apr-03	23-Apr-03	1 1	NM3	19:00	19:05	fine	0.4	60.0	62.5	57.5
Арг-03	23-Apr-03	2	NM3	19:05	19:10	fine	0.4	59.0	62.5	57.0
Apr-03	23-Apr-03	3	NM3	19:10	19:15	fine	0.4	59.5	63.0	57.0
Apr-03	23-Apr-03	1	NM4	19:35	19:40	fine	0.4	62.0	64.5	59.0
Apr-03	23-Apr-03	2	NM4	19:40	19:45	fine	0.4	63.5	65.0	60.5
Apr-03	23-Apr-03	3	NM4	19:45	19:50	fine	0.4	63.0	65.0	60.0
Apr-03	23-Apr-03	1 2	NM6	20:40	20:45	fine	0.4	61.7	64.0	60.0
Apr-03 Apr-03	23-Apr-03 23-Apr-03	2	NM6	20:45	20:50	fine	0.4	62.5	64.0 64.0	60.5
Apr-03 Apr-03	23-Apr-03 23-Apr-03	3	NM6	20:50	20:55	fine	0.4 0.4	62.0	ŧ	60.0
Apr-03 Apr-03	23-Apr-03 23-Apr-03	2	NM8 NM8	20:05 20:10	20:10 20:15	fine	0.4	62.5 64.0	64.0 65.5	60.0 60.5
Apr-03 Apr-03	23-Apr-03 23-Apr-03	3	NM8	20:10	20:15	fine fine	0.4	63.5	65.0	60.5 60.0
Apr-03	28-Apr-03	1	NM3	19:00	19:05	fine	0.4	61.0	63.5	58.0
Apr-03 Apr-03	28-Apr-03	2	NM3	19:05	19:10	fine	0.3	61.5	64.0	57.0
Apr-03	28-Apr-03	3	NM3	19:10	19:15	fine	0.3	60.0	63.0	57.5
Apr-03	28-Apr-03	1	NM4	19:30	19:35	fine	0.3	63.5	64.5	63.0
Apr-03	28-Apr-03	2	NM4	19:35	19:40	fine	0.4	63.0	64.7	62.0
Apr-03	28-Арг-03	3	NM4	19:40	19:45	fine	0.4	62.0	64.0	61.5
Apr-03	28-Apr-03	1	NM6	20:40	20:45	fine	0.5	62.0	64.5	60.5
Apr-03	28-Apr-03	2	NM6	20:45	20:50	fine	0.5	61.5	65.0	60.0
Apr-03	28-Apr-03	3	NM6	20:50	20:55	fine	0.5	63.0	65.5	60.0
Apr-03	28-Apr-03	1	NM8	20:10	20:15	fine	0.5	61.5	62.8	60.0
Арг-03	28-Apr-03	2	NM8	20:15	20:20	fine	0.5	63.5	65.0	60.5
Apr-03	28-Apr-03	3	NM8	20:20	20:25	fine	0.5	59.5	61.5	58.0

#### **Details of Evening time Noise Impact Monitoring**

			NSR	Time p	eriods	Weather	Avg. wind	Noi	se Level dE	(A)
Month	Date	Set No.	No.	Start	Finish	condition	speed (m/s)	L <sub>oq</sub>	L <sub>to</sub>	L <sub>90</sub>
May-03	06-May-03	1	NM3	19:00	19:05	fine	0.4	61.5	63.0	58.0
May-03	06-May-03	2	NM3	19:05	19:10	fine	0.4	60.0	63.5	58.5
May-03	06-May-03	3	NM3	19:10	19:15	fine	0.4	60.5	63.0	59.0
May-03	06-May-03	1	NM4	19:40	19:45	fine	0.4	62.5	65.0	60.0
May-03	06-May-03	2	NM4	19:45	19:50	fine	0.4	61.5	63.0	59.5
May-03	06-May-03	3	NM4	19:50	19:55	fine	0.4	62.0	63.5	60.0
May-03	06-May-03	1	NM6	20:40	20:45	fine	0.3	63.5	66.0	60.5
May-03	06-May-03	2	NM6	20:45	20:50	fine	0.3	64.5	66.0	60.0
May-03	06-May-03	3	NM6	20:50	20:55	fine	0.3	64.0	66.5	60.5
May-03	06-May-03	1	NM8	20:15	20:20	fine	0.4	61.0	62.5	59.5
May-03	06-May-03	2	NM8	20:20	20:25	fine	0.4	62.0	63.0	61.5
May-03	06-May-03	3	NM8 NM3	20:25 19:00	20:30 19:05	fine fine	0.4 0.4	61.5 60.5	63.0 63.0	60.0 58.5
May-03	15-May-03 15-May-03	2	NM3	19:00	19:05	fine	0.4	61.0	63.0	56.5 58.0
May-03 May-03	15-May-03	3	NM3	19:00	19:10	fine	0.4	60.5	63.5	58.0 58.0
May-03	15-May-03	1	NM4	19:30	19:35	fine	0.4	63.0	65.5	60.5
May-03	15-May-03	2	NM4	19:35	19:33	fine	0.4	62.8	65.0	60.0
May-03	15-May-03 15-May-03	3	NM4	19:33	19:45	fine	0.4	63.5	65.5	60.5
May-03	15-May-03 15-May-03	1	NM6	20:05	20:10	fine	0.5	61.5	64.5	60.5
May-03	15-May-03	2	NM6	20:10	20:15	fine	0.5	63.0	65.0	61.0
May-03	15-May-03	3	NM6	20:15	20:20	fine	0.5	62.0	64.0	60.0
May-03	15-May-03	1	NM8	20:35	20:40	fine	0.4	61.5	63.0	58.0
May-03	15-May-03	2	NM8	20:40	20:45	fine	0.4	62.0	64.5	59.5
May-03	15-May-03	3	NM8	20:45	20:50	fine	0.4	60.0	62.0	59.0
May-03	21-May-03	1	NM3	20:30	20:35	fine	0.5	60.5	63.0	58.5
May-03	21-May-03	2	NM3	20:35	20:40	fine	0.5	60.0	62.0	59.0
May-03	21-May-03	3	NM3	20:40	20:45	fine	0.5	60.0	63.5	59.0
May-03	21-May-03	1	NM4	20:05	20:10	fine	0.4	62.0	65.0	60.0
May-03	21-May-03	2	NM4	20:10	20:15	fine	0.4	63.0	66.0	60.5
May-03	21-May-03	3	NM4	20:15	20:20	fine	0.4	61.5	64.0	60.0
May-03	21-May-03	1	NM6	19:30	19:35	fine	0.7	63.5	65.5	61.5
May-03	21-May-03	2	NM6	19:35	19:40	fine	0.7	65.0	67.5	62.0
May-03	21-May-03	3	NM6	19:40	19:45	fine	0.7	62.5	65.0	61.5
May-03	21-May-03	1 1	NM8	19:00	19:05	fine	0.7	63.5	65.5	60.5
May-03	21-May-03	2	NM8	19:05	19:10	fine	0.7	62.5	64.5	60.0
May-03	21-May-03	3	NM8 NM3	19:10 19:00	19:15 19:05	fine fine	0.7 0.4	64.5 60.0	66.0 62.0	61.5 57.5
May-03 May-03	28-May-03 28-May-03	2	NM3	19:05	19:05	fine	0.4	60.5	62.0	57.5 58.0
May-03	28-May-03	3	NM3	19:00	19:15	fine	0.4	61.0	62.5	58.0
May-03	28-May-03	1 1	NM4	19:30	19:35	fine	0.5	62.5	64.5	57.0
May-03	28-May-03	2	NM4	19:35	19:40	fine	0.5	63.0	65.0	57.5
May-03	28-May-03	3	NM4	19:40	19:45	fine	0.5	62.0	64.5	57.5
May-03	28-May-03	1	NM6	20:00	20:05	fine	0.4	61.5	63.0	58.0
May-03	28-May-03	2	NM6	20:05	20:10	fine	0.4	63.0	65.0	59.5
May-03	28-May-03	3	NM6	20:10	20:15	fine	0.4	61.0	63.5	58.5
May-03	28-May-03	1	NM8	20:30	20:35	fine	0.4	62.0	64.5	60.0
May-03	28-May-03	2	NM8	20:35	20:40	fine	0.4	61.0	63.0	60.0
May-03	28-May-03	3	NM8	20:40	20:45	fine	0.4	61.0	62.0	59.5
Jun-03	03-Jun-03	1	NM3	20:50	20:55	fine	0.4	60.0	62.0	57.5
Jun-03	03-Jun-03	2	NM3	20:55	21:00	fine	0.4	59.5	62.0	58.0
Jun-03	03-Jun-03	3	NM3	21:00	21:05	fine	0.4	60.5	62.5	59.0
Jun-03	03-Jun-03	1	NM4	20:20	20:25	fine	0.4	63.0	65.0	60.5
Jun-03	03-Jun-03 03-Jun-03	2	NM4 NM4	20:25 20:30	20:30 20:35	fine	0.4	64.5 64.5	65.0 66.0	60.5 61.0
Jun-03 Jun-03	03-Jun-03 03-Jun-03	3	i .	20:30 19:40	20:35 19:45	fine	0.4 0.4		65.0	60.0
Jun-03 Jun-03	03-Jun-03 03-Jun-03	1 2	NM6 NM6	19:40 19:45	19:45	fine fine	0.4	62.5 63.5	64.5	60.5
Jun-03	03-Jun-03	3	NM6	19:45	19:55	fine	0.4	63.0	64.5	60.0
Jun-03 Jun-03	03-Jun-03	1	NM8	19:00	19:05	fine	0.5	64.0	66.0	60.5
Jun-03	03-Jun-03	2	NM8	19:05	19:10	fine	0.5	62.0	64.5	60.0
Jun-03	03-Jun-03	3	NM8	19:10	19:15	fine	0.5	61.5	63.0	59.0

#### **Details of Evening time Noise Impact Monitoring**

			NSR	Time p	eriods	Weather	Avg. wind	No	ise Level dE	(A)
Month	Date	Set No.	No.	Start	Finish	condition	speed (m/s)	L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
Jun-03	10-Jun-03	1	NM3	19:00	19:05	fine	0.4	60.5	62.0	57.0
Jun-03	10-Jun-03	2	NM3	19:05	19:10	fine	0.4	59.5	61.0	57.0
Jun-03	10-Jun-03	3	NM3	19:10	19:15	fine	0.4	60.0	61.5	57.5
Jun-03	10-Jun-03	1 1	NM4	19:20	19:25	fine	0.4	60.5	62.0	57.5
Jun-03	10-Jun-03	2	NM4	19:25	19:30	fine	0.4	61.0	63.0	58.0
Jun-03	10-Jun-03	3	NM4	19:30	19:35	fine	0.4	60.0	62.5	57.0
Jun-03	10-Jun-03	1	NM6	20:00	20:05	fine	0.5	64.0	66.5	61.0
Jun-03	10-Jun-03	2	NM6	20:05	20:10	fine	0.5	63.0	65.0	60.5
Jun-03	10-Jun-03	3	NM6	20:10	20:15	fine	0.5	61.5	63.0	59.0
Jun-03	10-Jun-03	1	NM8	20:30	20:35	fine	0.5	62.5	64.0	57.5
Jun-03	10-Jun-03	2	NM8	20:35	20:40	fine	0.5	60.5	62.5	58.0
Jun-03	10-Jun-03	3	8MN	20:40	20:45	fine	0.5	61.0	63.0	58.0
Jun-03	17-Jun-03	1	NM3	19:00	19:05	fine	0.4	59.0	65.0	57.5
Jun-03	17-Jun-03	2	NM3	19:05	19:10	fine	0.4	60.5	62.5	58.0
Jun-03	17-Jun-03	3	NM3	19:10	19:15	fine	0.4	60.0	63.0	58.5
Jun-03	17-Jun-03	1	NM4	19:30	19:35	fine	0.5	62.5	65.0	60.5
Jun-03	17-Jun-03	2	NM4	19:35	19:40	fine	0.5	63.0	65.5	60.0
Jun-03	17-Jun-03	3	NM4	19:40	19:45	fine	0.5	63.0	65.0	61.0
Jun-03	17-Jun-03	1	NM6	20:35	20:40	fine	0.5	63.0	64.5	60.5
Jun-03	17-Jun-03	2	NM6	20:40	20:45	fine	0.5	62.0	63.5	60.0
Jun-03	17-Jun-03	3	NM6	20:45	20:50	fine	0.5	63.5	65.0	61.0
Jun-03	17-Jun-03	1 1	NM8	20:00	20:05	fine	0.5	64.0	66.5	60.5
Jun-03	17-Jun-03	2	NM8	20:05	20:10	fine	0.5	60.5	62.5	57.5
Jun-03	17-Jun-03	3	NM8	20:10	20:15	fine	0.5	61.5	63.0	58.0
Jun-03	26-Jun-03	1	NM3	20:55	21:00	fine	0.3	60.0	61.5	58.0
Jun-03	26-Jun-03	2	NM3	21:00	21:05	fine	0.3	59.5	61.5	57.0
Jun-03	26-Jun-03	3	NM3	21:05	21:10	fine	0.3	59.0	61.0	57.5
Jun-03	26-Jun-03	1	NM4	20:30	20:35	fine	0.4	61.5	63.5	59.5
Jun-03	26-Jun-03	2	NM4	20:35	20:40	fine	0.4	60.5	62.0	58.0
Jun-03	26-Jun-03	3	NM4	20:40	20:45	fine	0.4	61.5	64.0	59.0
Jun-03	26-Jun-03	1	NM6	19:00	19:05	fine	0.4	61.5	63.0	59.0
Jun-03	26-Jun-03	2	NM6	19:05	19:10	fine	0.4	63.0	65.0	60.5
Jun-03	26-Jun-03	3	NM6	19:10	19:15	fine	0.4	61.0	63.5	58.0
Jun-03	26-Jun-03	1	NM8	19:40	19:45	fine	0.4	62.0	63.0	58.5
Jun-03	26-Jun-03	2	NM8	19:45	19:50	fine	0.4	62.5	64.0	60.0
Jun-03	26-Jun-03	3	NM8	19:50	19:55	fine	0.4	61.0	63.0	59.0

#### APPENDIX 2

24-hour TSP Monitoring Results for April 2003 to June 2003

Date         No.         Condition         Condition         Fortier         Initial         Final         Final         Final         Final         Final         Final         Final         Thirth         Thirth <th></th> <th></th> <th></th> <th>Receptor</th> <th>Weather</th> <th>Site</th> <th>Filter Weight (g)</th> <th>sight (g)</th> <th>TSP</th> <th>Flow Rate (m<sup>3</sup>/min)</th> <th>(m³/min)</th> <th>Average Flow</th> <th>Elaps</th> <th>Elapse Time</th> <th>Sampling</th> <th>Total</th> <th>24-hour TSP</th>				Receptor	Weather	Site	Filter Weight (g)	sight (g)	TSP	Flow Rate (m <sup>3</sup> /min)	(m³/min)	Average Flow	Elaps	Elapse Time	Sampling	Total	24-hour TSP
Act of the common operation of string stages on the common operation of string the common operation of string stages on the common opera		Month	Date	No.	condition		Initial	Final	weight (g)	Initial	Final	Rate (m³/min)	Start	Finish	Time (mins.)	vol. (m³)	Level (µa/m³)
Act of 10 (App. 02)         AAM A         Fine normal operation         5,100 and 10 (App. 02)         1,225 and 1,225 broad         1,222 and 1,229 broad         1,440,00           Act of 10 (App. 02)         AAK B         Fine normal operation         5,510 and 5	<del> </del>	Apr-03	01-Apr-03	AM2	Fine	normal operation	3.5195	3.5999	0.0804	1.2477	1.2400	1.2439	3267.52	3291.52	1440.00	1791.14	44.9
Αρτ-03 01-Αρτ-03 AM6         Fine         Prominal operation 3.671 3.7624 0.1002 1.4437 1.3432 1.3394 2.794.89 2818.89 1.440.00         1.440.00		Apr-03	01-Apr-03	AM3	Fine	normal operation	3.5178	3.5936	0.0758	1.2367	1.2277	1.2322	3198.93	3222.93	1440.00	1774.37	42.7
Apr-03 (1-Apr-02)         AMA         File         portural operation (3.46)         3.7504         (1.0102)         1.33394         1.33394         1.3394         1.3917.00         1.440.00           Apr-03 (1-Apr-02)         AMA         File         portural operation (3.467)         3.6645         0.10228         1.2559         1.2026         1.2027         3.222.93         3.226.93         1.440.00           Apr-03 (1-Apr-02)         AMA         File         portural operation (3.560)         3.669         0.1149         1.4712         1.4610         1.2822         1.391.01         1.440.00           Apr-03 (1-Apr-03)         AMA         File         portural operation (3.560)         3.669         1.0199         1.469         1.269         1.169         1.469         1.669		Apr-03	01-Apr-03	AM4	Fine	normal operation	3.5103	3,6165	0.1062	1.4518	1.4406	1.4462	3230.23	3254.23	1440.00	2082.53	51.0
Apr-33         17-Apr-33         AAAB         Fine         normal operation         3.4557         0.1228         1.6596         1.6596         1.6796         1.2406         1.6796         1.4400         <	_	Apr-03	01-Apr-03	AM5	Fine	normal operation	3.6211	3.7304	0.1093	1.3453	1.3335	1,3394	2794.89	2818.89	1440.00	1928.74	56.7
Apr. 30         AAAP         Fire         normal operation         3.641         3.664         0.1165         1.2456         1.2426         2.222.91         2.3345.52         1440.00           Apr. 30         7.4Apr. 43         AAAB         Fire         normal operation         3.676         0.1169         1.2457         1.2469         2.322.92         2.3245.23         1440.00           Apr. 30         7.4Apr. 43         AAB         Fire         normal operation         3.640         0.1397         1.6494         1.689         2.322.93         2.345.23         1440.00           Apr. 30         7.4Apr. 40         AAB         Fire         normal operation         3.640         0.1397         1.6494         1.689         2.325.23         2.345.23         1440.00           Apr. 31         2.4Apr. 40         AAB         Fire         normal operation         3.647         0.1497         1.6494         1.689         2.325.23         1.440.00           Apr. 31         2.2Apr. 40         AAB         Surry         normal operation         3.647         0.089         1.2382         1.2822         1.382         1.440.00           Apr. 31         2.2Apr. 30         AAB         Surry         normal operation         3.6452 <t< td=""><td></td><td>Apr-03</td><td>01-Apr-03</td><td>AM6</td><td>Fine</td><td>normal operation</td><td>3,4851</td><td>3.5823</td><td>0.0972</td><td>1.6326</td><td>1.6198</td><td>1.6262</td><td>1367.70</td><td>1391.70</td><td>1440.00</td><td>2341.73</td><td>41.5</td></t<>		Apr-03	01-Apr-03	AM6	Fine	normal operation	3,4851	3.5823	0.0972	1.6326	1.6198	1.6262	1367.70	1391.70	1440.00	2341.73	41.5
Apr-03         AVAM         Fine         normal operation         3.4692         0.1766         1.2056		Apr-03	07-Apr-03	AM2	Fine	normal operation	3.5417	3,6645	0.1228	1.2400	1.2452	1.2426	3291.52	3315.52	1440.00	1789.34	68.6
Αρτ-03         07-Αργ-03         AMA         Fine         normal operation         3,5667         0,1189         14712         14,489         1289         2818,88         2818,88         2842,88         1439,40           Αρτ-03         07-Αργ-03         AM6         Fine         normal operation         3,560         0,1897         1,400         1,838         2818,88         2842,88         1,415,90         1440,00           Αργ-03         17-Αργ-03         AM6         Fine         normal operation         3,560         0,1897         1,289         1,289         1,289         1,415,70         1440,00           Αργ-03         17-Αργ-03         AM7         Sumy         normal operation         3,667         0,000         1,289         1,289         1,289         1,440         1		Apr-03	07-Apr-03	AM3	Fine	normal operation	3.5432	3,6587	0.1155	1.2558	1.2055	1.2307	3222.93	3246.93	1440.00	1772.14	65.2
Apr-03         17-Apr-04         AM6         Fine normal operation         3.5400         3.6677         0.1277         1.3947         1.4030         1.5896         1.5819         1.4440         0           Apr-03         17-Apr-04         AM6         Fine normal operation         3.5400         3.6677         0.1275         1.5247         1.6638         1.981.70         1.440.00           Apr-03         12-Apr-03         AM6         Sumry normal operation         3.5463         3.6679         0.0026         1.2281         1.2260         32542         3.398.20         1.440.00           Apr-03         12-Apr-03         AM6         Sumry normal operation         3.5463         3.6679         0.1294         1.2281         1.2280         1.2286         1.440.00           Apr-03         12-Apr-03         AM6         Sumry normal operation         3.5692         0.1289         1.2281         1.2497         1.4457         3.208.22         1.440.00           Apr-03         12-Apr-03         AM6         Sumry normal operation         3.5692         0.1289         1.2481         1.4457         3.208.22         1.440.00           Apr-03         12-Apr-03         AM6         Sumry normal operation         3.4692         0.1289         1.2281 <td></td> <td>Apr-03</td> <td>07-Apr-03</td> <td>AM4</td> <td>Eine</td> <td>normal operation</td> <td>3.5606</td> <td>3.6795</td> <td>0.1189</td> <td>1.4712</td> <td>1,4481</td> <td>1.4597</td> <td>3254.23</td> <td>3278.23</td> <td>1440.00</td> <td>2101.90</td> <td>56.6</td>		Apr-03	07-Apr-03	AM4	Eine	normal operation	3.5606	3.6795	0.1189	1.4712	1,4481	1.4597	3254.23	3278.23	1440.00	2101.90	56.6
Αρτ-03         17-Αρτ-03         AMB         Fine         normal operation         3,559         0,1397         1,6894         1,6892         1,6892         1,6892         1,6893         1,2892         1,2892         1,391,70         144,000           Apr-03         12-Apr-03         AMB         Sumny         normal operation         3,564         0,080         1,2389         1,2285         1,2360         3,246.53         1,391,70         1440,00           Apr-03         12-Apr-03         AMB         Sumny         normal operation         3,566         3,621         0,080         1,2381         1,2286         1,2360         3,2443         3,2440		Apr-03	07-Apr-03	AM5	Fine	normal operation	3.5400	3.6675	0.1275	1.3947	1.4030	1.3989	2818.89	2842.88	1439.40	2013.50	63.3
Apr-03         12-Apr-03         AM3         Sunny normal operation         3.6544         3.6112         3.0176         3.5345         3.6116         3.000		Apr-03	07-Apr-03	AM6	Fine	normal operation	3.5500	3.6897	0.1397	1.6494	1.6582	1.6538	1391.70	1415.70	1440.00	2381.47	58.7
Apr-C3         12-Apr-C3         AMA         Summy         normal operation         3.5643         3.6289         0.0826         1.2381         1.2360         3276-53         3278-22         143940           Apr-C3         12-Apr-C3         AAM         Summy         normal operation         3.5645         3.0467         0.0807         1.2381         1.2360         3270-22         3278-22         143940           Apr-C3         12-Apr-C3         AMA         Summy         normal operation         3.4565         3.6496         0.0801         1.2341         1.6046         1.2047         1.6046         1.4000           Apr-C3         22-Apr-C3         AMA         Summy         normal operation         3.4592         0.0801         1.2381         1.2047         3.2395         1.44000           Apr-C3         22-Apr-C3         AMA         Summy         normal operation         3.4616         0.1281         1.2286         1.6668         1.4447         3.3395         1.44000           Apr-C3         22-Apr-C3         AMA         Summy         normal operation         3.4617         0.1548         1.6268         1.2376         1.4357         1.4450         3.3395         1.44000           Apr-C3         22-Apr-C3		Apr-03	12-Apr-03	AM2	Sunny	normal operation	3.5314	3.6112	0.0798	1.3392	1.2253	1.2823	3315.52	3339.52	1440.00	1846.44	43.2
Apr-03         12-Apr-03         AMM         Sunny         normal operation         3:5604         3:647         0.0803         1:2020         1:2042         3:278:23         3:330-22         3:330-23         3:330-23         3:340-00           Apr-03         12-Apr-03         AMB         Sunny         normal operation         3:5602         0.0608         1:3414         1:3414         2:442.88         2866.88         1440.00           Apr-03         12-Apr-03         AMB         Sunny         normal operation         3:478         0.1286         1:2381         1:2435         3:30-52         3:30-52         1:440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3:478         0.1286         1:2381         1:2457         3:30-52         1:440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3:482         3:56-60         0.1287         1:4538         1:4677         3:30-22         1:440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3:462         0.1287         1:4538         1:460.72         1:400.00           Apr-03         22-Apr-03         AMB         Sunny         normal		Apr-03	12-Apr-03	AM3	Sunny	normal operation	3.5463	3.6289	0.0826	1.2338	1.2381	1.2360	3246.93	3270.92	1439.40	1779.03	46,4
Apr-03         22-Apr-03         AM6         Sunny         normal operation         3.6902         3.6210         0.0000         1.3414         1.3471         1.3422         B 2866.8         1440.00           Apr-03         12-Apr-03         AM6         Sunny         normal operation         3.6906         0.0801         1.3414         1.5719         1445.70         1493.86         1440.00           Apr-03         22-Apr-03         AM8         Sunny         normal operation         3.4699         6.01491         1.2381         1.2265         1.2459         3336.20         3366.20         1440.00           Apr-03         22-Apr-03         AM6         Sunny         normal operation         3.4692         5.0438         1.371         1.3286         1.6648         1.6400         1.4457         1.4457         1.4457         1.4460.00         1.4440         1.4460.00		Apr-03	12-Apr-03	AM4	Sunny	normal operation	3.5654	3.6457	0.0803	1.2020	1,2063	1.2042	3278.23	3302.22	1439,40	1733.25	46.3
Apr-03         12-Apr-03         AM6         Sumny         normal operation         3.5595         3.6496         0.10801         1.5391         1.6646         1.5719         1439.69         1439.40           Apr-03         22-Apr-03         AM8         Sunny         normal operation         3.4595         3.6824         0.1186         1.2286         1.2316         3339.52         3339.52         3346.20         1.4000           Apr-03         22-Apr-03         AM4         Sunny         normal operation         3.489         3.6146         0.1347         1.437         3339.52         3356.22         1440.00           Apr-03         22-Apr-03         AM6         Sunny         normal operation         3.489         3.616         0.1347         1.437         3329.62         1440.00           Apr-03         22-Apr-03         AM8         Sunny         normal operation         3.4842         3.722         1.2281         1.4416         1.437         3.326.22         1440.00           Apr-03         22-Apr-03         AM8         Sunny         normal operation         3.4842         3.722         1.2281         1.4416         1.439         3.204.22         1.440.00           Apr-03         22-Apr-03         AM8         <		Apr-03	12-Apr-03	AM5	Sunny	normal operation	3.5602	3.6210	0.0608	1.3414	1.3471	1.3443	2842.88	2866.88	1440.00	1935.72	31.4
Apr-03         22-Apr-03         AMZ         Sunny         normal operation         3.456 3.6824         0.1268         1.2489         1.2331         1.2435         3330-22         3336-32         1440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3.4894         3.5624         0.1247         1.2389         1.2389         2266.88         280.08         1440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3.4824         3.522         0.0438         1.3478         1.4457         3300-22         328.62         1.440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3.4913         3.728         1.4378         1.4457         3300-22         328.62         1440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3.4510         3.723         1.4378         1.4457         3300-22         3368.23         1440.00           Apr-03         22-Apr-03         AMB         Sunny         normal operation         3.4510         3.723         1.438         1.4457         3300-22         336.83         1440.00           Apr-03         22-Apr-03		Apr-03	12-Apr-03	AM6	Sunny	normal operation	3.5595	3.6496	0.0901	1.5391	1.6046	1.5719	1415.70	1439.69	1439,40	2262.52	39.8
Apr-03         22-Apr-03         AM3         Sunny         normal operation         3.4999         3.6902         0.1191         1.2286         1.2286         1.2316         3.2270         3.302.22         3.302.22         3.4400           Apr-03         22-Apr-03         AM4         Sunny         normal operation         3.4899         3.6451         0.1434         1.4376         1.3366         1.4677         3302.22         3302.22         1440.00           Apr-03         22-Apr-03         AM6         Sunny         normal operation         3.492         3.6451         0.1446         1.655         1.467         3302.22         1440.00           Apr-03         22-Apr-03         AM8         Sunny         normal operation         3.492         0.2148         1.6643         1.6462         1.6553         1460.00         1440.00           Apr-03         25-Apr-03         AM8         Sunny         normal operation         3.467         3.753         0.322         1.4415         1.489         386.52         3.846.7         1.4416         1.489         3.866.2         1.4410         1.4416         1.4416         1.4416         1.4416         1.4416         1.4416         1.4416         1.4416         1.4416         1.4416         1		Apr-03	22-Apr-03	AM2	Sunny	normal operation	3.4556	3.5824	0.1268	1.2489	1.2381	1.2435	3339.52	3363.52	1440.00	1790.64	70.8
Apr-03         22-Apr-03         AMA         Summy         normal operation         3.4899         3.6146         0.1437         1.4375         1.4457         3302.22         3326.22         3326.22         1440.00           Apr-03         22-Apr-03         AM6         Summy         normal operation         3.4892         3.5262         0.0438         1.3471         1.3306         1.5394         385.22         1440.00           Apr-03         25-Apr-03         AM6         Summy         normal operation         3.4942         3.7262         0.2230         1.2394         1.2394         3363.52         1440.00           Apr-03         25-Apr-03         AM7         Summy         normal operation         3.4942         3.7262         0.2230         1.2394         1.2397         1440.00           Apr-03         25-Apr-03         AM8         Summy         normal operation         3.4607         3.7232         0.1397         1.7096         1.7074         1480.00           Apr-03         25-Apr-03         AM8         Summy         normal operation         3.4607         3.7232         0.1537         1.7096         1.7046         1.2394         1.2400           Apr-03         25-Apr-03         AM8         Summy <t< td=""><td></td><td>Apr-03</td><td>22-Apr-03</td><td>AM3</td><td>Sunny</td><td>normal operation</td><td>3.4711</td><td>3,5902</td><td>0.1191</td><td>1.2381</td><td>1.2255</td><td>1,2318</td><td>3270.92</td><td>3294.92</td><td>1440.00</td><td>1773.79</td><td>67.1</td></t<>		Apr-03	22-Apr-03	AM3	Sunny	normal operation	3.4711	3,5902	0.1191	1.2381	1.2255	1,2318	3270.92	3294.92	1440.00	1773.79	67.1
Apr-03         22-Apr-03         AM6         Sunny         normal operation         3.4824         3.5262         0.0438         1.3471         1.3306         1.3389         2866 88         2860 88         1440.00           Apr-03         23-Apr-03         AM6         Sunny         normal operation         3.4942         3.5262         1.0548         1.6642         1.6584         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6642         1.6640         1.400.00         1.400.00         1.400.00         1.600         1.600         1.6642         1.6643         1.6642         1.6642         1.6643         1.6642         1.6642         1.6642         1.6643         1.6643         1.6642         1.6642         1.6643         1.6643         1.6643         1.6642         1.6642 <td></td> <td>Apr-03</td> <td>22-Apr-03</td> <td>AM4</td> <td>Sunny</td> <td>normal operation</td> <td>3.4899</td> <td>3.6146</td> <td>0.1247</td> <td>1.4535</td> <td>1.4378</td> <td>1.4457</td> <td>3302.22</td> <td>3326.22</td> <td>1440.00</td> <td>2081.74</td> <td>59.9</td>		Apr-03	22-Apr-03	AM4	Sunny	normal operation	3.4899	3.6146	0.1247	1.4535	1.4378	1.4457	3302.22	3326.22	1440.00	2081.74	59.9
Apr-03         23-Apr-03         AM6         Sunny         normal operation         3.6451         0.1548         1.6643         1.6462         1.6563         1456,72         1480,72         1440,00           Apr-03         AM7         Sunny         normal operation         3.6471         3.7582         0.2320         1.2384         1.2394         3385,52         1440,00           Apr-03         25-Apr-03         AM8         Sunny         normal operation         3.4514         3.7533         0.3023         1.4376         1.2496         1.2094         224,00           Apr-03         25-Apr-03         AM8         Sunny         normal operation         3.4510         3.7533         0.3023         1.4376         1.4397         336.22         1440.00           Apr-03         25-Apr-03         AM8         Sunny         normal operation         3.4755         3.7212         0.2797         1.7096         1.7074         1480.00         1440.00           Apr-03         25-Apr-03         AM8         Fine         normal operation         3.465         3.6273         0.1408         1.2274         1.2276         1.440.00           May-03         02-May-03         AM4         Fine         normal operation         3.4673		Apr-03	22-Apr-03	AM5	Sunny	normal operation	3.4824	3,5262	0.0438	1.3471	1.3306	1.3389	2866.88	2890.88	1440.00	1927.94	22.7
Apr-03         25-Apr-03         AMZ         Sunmy         normal operation         3.5492         3.7262         0.2320         1.2346         1.2394         3365.52         3387.52         1440.00           Apr-03         25-Apr-03         AMA         Sunmy         normal operation         3.547         3.7265         0.2118         1.2276         1.2270         336.22         336.22         1440.00           Apr-03         25-Apr-03         AMS         Sunmy         normal operation         3.457         3.7282         1.397         1.3897         2890.88         291.48         1440.00           Apr-03         25-Apr-03         AMS         Sunmy         normal operation         3.4415         3.7212         0.2787         1.7056         1.7074         1480.72         1640.00           Apr-03         25-Apr-03         AMS         Fine         normal operation         3.4415         3.7212         0.2787         1.7056         1.7074         1480.72         1440.00           May-03         02-May-03         AMS         Fine         normal operation         3.445         3.5273         0.1408         1.2274         1.2270         334.25         3441.00           May-03         02-May-03         AMS         Fi		Apr-03	23-Apr-03	AM6	Sunny	normal operation	3.4903	3.6451	0.1548	1.6643	1.6462	1.6553	1456.72	1480.72	1440.00	2383.56	64.9
App-03         25-Apr-03         AM3         Sunny         normal operation         3.5147         3.7265         0.2118         1.2255         1.2264         1.2270         3294.92         3318.92         1440.00           Apr-03         25-Apr-03         AM4         Sunny         normal operation         3.4510         3.7233         1.3917         1.2957         326.22         336.22         1440.00           Apr-03         25-Apr-03         AM6         Sunny         normal operation         3.4416         3.7212         0.2797         1.7054         1.7074         1480.72         1647.00           Apr-03         25-Apr-03         AM6         Fine         normal operation         3.4465         3.6272         0.1406         1.2271         1.2967         1.480.72         1640.00           May-03         02-May-03         AM6         Fine         normal operation         3.4678         3.6272         0.1406         1.2271         1.2704         1.490.00           May-03         02-May-03         AM6         Fine         normal operation         3.4678         3.6522         0.1406         1.2278         1.2407         1.440.00           May-03         02-May-03         AM6         Fine         normal operation		Apr-03	25-Apr-03	AM2	Sunny	normal operation	3.4942	3.7262	0.2320	1.2381	1.2406	1.2394	3363.52	3387.52	1440.00	1784.66	130.0
App-03         25-Apr-03         AM4         Sunny         normal operation         3.450         3.7533         0.3023         1.4316         1.4397         3336.22         1440.00           Apr-03         25-Apr-03         AM5         Sunny         normal operation         3.4507         3.7532         0.2733         1.3917         1.3957         1.3937         2890.88         2914.88         1440.00           Apr-03         25-Apr-03         AM6         Fine         normal operation         3.4765         3.6727         0.1537         1.2714         1480.72         1504.70         1438.80           May-03         02-May-03         AM3         Fine         normal operation         3.485         3.532         0.1408         1.2274         1.277         1.407         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4853         3.532         0.1446         1.277         1.407         334.25         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4673         3.5857         0.1978         1.277         1.7094         1.284         3.440.00           May-03         07-May-03         AM4         Fine <td></td> <td>Apr-03</td> <td>25-Apr-03</td> <td>AM3</td> <td>Sunny</td> <td>normal operation</td> <td>3.5147</td> <td>3.7265</td> <td>0.2118</td> <td>1.2255</td> <td>1.2284</td> <td>1.2270</td> <td>3294.92</td> <td>3318.92</td> <td>1440.00</td> <td>1766.81</td> <td>119.9</td>		Apr-03	25-Apr-03	AM3	Sunny	normal operation	3.5147	3.7265	0.2118	1.2255	1.2284	1.2270	3294.92	3318.92	1440.00	1766.81	119.9
Apr-03         25-Apr-03         AM5         Sunny         normal operation         3.415         3.7240         0.2733         1.3917         1.3957         1.3937         2890.88         2914.88         1440.00           Apr-03         25-Apr-03         AM6         Sunny         normal operation         3.415         3.7212         0.2737         1.7074         1480.72         1604.70         1480.72           May-03         02-May-03         AM3         Fine         normal operation         3.465         3.6272         0.1537         1.2401         3387.52         3411.51         14399         14407         1480.72         1440.00           May-03         02-May-03         AM4         Fine         normal operation         3.4673         3.6741         0.1978         1.2401         3387.23         14400           May-03         02-May-03         AM6         Fine         normal operation         3.4679         3.657         0.1978         1.7096         1.7077         1.7087         1400.00           May-03         07-May-03         AM3         Fine         normal operation         3.4572         3.567         0.1978         1.7077         1.7087         1.400.00           May-03         07-May-03         A		Apr-03	25-Apr-03	AM4	Sunny	normal operation	3.4510	3.7533	0.3023	1.4378	1.4415	1.4397	3326.22	3350.22	1440.00	2073.10	145.8
App-03         25-Ap-03         AM6         Sunny         normal operation         3.415         3.7212         0.2797         1.7052         1.7054         1.7074         1480.72         1504.70         1438.80           May-03         02-May-03         AM2         Fine         normal operation         3.4735         3.6272         0.1537         1.2406         1.2396         1.2401         3387.52         341.51         1439.40           May-03         02-May-03         AM3         Fine         normal operation         3.4865         3.6272         0.1537         1.2406         1.2378         3348.23         3411.51         1439.40           May-03         02-May-03         AM4         Fine         normal operation         3.4673         3.657         0.1978         1.2407         1.3948         2914.88         2938.88         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4678         3.5867         0.1978         1.7097         1.2899         3342.92         1440.00           May-03         07-May-03         AM4         Fine         normal operation         3.4678         3.5286         0.0666         1.2771         1.2899         3348.92         1440.00 <td></td> <td>Apr-03</td> <td>25-Apr-03</td> <td>AMS</td> <td>Sunny</td> <td>normal operation</td> <td>3.4607</td> <td>3.7340</td> <td>0.2733</td> <td>1.3917</td> <td>1.3957</td> <td>1.3937</td> <td>2890.88</td> <td>2914.88</td> <td>1440.00</td> <td>2006.93</td> <td>136.2</td>		Apr-03	25-Apr-03	AMS	Sunny	normal operation	3.4607	3.7340	0.2733	1.3917	1.3957	1.3937	2890.88	2914.88	1440.00	2006.93	136.2
May-03         O2-May-03         AM2         Fine         normal operation         3.4735         3.6272         0.1537         1.2406         1.2396         1.2401         3387.52         341.51         1439.40           May-03         02-May-03         AM3         Fine         normal operation         3.4865         3.6273         0.1408         1.2274         1.2278         3318.32         3342.92         1440.00           May-03         02-May-03         AM4         Fine         normal operation         3.4763         3.5362         0.0879         1.4415         1.497         3374.23         3398.23         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4763         3.6741         0.1978         1.7077         1.7087         1440.00         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4676         3.5282         0.0606         1.7077         1.7087         1440.00           May-03         07-May-03         AM4         Fine         normal operation         3.4426         3.5282         0.0606         1.2284         1.2297         1.440.00           May-03         07-May-03         AM6         F		Apr-03	25-Apr-03	AM6	Sunny	normal operation	3,4415	3.7212	0.2797	1.7052	1.7096	1.7074	1480.72	1504.70	1438.80	2456.61	113.9
May-03         Oc-May-03         AM3         Fine         normal operation         3.4865         3.6273         0.1408         1.2274         1.2278         3318.92         3342.92         1440.00           May-03         06-May-03         AM4         Fine         normal operation         3.4695         0.0879         1.4415         1.4399         1.4407         3374.23         3398.23         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4763         3.6547         0.1978         1.7096         1.7077         1.7087         1504.70         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4676         3.6567         0.0506         1.7077         1.7087         1440.00           May-03         07-May-03         AM4         Fine         normal operation         3.4676         3.5282         0.0606         1.2024         1.2294         1440.00           May-03         07-May-03         AM4         Fine         normal operation         3.4572         3.528         0.0646         1.2897         1.2899         3342.22         1440.00           May-03         07-May-03         AM6         Fine         norm	T	May-03	02-May-03	AM2	Fine	normal operation	3.4735	3.6272	0.1537	1.2406	1,2395	1.2401	3387.52	3411.51	1439.40	1784.93	86.1
May-03         G6-May-03         AM4         Fine         normal operation         3.4883         3.5362         0.0879         1.4415         1.4399         1.4407         3374.23         3398.23         1440.00           May-03         02-May-03         AM5         Fine         normal operation         3.4679         0.1978         1.3957         1.3939         1.3948         2914.88         2938.88         1440.00           May-03         02-May-03         AM6         Fine         normal operation         3.4676         3.5657         0.0506         1.7007         1.7077         1.7087         1440.00           May-03         07-May-03         AM8         Fine         normal operation         3.4672         3.5282         0.0606         1.2204         1.2297         1.2899         3341.51         1440.00           May-03         07-May-03         AM6         Fine         normal operation         3.4572         3.5282         0.0773         1.6781         1.2897         3440.00           May-03         07-May-03         AM6         Fine         normal operation         3.4492         3.5222         0.0773         1.6781         1.2897         3459.23         1440.00           May-03         13-May-03 <t< td=""><td></td><td>May-03</td><td>02-May-03</td><td>AM3</td><td>Fine</td><td>normal operation</td><td>3.4865</td><td>3.6273</td><td>0.1408</td><td>1.2284</td><td>1.2271</td><td>1.2278</td><td>3318.92</td><td>3342.92</td><td>1440.00</td><td>1767.96</td><td>9.67</td></t<>		May-03	02-May-03	AM3	Fine	normal operation	3.4865	3.6273	0.1408	1.2284	1.2271	1.2278	3318.92	3342.92	1440.00	1767.96	9.67
May-03         O2-May-03         AM5         Fine normal operation         3.4763         3.6741         0.1978         1.3957         1.3948         2914.88         2938.88         1440.00           May-03         02-May-03         AM6         Fine normal operation         3.4679         3.5667         0.1978         1.7096         1.7077         1.7087         1528.70         1440.00           May-03         07-May-03         AM8         Fine normal operation         3.4679         3.5667         0.0566         1.2771         1.7087         17087         17087         1440.00           May-03         07-May-03         AM8         Fine normal operation         3.4672         3.5067         0.0566         1.2771         1.2322         1.2899         3341.51         1440.00           May-03         07-May-03         AM6         Fine normal operation         3.4572         3.5218         0.0646         1.2857         1.2899         3398.23         3440.00           May-03         07-May-03         AM6         Fine normal operation         3.4492         3.5222         0.0773         1.6781         1.6857         1.6819         1528.70         1440.00           May-03         15-May-03         AM6         Sunny normal operation		May-03	06-May-03	AM4	Fine	normal operation	3.4483	3.5362	0.0879	1.4415	1,4399	1.4407	3374.23	3398.23	1440.00	2074.61	42.4
May-03         Oz-May-03         AM6         Fine normal operation         3.4679         3.5657         0.1978         1.7096         1.7097         1.7087         1504.70         1528.70         1440.00           May-03         07-May-03         AM2         Fine normal operation         3.4679         3.5667         0.0566         1.2771         1.2322         1.2397         3342.92         336.92         1440.00           May-03         07-May-03         AM4         Fine normal operation         3.4572         0.0565         1.2271         1.2397         3342.92         336.92         1440.00           May-03         07-May-03         AM6         Fine normal operation         3.4572         0.0761         1.2371         1.2927         1.2898         2938.88         2962.88         1440.00           May-03         07-May-03         AM6         Fine normal operation         3.4425         3.5218         0.0690         1.2226         1.2897         1.3892         1.440.00           May-03         13-May-03         AM6         Fine normal operation         3.4429         3.5322         0.0890         1.2226         1.2897         1.4599         1440.00           May-03         15-May-03         AM8         Sunny normal operation		May-03	02-May-03	AM5	Fine	normal operation	3.4763	3.6741	0.1978	1.3957	1.3939	1.3948	2914.88	2938.88	1440.00	2008.51	98.5
May-03         O7-May-03         AMZ         Fine normal operation operation         3.4676         3.5282         0.0660         1.2162         1.2163         3411.51         3435.51         1440.00           May-03         07-May-03         AM3         Fine normal operation operation operation         3.4502         3.5282         0.0666         1.2271         1.2297         3342.92         3366.92         1440.00           May-03         07-May-03         AM4         Fine normal operation operation         3.4572         3.5218         0.0761         1.2877         1.2899         3398.23         3422.23         1440.00           May-03         07-May-03         AM5         Fine normal operation operation         3.4449         3.5218         0.0773         1.6857         1.2897         1.3868         2998.88         1440.00           May-03         17-May-03         AM6         Fine normal operation operation         3.449         3.5222         0.0773         1.6857         1.2897         1528.70         1440.00           May-03         17-May-03         AM3         Sunny normal operation operation 3.437         3.5320         0.0890         1.2847         1.2847         1.2847         1.2849         1.2846.26         1447.20           May-03 <t< td=""><td>*****</td><td>May-03</td><td>02-May-03</td><td>AM6</td><td>Fine</td><td>normal operation</td><td>3.4679</td><td>3.6657</td><td>0.1978</td><td>1.7096</td><td>1.707.1</td><td>1.7087</td><td>1504.70</td><td>1528.70</td><td>1440.00</td><td>2460.46</td><td>80.4</td></t<>	*****	May-03	02-May-03	AM6	Fine	normal operation	3.4679	3.6657	0.1978	1.7096	1.707.1	1.7087	1504.70	1528.70	1440.00	2460.46	80.4
May-03         O7-May-03         AM3         Fine normal operation         3.4502         3.5067         0.0565         1.2271         1.2322         1.2297         3342.92         336.92         1440.00           May-03         07-May-03         AM4         Fine normal operation         3.4572         3.5186         0.0761         1.2877         1.2899         3398.23         3422.23         1440.00           May-03         07-May-03         AM5         Fine normal operation         3.4572         3.5218         0.0646         1.3633         1.3702         1.3668         2938.88         2962.88         1440.00           May-03         07-May-03         AM6         Fine normal operation         3.4499         3.5222         0.0773         1.6791         1.6857         1.6899         3398.23         1440.00           May-03         13-May-03         AM3         Sunny normal operation         3.4492         3.5222         0.0890         1.2926         1.2837         1.2892         3391.34         1447.20           May-03         13-May-03         AM4         Sunny normal operation         3.4379         0.0894         1.2827         1.2802         3391.34         1447.20           May-03         13-May-03         AM6         Sun		May-03	07-May-03	AM2	Fine	normal operation	3.4676	3.5282	0.0606	1.2162	1.2204	1.2183	3411.51	3435.51	1440.00	1754.35	34.5
May-03         O7-May-03         AM4         Fine         normal operation         3.422         3.5186         0.0761         1.2871         1.2897         1.2899         3398.23         3422.23         1440.00           May-03         O7-May-03         AM5         Fine         normal operation         3.4572         3.5218         0.0646         1.3633         1.3702         1.3668         2998.88         1440.00           May-03         O7-May-03         AM6         Fine         normal operation         3.4449         3.5222         0.0773         1.6781         1.6857         1.6819         1528.70         1440.00           May-03         13-May-03         AM7         Sunny         normal operation         3.4492         3.5222         0.0773         1.2857         1.2837         1.5819         1447.20           May-03         15-May-03         AM4         Sunny         normal operation         3.4371         0.0949         1.2956         1.2713         1.2401         3366.92         3391.34         1447.20           May-03         13-May-03         AM6         Sunny         normal operation         3.4392         0.1280         1.2713         1.2713         1.447.30           May-03         13-May-03		May-03	07-May-03	AM3	Fine	normal operation	3.4502	3.5067	0.0565	1.2271	1.2322	1.2297	3342,92	3366.92	1440.00	1770.70	31.9
May-03         O7-May-03         AM5         Fine         normal operation         3.4572         3.5218         0.0646         1.3533         1.3702         1.3668         2938.88         2962.88         1440.00           May-03         O7-May-03         AM6         Fine         normal operation         3.4449         3.5222         0.0773         1.6781         1.6857         1.6819         1528.70         1440.00           May-03         13-May-03         AM6         Fine         normal operation         3.4492         3.5322         0.0890         1.2926         1.2837         1.2882         3435.51         3447.20           May-03         13-May-03         AM8         Sunny         normal operation         3.4371         3.5320         0.0949         1.2949         1.2843         1.2841         3366.92         3391.34         1447.20           May-03         13-May-03         AM4         Sunny         normal operation         3.4371         0.1052         1.2849         1.2713         1.2713         1.441.80           May-03         13-May-03         AM5         Sunny         normal operation         3.4399         3.5280         0.1880         1.3192         1.3112         1.5167.76         1576.76         1441.3.60 <td></td> <td>May-03</td> <td>07-May-03</td> <td>AM4</td> <td>Fine</td> <td>normal operation</td> <td>3.4425</td> <td>3.5186</td> <td>0.0761</td> <td>1.2871</td> <td>1.2927</td> <td>1.2899</td> <td>3398.23</td> <td>3422.23</td> <td>1440.00</td> <td>1857.46</td> <td>41.0</td>		May-03	07-May-03	AM4	Fine	normal operation	3.4425	3.5186	0.0761	1.2871	1.2927	1.2899	3398.23	3422.23	1440.00	1857.46	41.0
May-03         O7-May-03         AM6         Fine         normal operation         3.4449         3.5222         0.0773         1.6781         1.6857         1.6819         1528.70         1440.00           May-03         13-May-03         AM2         Sunny         normal operation         3.4492         3.5322         0.0890         1.2826         1.2837         1.2882         3455.51         3459.63         1447.20           May-03         13-May-03         AM3         Sunny         normal operation         3.4371         3.5320         0.0949         1.2845         1.2843         3366.92         3391.34         1465.20           May-03         13-May-03         AM4         Sunny         normal operation         3.4377         3.5179         0.1289         1.2713         1.2770         3422.23         3446.26         1441.80           May-03         13-May-03         AM5         Sunny         normal operation         3.4392         3.5280         0.1280         1.3770         1.3162         1.3162         1.441.80           May-03         13-May-03         AM5         Sunny         normal operation         3.4392         3.5280         0.0888         1.3192         1.3132         1.562.70         1562.70         1441.80 <td></td> <td>May-03</td> <td>07-May-03</td> <td>AMS</td> <td>Fine</td> <td>normal operation</td> <td>3.4572</td> <td>3.5218</td> <td>0.0646</td> <td>1.3633</td> <td>1.3702</td> <td>1.3668</td> <td>2938.88</td> <td>2962.88</td> <td>1440.00</td> <td>1968.12</td> <td>32.8</td>		May-03	07-May-03	AMS	Fine	normal operation	3.4572	3.5218	0.0646	1.3633	1.3702	1.3668	2938.88	2962.88	1440.00	1968.12	32.8
May-03         13-May-03         AMZ         Sunny         normal operation         3.492         3.532         0.0890         1.2926         1.2837         1.2887         345.51         345.63         1447.20           May-03         15-May-03         AM3         Sunny         normal operation         3.4371         3.5320         0.0949         1.2469         1.2401         3366.92         3391.34         1465.20           May-03         13-May-03         AM4         Sunny         normal operation         3.4127         3.5179         0.1052         1.2826         1.2770         3422.23         346.26         1441.80           May-03         13-May-03         AM5         Sunny         normal operation         3.4399         3.5679         0.1280         1.3270         1.3161         2962.88         2986.88         1440.00           May-03         13-May-03         AM6         Sunny         normal operation         3.4392         3.5280         0.0888         1.3132         1.3132         1552.70         1576.76         1443.60		May-03	07-May-03	AM6	Fine	normal operation	3.4449	3.5222	0.0773	1.6781	1.6857	1.6819	1528.70	1552.70	1440.00	2421.94	31.9
May-03         15-May-03         AM3         Sunny         normal operation         3.4371         3.5320         0.0949         1.2459         1.2469         1.2401         3366.92         3391.34         1465.20           May-03         13-May-03         AM4         Sunny         normal operation         3.4127         3.5179         0.1052         1.2826         1.2770         3422.23         3446.26         1441.80           May-03         13-May-03         AM5         Sunny         normal operation         3.4392         3.5679         0.1280         1.3051         1.3161         2962.88         2986.88         1440.00           May-03         13-May-03         AM6         Sunny         normal operation         3.4392         3.5280         0.0888         1.3192         1.3132         1552.70         1576.76         1443.60		May-03	13-May-03	AM2	Sunny	normal operation	3.4492	3.5382	0.0890	1.2926	1.2837	1.2882	3435.51	3459.63	1447.20	1864.21	47.7
May-03         13-May-03         AM4         Sunny         normal operation         3.427         3.5179         0.1052         1.2826         1.2770         342.23         346.26         1441.80         1440.00           May-03         13-May-03         AM5         Sunny         normal operation         3.4392         3.5280         0.0888         1.3071         1.3132         155.70         1576.76         1443.60		May-03	•	AM3	Sunny	normal operation	3.4371	3.5320	0.0949	1.2459	1.2343	1.2401	3366.92	3391.34	1465.20	1816.99	52.2
May-03         13-May-03         AM5         Sunny         normal operation         3.4392         3.5679         0.1280         1.3270         1.3051         1.3161         2962.88         2986.88         1440.00         1.3071         1.3132         1552.70         1576.76         1443.60         1.443.60		May-03	13-May-03	AM4	Sunny	normal operation	3.4127	3.5179	0.1052	1.2826	1.2713	1.2770	3422.23	3446.26	1441.80	1841.11	57.1
May-03   13-May-03   AM6   Sunny   normal operation   3.4392   3.5280   0.0888   1.3192   1.3071   1.3132   1552.70   1576.76   1443.60   1		May-03	13-May-03	AM5	Sunny	normal operation	3.4399	3.5679	0.1280	1.3270	1.3051	1.3161	2962.88	2986.88	1440.00	1895.11	67.5
		May-03	13-May-03	AM6	Sunny	normal operation	3.4392	3.5280	0.0888	1.3192	1.3071	1.3132	1552.70	1576.76	1443.60	1895.66	46.8

		20000	Weather	Site	Filter Weight (g)	eight (g)	TSP	Flow Rate	Flow Rate (m <sup>3</sup> /min)	Average Flow		Elapse Time	Sampling	Total	24-hour TSP
_	Date	No.	condition	condition	Initial	Final	weight (g)	Initial	Final	Rate (m³/min)	Start	Finish	Time (mins.)	vol. (m³)	Level (µg/m³)
호	19-May-03	AM2	Sunny	normal operation	3.7158	3.7844	0.0686	1.2837	1.2858	1,2848	3459.63	3483.63	1440.00	1850.04	37.1
9	19-May-03	AM3	Sunny	normal operation	3.7034	3.7668	0.0634	1.2343	1.2370	1.2357	3391,34	3415.34	1440.00	1779.34	35.6
호	19-May-03	AM4	Sunny	normal operation	3.7292	3.8015	0.0723	1.2447	1.2472	1.2460	3446.26	3470.26	1440.00	1794.17	40.3
Φ	19-May-03	AM5	Sunny	normal operation	3,7415	3.8337	0.0922	1.2655	1.2705	1,2680	2986.88	3010.88	1440.00	1825.92	50.5
ထို	19-May-03	AM6	Sunny	normal operation	3.7684	3.8426	0.0742	1.3071	1.3100	1.3086	1576.76	1600.76	1440.00	1884.31	39.4
4	24-May-03	AM2	Sunny	normal operation	3.5244	3.6014	0.0770	1.2858	1.2842	1,2850	3483.63	3507.64	1440.60	1851.17	41.6
4	24-May-03	AM3	Sunny	normal operation	3.5136	3.5978	0.0842	1.2370	1.2349	1.2360	3415.34	3439.35	1440.60	1780.51	47.3
Ž,	24-May-03	AM4	Sunny	normal operation	3.5074	3.5857	0.0783	1.2739	1.2719	1.2729	3470.26	3494.27	1440.60	1833.74	42.7
4	24-May-03	AM5	Sunny	normal operation	3.5246	3.6116	0.0870	1.2705	1.2666	1.2686	3010.88	3034.89	1440.60	1827.47	47.6
×	24-May-03	AM6	Sunny	normal operation	3.5299	3.6146	0.0847	1.3100	1.3078	1.3089	1600.76	1624.44	1420.80	1859.69	45.5
~	31-May-03	AM2	Sunny	normal operation	3.4498	3.6180	0.1682	1.2842	1.2887	1.2865	3507.64	3531.64	1440.00	1852.49	80.8
~	31-May-03	AM3	Sunny	normal operation	3.4592	3.6249	0.1657	1.2349	1.2408	1,2379	3439.35	3463.35	1440.00	1782.50	93.0
Ξ	31-May-03	AM4	Sunny	normal operation	3.4482	3.6036	0.1554	1.2452	1.2509	1.2481	3494.27	3518.27	1440.00	1797.19	86.5
3	31-May-03	AM5	Sunny	normal operation	3.4426	3.6418	0.1992	1.2666	1.2776	1.2721	3034.89	3058.89	1440.00	1831.82	108.7
5	31-May-03	AM6	Sunny	normal operation	3.4529	3.6232	0.1703	1.3597	1.3139	1.3368	1624.44	1648.44	1440.00	1924.99	88.5
ıŏ	06-Jun-03	AM2	Rainy	normal operation	3.4548	3.5438	0.0890	1.2887	1.3300	1,3094	3531.64	3555.64	1440.00	1885.46	47.2
8	06-Jun-03	AM3	Rainy	normal operation	3.4506	3.5411	0.0905	1.2408	1.2385	1.2397	3463.35	3486.96	1416.60	1756.09	51.5
ō	06-Jun-03	AM4	Rainy	normal operation	3.4606	3.5370	0.0764	1.2509	1.2487	1.2498	3518.27	3542.27	1440.00	1799.71	42.5
0	06-Jun-03	AM5	Rainy	normal operation	3.4763	3.8449	0.3686	1.3971	1.3926	1.3949	3058.89	3082.89	1440.00	2008.58	183.5
$\circ$	06-Jun-03	AM6	Rainy	normal operation	3.4736	3.5521	0.0785	1.3139	1.3115	1.3127	1648.44	1672.44	1440.00	1890.29	41.5
<del></del>	12-Jun-03	AM2	Rainy	normal operation	3.5040	3.5805	0.0765	1.2869	1.2878	1.2874	3555.64	3579.64	1440.00	1853.78	41.3
-	12-Jun-03	AM3	Rainy	normal operation	3.4439	3.5168	0.0729	1.2385	1.2397	1.2391	3486.96	3510.96	1440.00	1784.30	40.9
-	12-Jun-03	AM4	Rainy	normal operation	3.4723	3.5495	0.0772	1.2754	1.2766	1.2760	3542.27	3566.27	1440.00	1837.44	45.0
÷	14-Jun-03	AM5	Rainy	normal operation	3.4557	3.5395	0.0838	1.3528	1.3551	1.3540	3166.11	3190.31	1452.00	1965.94	42.6
÷	12-Jun-03	AM6	Rainy	normal operation	3.4375	3.5079	0.0704	1.3636	1.3649	1.3643	1672.44	1696.44	1440.00	1964.52	35.8
≃	18-Jun-03	AM2	Sunny	normal operation	3.3501	3.5887	0.2386	1.2894	1.2870	1.2882	3603.64	3627.64	1440.00	1855.01	128.6
~	18-Jun-03	AM3	Sunny	normal operation	3.4605	3.6716	0.2111	1,1915	1.1885	1,1900	3534.96	3558.96	1440.00	1713.60	123.2
~	18-Jun-03	AM4	Sunny	normal operation	3,4650	3.7079	0.2429	1.2786	1.2755	1.2771	3590.27	3610.27	1200.00	1532.46	158.5
$\overline{}$	18-Jun-03	AM5	Sunny	normal operation	3.3523	3.6499	0.2976	1.3592	1.3530	1.3561	3264.75	3288.84	1445.40	1960.11	151.8
_	18-Jun-03	AM6	Sunny	normal operation	3,3552	3.5948	0,2396	1.3149	1.3116	1.3133	1720.44	1744.44	1440.00	1891.08	126.7
CA	24-Jun-03	AM2	Sunny	normal operation	3.3637	3,4145	0.0508	1.2870	1.2855	1.2863	3627.64	3651.63	1439.40	1851.43	27.4
C	24-Jun-03	AM3	Sunny	normal operation	3.3721	3.4404	0.0683	1.1384	1.1367	1.1376	3572,89	3596.89	1440.00	1638.07	41.7
C/J	24-Jun-03	AM4	Sunny	normal operation	3.3619	3.4281	0.0662	1.3023	1.3003	1.3013	3610.27	3634.27	1440.00	1873.87	35.3
N	24-Jun-03	AM5	Sunny	normal operation	3.3765	3.4389	0.0624	1,3530	1.3492	1.3511	3312.84	3336.84	1440.00	1945.58	32.1
CV	24-Jun-03	AM6	Sunny	normal operation	3.3682	3.4226	0.0544	1.3116	1.3096	1.3106	1744.44	1768.44	1440.00	1887.26	28.8
	30-Jun-03	AM2	Sunny	normal operation	3,3205	3.3605	0.0400	1.2855	1.2849	1.2852	3651.63	3675.64	1440.60	1851.46	21.6
ζτ,	30-Jun-03	AM3	Sunny	normal operation	3.3606	3.3992	0.0386	1.1867	1.1859	1.1863	3596.89	3620.89	1440.00	1708.27	22.6
	30-Jun-03	AM4	Sunny	normal operation	3.3622	3.3972	0.0350	1.1935	1.1928	1.1932	3634.27	3658.22	1437.00	1714.56	20.4
	30-Jun-03	AMS	Sunny	normal operation	3.3706	3.4178	0.0472	1.3492	1.3475	1.3484	3336.84	3360.84	1440.00	1941.62	24.3
	30-Jun-03	AM6	Sunny	normal operation	3.3556	3.4003	0.0447	1.2836	1.2827	1.2832	1768.44	1792.45	1440.60	1848.51	24.2

#### APPENDIX 3

1-hour TSP Monitoring Results for April 2003 to June 2003

		Receptor		Time p	eriods	Weather	Site	Temp.	Pressure	1-hour TSP
Month	Date	No.	Set No.	Start	Finish	condition	condition	(°C)	(mmHg)	Level (μg/g³)
Apr-03	02-Apr-03	AM2	1	9:17	10:17	Fine	normal operation	26.0	758.3	219.1
Apr-03	02-Apr-03	AM2	2	10:17	11:17	Fine	normal operation	26.0	758.3	206.0
Apr-03	02-Apr-03	AM2	3	13:17	14:17	Fine	normal operation	26.0	758.3	200.1
Apr-03	02-Apr-03	AM3	1	9:20	10:20	Fine	normal operation	26.0	758.3	214.7
Apr-03	02-Apr-03	AM3	2	10:20	11:20	Fine	normal operation	26.0	758.3	200.8
Apr-03	02-Apr-03	AM3	3	13:20	14:20	Fine	normal operation	26.0	758.3	196.5
Apr-03	02-Арг-03	AM4	1	9:55	10:55	Fine	normal operation	26.0	758.3	199.8
Apr-03	02-Apr-03	AM4	2	10:55	11:55	Fine	normal operation	26.0	758.3	177.5
Apr-03	02-Арг-03	AM4	3	13:55	14:55	Fine	normal operation	26.0	758.3	176.7
Apr-03	02-Apr-03	AM5	1	9:43	10:43	Fine	normal operation	26.0	758.3	224.7
Арг-03 Арг-03	02-Apr-03	AM5 AM5	2 3	10:43 13:43	11:43 14:43	Fine	normal operation	26.0	758.3	193.0
Apr-03	02-Apr-03 02-Apr-03	AM6	1	9:28	10:28	Fine Fine	normal operation	26.0	758.3 758.3	198.4 196.7
Арг-03 Арг-03	02-Apr-03 02-Apr-03	AM6	2	10:28	11:28	Fine	normal operation normal operation	26.0 26.0	758.3 758.3	173.6
Apr-03	02-Apr-03	AM6	3	13:28	14:28	Fine	normal operation	26.0	758.3 758.3	173.6
Apr-03	08-Apr-03	AM2	1	8:07	9:07	Fine	normal operation	23.0	760.0	166.5
Apr-03	08-Apr-03	AM2	2	9:07	10:07	Fine	normal operation	23.0	760.0	144.8
Apr-03	08-Apr-03	AM2	3	10:22	11:22	Fine	normal operation	23.0	760.0	151.2
Apr-03	08-Apr-03	AM3	1	8:13	9:13	Fine	normal operation	23.0	760.0	193.8
Apr-03	08-Apr-03	AM3	2	9:13	10:13	Fine	normal operation	23.0	760.0	193.5
Apr-03	08-Apr-03	AM3	3	10:13	11:13	Fine	normal operation	23.0	760.0	194.7
Apr-03	08-Apr-03	AM4	1	8:17	9:17	Fine	normal operation	23.0	760.0	170.5
Apr-03	08-Apr-03	AM4	2	9:17	10:17	Fine	normal operation	23.0	760.0	145.0
Apr-03	08-Apr-03	AM4	3	10:17	11:17	Fine	normal operation	23.0	760.0	155.1
Арг-03	08-Apr-03	AM5	1	8:21	9:21	Fine	normal operation	23.0	760.0	171.4
Apr-03	08-Арг-03	AM5	2	9:21	10:21	Fine	normal operation	23.0	760.0	158.8
Apr-03	08-Apr-03	AM5	3	10:21	11:21	Fine	normal operation	23.0	760.0	172.2
Apr-03	08-Apr-03	AM6	1	8:03	9:03	Fine	normal operation	23.0	760.0	162.8
Apr-03	08-Apr-03	AM6	2	9:03	10:03	Fine	normal operation	23.0	760.0	163.6
Apr-03	08-Apr-03	AM6	3	10:03	11:03	Fine	normal operation	23.0	760.0	167.2
Apr-03	16-Apr-03	AM2	1	13:03	14:03	Sunny	normal operation	22.0	764.0	204.7
Apr-03	16-Apr-03	AM2	2	14:03	15:03	Sunny	normal operation	22.0	764.0	227.8
Apr-03	16-Apr-03	AM2	3	15:03	16:03	Sunny	normal operation	22.0	764.0	226.3
Apr-03	16-Apr-03	AM3	1	13:10	14:10	Sunny	normal operation	22.0	764.0	193.0
Apr-03	16-Apr-03	AM3	2	14:10	15:10	Sunny	normal operation	22.0	764.0	222.3
Apr-03	16-Apr-03	AM3	3	15:10	16:10	Sunny	normal operation	22.0	764.0	204.6
Apr-03	16-Apr-03	AM4	1	13:00	14:00	Sunny	normal operation	22.0	764.0	168.4
Apr-03	16-Apr-03	AM4	2	14:00	15:00	Sunny	normal operation	22.0	764.0	197.1
Арг-03	16-Apr-03	AM4	3	15:00	16:00	Sunny	normal operation	22.0	764.0	190.6
Apr-03	16-Apr-03	AM5	1	13:01	14:01	Sunny	normal operation	22.0	764.0	184.1
Apr-03 Apr-03	16-Apr-03 16-Apr-03	AM5	2	14:01 15:01	15:01	Sunny	normal operation	22.0	764.0	182.2
Apr-03	16-Apr-03	AM5 AM6	3 1	13:05	16:01 14:05	Sunny Sunny	normal operation normal operation	22.0 22.0	764.0 764.0	199.4 194.0
Apr-03	16-Apr-03	AM6	2	14:05	15:05	Sunny	normal operation	22.0	764.0 764.0	177.8
Apr-03	16-Apr-03	AM6	3	15:05	16:05	Sunny	normal operation	22.0	764.0 764.0	177.8
Apr-03	23-Apr-03	AM2	1	8:14	9:14	Sunny	normal operation	28.0	760.0	188.6
Apr-03	23-Арг-03	AM2	2	9:14	10:14	Sunny	normal operation	28.0	760.0	199.6
Apr-03	23-Apr-03	AM2	3	10:14	11:14	Sunny	normal operation	28.0	760.0	206.7
Apr-03	23-Apr-03	AM3	1	8:12	9:12	Sunny	normal operation	28.0	760.0	187.3
Apr-03	23-Apr-03	AM3	2	9:12	10:12	Sunny	normal operation	28.0	760.0	199.2
Apr-03	23-Арг-03	AM3	3	10:12	11:12	Sunny	normal operation	28.0	760.0	207.4
Apr-03	23-Арг-03	AM4	1	8:17	9:17	Sunny	normal operation	28.0	760.0	214.2
Apr-03	23-Apr-03	AM4	2	9:17	10:17	Sunny	normal operation	28.0	760.0	224.2
Apr-03	23-Apr-03	AM4	3	10:17	11:17	Sunny	normal operation	28.0	760.0	231.9
Apr-03	23-Apr-03	AM5	1	8:20	9:20	Sunny	normal operation	28.0	760.0	219.6
Apr-03	23-Apr-03	AM5	2	9:20	10:20	Sunny	normal operation	28.0	760.0	229.0
Apr-03	23-Apr-03	AM5	3	10:20	11:20	Sunny	normal operation	28.0	760.0	239.1
Apr-03	23-Apr-03	AM6	1	8:28	9:28	Sunny	normal operation	28.0	760.0	198.7
Apr-03	23-Apr-03	AM6	2	9:28	10:28	Sunny	normal operation	28.0	760.0	208.1
Apr-03	23-Apr-03	AM6	3	10:28	11:28	Sunny	normal operation	28.0	760.0	223.7

		Receptor		Time p	eriods	Weather	Site	Temp.	Pressure	1-hour TSP
Month	Date	No.	Set No.	Start	Finish	condition	condition	(°C)	(mmHg)	Level (μg/g <sup>3</sup> )
Apr-03	28-Apr-03	AM2	1	8:50	9:50	Sunny	normal operation	27.0	762.0	204.2
Apr-03	28-Apr-03	AM2	2	9:50	10:50	Sunny	normal operation	27.0	762.0	193.4
Apr-03	28-Apr-03	AM2	3	10:50	11:50	Sunny	normal operation	27.0	762.0	185.5
Apr-03	28-Apr-03	АМЗ	1	8:48	9:48	Sunny	normal operation	27.0	762.0	209.2
Apr-03	28-Apr-03	AM3	2	9:48	10:48	Sunny	normal operation	27.0	762.0	204.1
Арг-03	28-Apr-03	AM3	3	10:48	11:48	Sunny	normal operation	27.0	762.0	198.1
Apr-03	28-Apr-03	AM4	1	8:55	9:55	Sunny	normal operation	27.0	762.0	213.7
Apr-03	28-Арг-03	AM4	2	9:55	10:55	Sunny	normal operation	27.0	762.0	206.2
Apr-03	28-Apr-03	AM4	3	10:55	11:55	Sunny	normal operation	27.0	762.0	196.0
Apr-03	28-Apr-03	AM5	1	8:51	9:51	Sunny	normal operation	27.0	762.0	199.2
Apr-03	28-Apr-03	AM5	2	9:51	10:51	Sunny	normal operation	27.0	762.0	190.9
Арг-03	28-Apr-03	AM5	3	10:51	11:51	Sunny	normal operation	27.0	762.0	183.4
Apr-03	28-Apr-03	AM6	1	8:53	9:53	Sunny	normal operation	27.0	762.0	227.1
Apr-03	28-Apr-03	AM6	2	9:53	10:53	Sunny	normal operation	27.0	762.0	219.4
Apr-03	28-Apr-03	AM6	3	10:53	11:53	Sunny	normal operation	27.0	762.0	213.0
May-03	06-May-03	AM2	1	8:32	9:32	Fine	normal operation	27.0	760.0	164.7
May-03	06-May-03	AM2	2	9:32	10:32	Fine	normal operation	27.0	760.0	150.3
May-03	06-May-03	AM2	3	10:32	11:32	Fine	normal operation	27.0	760.0	142.6
May-03	06-May-03	AM3	1	8:34	9:34	Fine	normal operation	27.0	760.0	153.0
May-03	06-May-03	AM3	2	9:34	10:34	Fine	normal operation	27.0	760.0	145.0
May-03	06-May-03	AM3	3	10:34	11:34	Fine	normal operation	27.0	760.0 760.0	137.8 159.0
May-03	06-May-03	AM4	1	8:30	9:30	Fine	normal operation	27.0 27.0	760.0	146.9
May-03 May-03	06-May-03	AM4	2 3	9:30 10:30	10:30 11:30	Fine Fine	normal operation normal operation	27.0	760.0	133.2
	06-May-03 06-May-03	AM4 AM5	1	13:03	14:03	Fine	normal operation	27.0	760.0	153.2
May-03 May-03	06-May-03	AM5	2	14:03	15:03	Fine	normal operation	27.0	760.0	155.9
May-03	06-May-03	AM5	3	15:03	16:03	Fine	normal operation	27.0	760.0	163.2
May-03	06-May-03	AM6	1	13:02	14:02	Fine	normal operation	27.0	760.0	156.3
May-03	06-May-03	AM6	2	14:02	15:02	Fine	normal operation	27.0	760.0	154.8
May-03	06-May-03	AM6	3	15:02	16:02	Fine	normal operation	27.0	760.0	169.2
May-03	09-May-03	AM2	1	9:53	10:53	Fine	normal operation	25.0	762.8	201.7
May-03	09-May-03	AM2	2	10:53	11:53	Fine	normal operation	25.0	762.8	201.0
May-03	09-May-03	AM2	3	13:53	14:53	Fine	normal operation	25.0	762.8	206.6
May-03	09-May-03	AM3	1	9:48	10:48	Fine	normal operation	25.0	762.8	189.7
May-03	09-May-03	AM3	2	10:48	11:48	Fine	normal operation	25.0	762.8	186.2
May-03	09-May-03	AM3	3	13:48	14:48	Fine	normal operation	25.0	762.8	195.2
May-03	09-May-03	AM4	1	10:10	11:10	Fine	normal operation	25.0	762.8	202.7
May-03	09-May-03	AM4	2	13:10	14:10	Fine	normal operation	25.0	762.8	194.9
May-03	09-May-03	AM4	3	14:10	15:10	Fine	normal operation	25.0	762.8	203.7
May-03	09-May-03	AM5	1	10:25	11:25	Fine	normal operation	25.0	762.8	226.8
May-03	09-May-03	AM5	2	13:25	14:25	Fine	normal operation	25.0	762.8	217.4
May-03	09-May-03	AM5	3	14:25	15:25	Fine	normal operation	25.0	762.8	228.8
May-03	09-May-03	AM6	1	10:04	11:04	Fine	normal operation	25.0	762.8	210.5
May-03	09-May-03	AM6	2 3	13:04	14:04	Fine Fine	normal operation	25.0 25.0	762.8 762.8	208.7 210.5
May-03 May-03	09-May-03 15-May-03	AM6 AM2	1	14:04 8:16	15:04 9:16	Sunny	normal operation normal operation	25.0 30.0	756.0	196.0
May-03	15-May-03	AM2	2	9:16	10:16	Sunny	normal operation	30.0	756.0	217.8
May-03	15-May-03	AM2	3	10:16	11:16	Sunny	normal operation	30.0	756.0	231.4
May-03	15-May-03	AM3	1	8:04	9:04	Sunny	normal operation	30.0	756.0	186.0
May-03	15-May-03	AM3	2	9:04	10:04	Sunny	normal operation	30.0	756.0	182.5
May-03	15-May-03	AM3	3	10:04	11:04	Sunny	normal operation	30.0	756.0	129.6
May-03	15-May-03	AM4	1	8:06	9:06	Sunny	normal operation	30.0	756.0	183.3
May-03	15-May-03	AM4	2	9:06	10:06	Sunny	normal operation	30.0	756.0	172.5
May-03	15-May-03	AM4	3	10:06	11:06	Sunny	normal operation	30.0	756.0	160.8
May-03	15-May-03	AM5	1	8:12	9:12	Sunny	normal operation	30.0	756.0	209.3
May-03	15-May-03	AM5	2	9:12	10:12	Sunny	normal operation	30.0	756.0	205.2
May-03	15-May-03	AM5	3	10:12	. 11:12	Sunny	normal operation	30.0	756.0	174.7
May-03	15-May-03	AM6	1	8:06	9:06	Sunny	normal operation	30.0	756.0	186.2
May-03	15-May-03		2	9:06	10:06	Sunny	normal operation	30.0	756.0	181.7
May-03	15-May-03	AM6	3	10:06	11:06	Sunny	normal operation	30.0	756.0	142.1

May-03   22-May-03   AMZ   1   7-43   8-43   Sunny   normal operation   20.0   758.0   181.0			Receptor		Time p	eriods	Weather	Site	Temp.	Pressure	1-hour TSP
May-03   22-May-03   AM2   2   8:43   9:43   Sunny   normal operation   29.0   758.0   193.0   178.5   May-03   22-May-03   AM3   1   8:48   9:48   Sunny   normal operation   29.0   758.0   204.3   104.8   11:48   Sunny   normal operation   29.0   758.0   226.7   104.8   104.8   11:48   Sunny   normal operation   29.0   758.0   226.7   104.8   103.9   103.9   Sunny   normal operation   29.0   758.0   226.7   104.8   103.9   103.9   Sunny   normal operation   29.0   758.0   226.4   104.8	Month	Date	No.	Set No.	Start	Finish	condition	condition	(°C)	(mmHg)	Level (μg/g <sup>3</sup> )
May-03   22-May-03   AM2   3   9-43   10-43   Sunny   normal operation   29.0   758.0   178.5	May-03	22-May-03	AM2	1	7:43	8:43	Sunny	normal operation	29.0	758.0	181.0
May-03   22-May-03   AM3   1   8.48   9.48   Sunny   normal operation   29.0   758.0   204.3	May-03	22-May-03	AM2	2	8:43	9:43	Sunny	normal operation	29.0	758.0	193.0
May-03   22-May-03   AM3   2   948   10-48   Sunny   normal operation   29.0   758.0   296.5	May-03		AM2		9:43	10:43	Sunny	normal operation	29.0		
May-03   22-May-03   AMM					i		•				
May-03   22-May-03   AMM   2   9:39   0:39   Sumy   normal operation   29.0   758.0   202.4									1		
Nay-03   22-May-03   AMM   3   10.39   10.39   Sunny   normal operation   29.0   758.0   202.4		-						; '			
May-03   22-May-03   AM4   3   10:39   11:39   Sunny   normal operation   29.0   758.0   187.1								; ' I	i		
May-03   22-May-03   AM5   1   8.55   9.55   Sunny   Narmal operation   29.0   758.0   137.1						1 :	•	i '			
May-03   22-May-03   AM5   2   9.55   10.55   Sunny   Normal operation   29.0   758.0   201.8			1 1			1 :					
May-03   22-May-03   AM6   1   8:34   9:34   Sunny   Normal operation   29.0   758.0   201.6			1			1 :					•
May-03   22-May-03   AM6   1   8:34   9:34   Sunny   Normal operation   29.0   758.0   205.8	, ,		1			}	•			1	
May-03         22-May-03         AM6         2         9:34         10:34         Sunny         normal operation         29.0         758.0         185.3           May-03         28-May-03         AM2         1         9:17         10:17         Cloudy         normal operation         29.0         758.0         183.5           May-03         28-May-03         AM2         2         10:17         11:17         Cloudy         normal operation         26.0         753.0         183.5           May-03         28-May-03         AM3         1         8:47         9:47         Cloudy         normal operation         26.0         753.0         183.5           May-03         28-May-03         AM3         1         8:47         9:47         Cloudy         normal operation         26.0         753.0         29.8           May-03         28-May-03         AM4         1         9:07         71:07         Cloudy         normal operation         26.0         753.0         29.8           May-03         28-May-03         AM4         1         9:07         71:00         Cloudy         normal operation         26.0         753.0         29.12           May-03         28-May-03         AM5			t l			<b>:</b>	•				
May-03   22-May-03   AM6   3   10:34   11:34   Sunny   normal operation   29.0   758.0   212.7			[ I				•			1 1	
May-03         28-May-03         AMZ         1         9:17         10:17         Cloudy homal operation         26.0         753.0         183.5           May-03         28-May-03         AMZ         3         11:17         12:17         Cloudy homal operation         26.0         753.0         183.3           May-03         28-May-03         AM3         1         8:47         9:47         Cloudy homal operation         26.0         753.0         210.8           May-03         28-May-03         AM3         1         9:47         10:47         Cloudy homal operation         26.0         753.0         209.8           May-03         28-May-03         AM4         1         9:07         10:07         Cloudy homal operation         26.0         753.0         201.8           May-03         28-May-03         AM4         2         10:07         11:07         Cloudy homal operation         26.0         753.0         201.2           May-03         28-May-03         AM4         3         11:07         12:07         Cloudy homal operation         26.0         753.0         202.0           May-03         28-May-03         AM5         1         9:21         10:21         Cloudy homal operation         26.0		_	t				•				
May-03   28-May-03   AM2   2   10:17   11:17   Cloudy   normal operation   26.0   753.0   183.3		•				1	1				
May-03   28-May-03   AM3			i .					, ,			
May-03   28-May-03   AM3   1   8.47   9.47   Cloudy   normal operation   26.0   753.0   209.8		•	1					! ' I			
May-03   28-May-03   AM3   3   10:47   11:47   Cloudy   normal operation   26.0   753.0   201.8					1						
May-03   28-May-03   AMA						I					
May-03   28-May-03   AMM			1 3			I		1 ' 1			
May-03   28-May-03   AM4   3   11:07   12:07   Cloudy   normal operation   26.0   753.0   198.2			I :			1					
May-03         28-May-03         AM4         3         11:07         12:07         Cloudy normal operation         26.0         753.0         198.9           May-03         28-May-03         AM5         1         9:21         10:21         Cloudy normal operation         26.0         753.0         202.0           May-03         28-May-03         AM5         3         11:21         11:21         Cloudy normal operation         26.0         753.0         291.8           May-03         28-May-03         AM6         1         13:00         14:00         Cloudy normal operation         26.0         753.0         224.0           May-03         28-May-03         AM6         2         14:00         15:00         Cloudy normal operation         26.0         753.0         222.9           May-03         28-May-03         AM6         3         15:00         16:00         Cloudy normal operation         26.0         753.0         222.9           Jun-03         03-Jun-03         AM2         1         13:00         14:00         Sunny normal operation         28.0         762.0         222.7           Jun-03         03-Jun-03         AM3         1         13:04         14:04         Sunny normal operation			AM4	2	10:07	11:07			1		
May-03         28-May-03         AM5         1         9:21         10:21         Cloudy normal operation of mormal operation of 26.0         753.0         202.0           May-03         28-May-03         AM5         2         10:21         11:21         Cloudy normal operation of mormal operation of 26.0         753.0         199.9           May-03         28-May-03         AM6         1         13:00         14:00         Cloudy normal operation of mormal operation of 26.0         753.0         224.0           May-03         28-May-03         AM6         1         13:00         14:00         Cloudy normal operation of 26.0         753.0         222.9           May-03         28-May-03         AM6         3         15:00         16:00         Cloudy normal operation of 26.0         753.0         222.1           Jun-03         03-Jun-03         AM2         1         13:00         14:00         Sunny normal operation of 26.0         753.0         222.7           Jun-03         03-Jun-03         AM2         1         13:00         14:00         Sunny normal operation of 26.0         753.0         222.7           Jun-03         03-Jun-03         AM3         1         13:04         16:00         Sunny normal operation of 26.0         762.0         2			AM4		11:07	12:07	Cloudy	normal operation	1		
May-03   28-May-03   AM5   3	_	28-May-03	AM5	1	9:21	10:21	Cloudy		26.0	753.0	202.0
May-03         28-May-03         AM6         1         13:00         14:00         Cloudy normal operation normal operation 26.0         753.0         224.0           May-03         28-May-03         AM6         2         14:00         15:00         Cloudy normal operation 26.0         753.0         222.9           Jun-03         03-Jun-03         AM2         1         13:00         16:00         Sunny normal operation 28.0         762.0         222.7           Jun-03         03-Jun-03         AM2         2         14:00         15:00         Sunny normal operation 28.0         762.0         221.7           Jun-03         03-Jun-03         AM2         3         15:00         16:00         Sunny normal operation 28.0         762.0         227.5           Jun-03         03-Jun-03         AM3         1         13:04         14:04         Sunny normal operation 28.0         762.0         196.2           Jun-03         03-Jun-03         AM3         2         14:04         15:04         Sunny normal operation 28.0         762.0         192.8           Jun-03         03-Jun-03         AM4         1         13:00         14:00         Sunny normal operation 28.0         762.0         192.8           Jun-03         03-J	May-03	28-May-03	AM5	2	10:21	11:21	Cloudy	normal operation	26.0	753.0	199.9
May-03   28-May-03   AM6   2   14:00   15:00   Cloudy   normal operation   26.0   753.0   222.9	May-03	28-May-03	AM5	3	11:21	12:21	Cloudy	normal operation	26.0	753.0	201.8
May-03   28-May-03   AM6   3   15:00   16:00   Cloudy   normal operation   26.0   753.0   232.1     Jun-03   O3-Jun-03   AM2   1   13:00   14:00   Sunny   normal operation   28.0   762.0   222.7     Jun-03   O3-Jun-03   AM2   3   15:00   16:00   Sunny   normal operation   28.0   762.0   277.4     Jun-03   O3-Jun-03   AM2   3   15:00   16:00   Sunny   normal operation   28.0   762.0   207.5     Jun-03   O3-Jun-03   AM3   1   13:04   14:04   Sunny   normal operation   28.0   762.0   207.5     Jun-03   O3-Jun-03   AM3   2   14:04   15:04   Sunny   normal operation   28.0   762.0   196.2     Jun-03   O3-Jun-03   AM3   2   14:04   15:04   Sunny   normal operation   28.0   762.0   196.2     Jun-03   O3-Jun-03   AM4   1   13:00   14:00   Sunny   normal operation   28.0   762.0   196.2     Jun-03   O3-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   200.3     Jun-03   O3-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   197.1     Jun-03   O3-Jun-03   AM4   3   15:00   16:00   Sunny   normal operation   28.0   762.0   197.1     Jun-03   O3-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   O3-Jun-03   AM5   3   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   O3-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-	May-03	28-May-03	AM6	1	13:00	14:00	Cloudy	normal operation	26.0	753.0	224.0
Jun-03   03-Jun-03   AM2   1   13:00   14:00   Sunny   normal operation   28.0   762.0   222.7			AM6		14:00			normal operation			
Jun-03   03-Jun-03   AM2   2   14:00   15:00   Sunny   normal operation   28.0   762.0   207.5	May-03				15:00						
Jun-03   03-Jun-03   AM2   3   15:00   16:00   Sunny   normal operation   28.0   762.0   207.5											1 1
Jun-03   03-Jun-03   AM3   1   13:04   14:04   Sunny   normal operation   28.0   762.0   196.2     Jun-03   03-Jun-03   AM3   2   14:04   16:04   Sunny   normal operation   28.0   762.0   192.8     Jun-03   03-Jun-03   AM4   1   13:00   14:00   Sunny   normal operation   28.0   762.0   183.8     Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   200.3     Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   197.1     Jun-03   03-Jun-03   AM4   3   15:00   16:00   Sunny   normal operation   28.0   762.0   197.1     Jun-03   03-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   03-Jun-03   AM5   2   14:03   15:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   03-Jun-03   AM5   3   15:03   16:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   275.7     Jun-03   03-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   275.7     Jun-03   03-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   03-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   03-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM2   1   8:12   9:12   Rainy   normal operation   26.0   753.0   178.0     Jun-03   10-Jun-03   AM2   2   9:12   10:12   Rainy   normal operation   26.0   753.0   178.0     Jun-03   10-Jun-03   AM3   1   8:02   9:02   Rainy   normal operation   26.0   753.0   154.6     Jun-03   10-Jun-03   AM4   1   8:09   9:09   Rainy   normal operation   26.0   753.0   154.2     Jun-03   10-Jun-03   AM4   3   10:09   11:09   Rainy   normal operation   26.0   753.0   154.2     Jun-03   10-Jun-03   AM5   1   8:04   9:04   Rainy   normal operation   26.0   753.0   154.2					l			· ·		1	1
Jun-03   03-Jun-03   AM3   2   14:04   15:04   Sunny   normal operation   28.0   762.0   192.8     Jun-03   03-Jun-03   AM4   1   13:00   14:00   Sunny   normal operation   28.0   762.0   183.8     Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   200.3     Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   200.3     Jun-03   03-Jun-03   AM4   3   15:00   16:00   Sunny   normal operation   28.0   762.0   180.6     Jun-03   03-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   03-Jun-03   AM5   2   14:03   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM5   3   15:03   16:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   279.7     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   279.7     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   03-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   03-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   03-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM2   1   8:12   9:12   Rainy   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM2   2   9:12   10:12   Rainy   normal operation   26.0   753.0   178.0     Jun-03   10-Jun-03   AM3   1   8:02   9:02   Rainy   normal operation   26.0   753.0   154.6     Jun-03   10-Jun-03   AM4   1   8:09   9:09   Rainy   normal operation   26.0   753.0   135.4     Jun-03   10-Jun-03   AM4   3   10:09   11:09   Rainy   normal operation   26.0   753.0   135.4     Jun-03   10-Jun-03   AM4   3   10:09   11:09   Rainy   normal operation   26.0   753.0   154.2     Jun-03   10-Jun-03   AM5   1   8:04   9:04   Rainy   normal operation   26.0   753.0   154.2								, ,			
Jun-03   03-Jun-03   AM3   3   15:04   16:04   Sunny   normal operation   28.0   762.0   200.3     Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   200.3     Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   197.1     Jun-03   03-Jun-03   AM4   3   15:00   16:00   Sunny   normal operation   28.0   762.0   197.1     Jun-03   03-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   03-Jun-03   AM5   2   14:03   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM5   3   15:03   16:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   03-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   03-Jun-03   AM6   3   15:03   16:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM6   3   15:03   16:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM2   1   8:12   9:12   Rainy   normal operation   28.0   762.0   193.5     Jun-03   10-Jun-03   AM2   1   8:12   9:12   Rainy   normal operation   26.0   753.0   178.0     Jun-03   10-Jun-03   AM2   3   10:12   11:12   Rainy   normal operation   26.0   753.0   154.6     Jun-03   10-Jun-03   AM3   1   8:02   9:02   Rainy   normal operation   26.0   753.0   154.5     Jun-03   10-Jun-03   AM4   1   8:09   9:09   Rainy   normal operation   26.0   753.0   134.5     Jun-03   10-Jun-03   AM4   3   10:09   11:09   Rainy   normal operation   26.0   753.0   135.4     Jun-03   10-Jun-03   AM5   2   9:04   10:04   Rainy   normal operation   26.0   753.0   156.2     Jun-03   10-Jun-03   AM5   3   10:04   11:04   Rainy   normal operation   26.0   753.0   156.5     Jun-03   10-Jun-03   AM5   3   10:04   11:04   Rainy   normal operation			1								
Jun-03   03-Jun-03   AM4   1   13:00   14:00   Sunny   normal operation   28.0   762.0   200.3   Jun-03   03-Jun-03   AM4   3   15:00   16:00   Sunny   normal operation   28.0   762.0   197.1   Jun-03   03-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   180.6   Jun-03   03-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2   Jun-03   03-Jun-03   AM5   2   14:03   15:03   Sunny   normal operation   28.0   762.0   276.0   Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   276.0   Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7   Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7   Jun-03   03-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   30-Jun-03   AM6   3   15:03   16:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   10-Jun-03   AM6   3   15:03   I6:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   10-Jun-03   AM6   3   15:03   I6:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   10-Jun-03   AM6   3   15:03   I6:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   10-Jun-03   AM6   3   15:03   I6:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   Jun-03   AM6   3   15:03   I6:03   Sunny   normal operation   28.0   762.0   205.1   Jun-03   Jun-03   AM6   3   15:03   Jun-03   Jun-03   AM6   3   Jun-03   Jun-03   AM6   3   Jun-03   Jun-03   Jun-03   AM6   3   Jun-03   Jun-03   AM6   3   Jun-03   Jun-03   Jun-03   AM6   3   Jun-04   Jun-03   Jun-03   AM6   3   Jun-04   Jun-03   Jun-03   Jun-03   AM6   3   Jun-04   Jun-03   Jun-03   Jun-03   AM6   3   Jun-04   J		1			1	1	,	1 '			
Jun-03   03-Jun-03   AM4   2   14:00   15:00   Sunny   normal operation   28.0   762.0   197.1		•		1	9	1				t I	
Jun-03   03-Jun-03   AM4   3   15:00   16:00   Sunny   normal operation   28.0   762.0   266.2     Jun-03   03-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   03-Jun-03   AM5   2   14:03   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   03-Jun-03   AM5   3   15:03   16:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   03-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   03-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   03-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   03-Jun-03   AM6   3   15:03   16:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM6   3   15:03   16:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   10-Jun-03   AM2   1   8:12   9:12   Rainy   normal operation   26.0   753.0   179.9     Jun-03   10-Jun-03   AM2   2   9:12   10:12   Rainy   normal operation   26.0   753.0   178.0     Jun-03   10-Jun-03   AM3   1   8:02   9:02   Rainy   normal operation   26.0   753.0   154.6     Jun-03   10-Jun-03   AM3   2   9:02   10:02   Rainy   normal operation   26.0   753.0   151.2     Jun-03   10-Jun-03   AM4   1   8:09   9:09   Rainy   normal operation   26.0   753.0   134.5     Jun-03   10-Jun-03   AM4   3   10:09   11:09   Rainy   normal operation   26.0   753.0   154.2     Jun-03   10-Jun-03   AM5   1   8:04   9:04   Rainy   normal operation   26.0   753.0   154.2     Jun-03   10-Jun-03   AM5   1   8:04   9:04   Rainy   normal operation   26.0   753.0   155.2     Jun-03   10-Jun-03   AM5   3   10:04   11:04   Rainy   normal operation   26.0   753.0   156.5     Jun-03   10-Jun-03   AM5   3   10:04   11:04   Rainy   normal operation   26.0   753.0   156.5     Jun-03   10-Jun-03   AM6   1   8:00   9:00   Rainy   normal operation   26.0   753.0   156.5     Jun-03   10-Jun-03   AM6   1   8:00   9:00   Rainy   normal operation   26.0			1	l .	1	1		•	ī	E I	l'
Jun-03   O3-Jun-03   AM5   1   13:03   14:03   Sunny   normal operation   28.0   762.0   266.2     Jun-03   O3-Jun-03   AM5   2   14:03   15:03   Sunny   normal operation   28.0   762.0   276.0     Jun-03   O3-Jun-03   AM5   3   15:03   16:03   Sunny   normal operation   28.0   762.0   259.7     Jun-03   O3-Jun-03   AM6   1   13:03   14:03   Sunny   normal operation   28.0   762.0   213.7     Jun-03   O3-Jun-03   AM6   2   14:03   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   O3-Jun-03   AM6   3   15:03   Sunny   normal operation   28.0   762.0   205.1     Jun-03   O3-Jun-03   AM2   1   8:12   9:12   Rainy   normal operation   26.0   753.0   179.9     Jun-03   O3-Jun-03   AM2   2   9:12   O3.12   Rainy   normal operation   26.0   753.0   179.9     Jun-03   O3-Jun-03   AM2   3   10:12   11:12   Rainy   normal operation   26.0   753.0   169.5     Jun-03   O3-Jun-03   AM3   1   8:02   9:02   Rainy   normal operation   26.0   753.0   154.6     Jun-03   O3-Jun-03   AM3   3   10:02   11:02   Rainy   normal operation   26.0   753.0   134.5     Jun-03   O3-Jun-03   AM4   1   8:09   9:09   Rainy   normal operation   26.0   753.0   134.5     Jun-03   O3-Jun-03   AM4   3   10:09   11:09   Rainy   normal operation   26.0   753.0   154.2     Jun-03   O3-Jun-03   AM5   1   8:04   9:04   Rainy   normal operation   26.0   753.0   154.2     Jun-03   O3-Jun-03   AM5   2   9:04   10:04   Rainy   normal operation   26.0   753.0   150.9     Jun-03   O3-Jun-03   AM6   1   8:00   9:00   Rainy   normal operation   26.0   753.0   125.2     Jun-03   O3-Jun-03   AM6   1   8:00   9:00   Rainy   normal operation   26.0   753.0   125.2     Jun-03   O3-Jun-03   AM6   1   8:00   9:00   Rainy   normal operation   26.0   753.0   125.2     Jun-03   O3-J	1		1	t	1	1		i '	E .		
Jun-03         03-Jun-03         AM5         2         14:03         15:03         Sunny         normal operation         28.0         762.0         276.0           Jun-03         03-Jun-03         AM6         1         13:03         14:03         Sunny         normal operation         28.0         762.0         259.7           Jun-03         03-Jun-03         AM6         1         13:03         14:03         Sunny         normal operation         28.0         762.0         213.7           Jun-03         03-Jun-03         AM6         2         14:03         15:03         Sunny         normal operation         28.0         762.0         205.1           Jun-03         03-Jun-03         AM6         3         15:03         16:03         Sunny         normal operation         28.0         762.0         205.1           Jun-03         10-Jun-03         AM2         1         8:12         9:12         Rainy         normal operation         26.0         753.0         179.9           Jun-03         10-Jun-03         AM2         2         9:12         10:12         Rainy         normal operation         26.0         753.0         178.0           Jun-03         10-Jun-03         AM3			1	i .	1			,	E .		
Jun-03         03-Jun-03         AM5         3         15:03         16:03         Sunny         normal operation         28.0         762.0         259.7           Jun-03         03-Jun-03         AM6         1         13:03         14:03         Sunny         normal operation         28.0         762.0         213.7           Jun-03         03-Jun-03         AM6         2         14:03         15:03         Sunny         normal operation         28.0         762.0         205.1           Jun-03         03-Jun-03         AM6         3         15:03         16:03         Sunny         normal operation         28.0         762.0         205.1           Jun-03         10-Jun-03         AM2         1         8:12         9:12         Rainy         normal operation         28.0         762.0         193.5           Jun-03         10-Jun-03         AM2         1         8:12         9:12         Rainy         normal operation         26.0         753.0         178.0           Jun-03         10-Jun-03         AM2         3         10:12         Rainy         normal operation         26.0         753.0         169.5           Jun-03         10-Jun-03         AM3         1	•		1	1	1			i '	1		
Jun-03         03-Jun-03         AM6         1         13:03         14:03         Sunny         normal operation normal ope	4		\$	l	1	1					
Jun-03         03-Jun-03         AM6         2         14:03         15:03         Sunny         normal operation normal ope			1	l	ŀ	1					
Jun-03         03-Jun-03         AM6         3         15:03         16:03         Sunny         normal operation normal ope					i	I	, ,				
Jun-03         10-Jun-03         AM2         1         8:12         9:12         Rainy normal operation normal opera			i .								
Jun-03         10-Jun-03         AM2         2         9:12         10:12         Rainy normal operation normal oper											
Jun-03         10-Jun-03         AM3         1         8:02         9:02         Rainy normal operation normal opera	Jun-03	10-Jun-03		2			Rainy				178.0
Jun-03         10-Jun-03         AM3         2         9:02         10:02         Rainy normal operation normal oper		ì		3		I	Rainy	normal operation	26.0		1 :
Jun-03         10-Jun-03         AM3         3         10:02         11:02         Rainy normal operation normal norma		<b>†</b>		3				1 '			
Jun-03         10-Jun-03         AM4         1         8:09         9:09         Rainy normal operation normal nor		E						1 '			
Jun-03         10-Jun-03         AM4         2         9:09         10:09         Rainy normal operation normal n		ŧ.		1		1	1 7	1 '	1	1	h .
Jun-03         10-Jun-03         AM4         3         10:09         11:09         Rainy         normal operation normal	F .			1	1		, ,		1		
Jun-03         10-Jun-03         AM5         1         8:04         9:04         Rainy normal operation normal no		l .	1		1	ł	1				
Jun-03         10-Jun-03         AM5         2         9:04         10:04         Rainy normal operation normal		i .	1	1	1		1 -	1			
Jun-03         10-Jun-03         AM5         3         10:04         11:04         Rainy         normal operation normal operation         26.0         753.0         125.2           Jun-03         10-Jun-03         AM6         1         8:00         9:00         Rainy         normal operation normal operation         26.0         753.0         168.7	•		1		1	E .	f "	•			
Jun-03         10-Jun-03         AM6         1         8:00         9:00         Rainy         normal operation         26.0         753.0         168.7			1		1	E .					
			L	E .				1			
	Jun-03	10-Jun-03	AM6	2	9:00	10:00	Rainy	normal operation	26.0	753.0	164.1
Jun-03 10-Jun-03 AM6 3 10:00 11:00 Rainy normal operation 26.0 753.0 152.1			ł.								

		Receptor		Time p	eriods	Weather	Site	Temp.	Pressure	1-hour TSP
Month	Date	No.	Set No.	Start	Finish	condition	condition	(°C)	(mmHg)	Level (μg/g <sup>3</sup> )
Jun-03	17-Jun-03	AM2	1	8:49	9:49	Fine	normal operation	26.0	756.0	215.7
Jun-03	17-Jun-03	AM2	2	9:49	10:49	Fine	normal operation	26.0	756.0	193.5
Jun-03	17-Jun-03	AM2	3	10:49	11:49	Fine	normal operation	26.0	756.0	185.2
Jun-03	17-Jun-03	AM3	1	8:46	9:46	Fine	normal operation	26.0	756.0	216.2
Jun-03	17-Jun-03	AM3	2	9:46	10:46	Fine	normal operation	26.0	756.0	190.4
Jun-03	17-Jun-03	AM3	3	10:46	11:46	Fine	normal operation	26.0	756.0	182.3
Jun-03	17-Jun-03	AM4	1	8:54	9:54	Fine	normal operation	26.0	756.0	236.2
Jun-03	17-Jun-03	AM4	2	9:54	10:54	Fine	normal operation	26.0	756.0	213.6
Jun-03	17-Jun-03	AM4	3	10:54	11:54	Fine	normal operation	26.0	756.0	205.1
Jun-03	17-Jun-03	AM5	1	9:02	10:02	Fine	normal operation	26.0	756.0	196.0
Jun-03	17-Jun-03	AM5	2	10:02	11:02	Fine	normal operation	26.0	756.0	174.9
Jun-03	17-Jun-03	AM5	3	11:02	12:02	Fine	normal operation	26.0	756.0	162.8
Jun-03	17-Jun-03	AM6	1	8:37	9:37	Fine	normal operation	26.0	756.0	209.9
Jun-03	17-Jun-03	AM6	2	9:37	10:37	Fine	normal operation	26.0	756.0	191,4
Jun-03	17-Jun-03	AM6	3	10:37	11:37	Fine	normal operation	26.0	756.0	183.1
Jun-03	23-Jun-03	AM2	1	8:46	9:46	Cloudy	normal operation	31.0	765.8	177.8
Jun-03	23-Jun-03	AM2	2	9:46	10:46	Cloudy	normal operation	31.0	765.8	162.2
Jun-03	23-Jun-03	AM2	3	10:46	11:46	Cloudy	normal operation	31.0	765.8	165.6
Jun-03	23-Jun-03	AM3	1	8:37	9:37	Cloudy	normal operation	31.0	765.8	189.4
Jun-03	23-Jun-03	AM3	2	9:37	10:37	Cloudy	normal operation	31.0	765.8	159.2
Jun-03	23-Jun-03	AM3	3	10:37	11:37	Cloudy	normal operation	31.0	765.8	182.7
Jun-03	23-Jun-03	AM4	1	8:43	9:43	Cloudy	normal operation	31.0	765.8	173.4
Jun-03	23-Jun-03	AM4	2	9:43	10:43	Cloudy	normal operation	31.0	765.8	138.0
Jun-03	23-Jun-03	AM4	3	10:43	11:43	Cloudy	normal operation	31.0	765.8	146.8
Jun-03	23-Jun-03	AM5	1	8:53	9:53	Cloudy	normal operation	31.0	765.8	163.2
Jun-03	23-Jun-03	AM5	2	9:53	10:53	Cloudy	normal operation	31.0	765.8	144.3
Jun-03	23-Jun-03	AM5	3	10:53	11:53	Cloudy	normal operation	31.0	765.8	149.3
Jun-03	23-Jun-03	AM6	1	8:56	9:56	Cloudy	normal operation	31.0	765.8	145.9
Jun-03	23-Jun-03	AM6	2	9:56	10:56	Cloudy	normal operation	31.0	765.8	125.1
Jun-03	23-Jun-03	AM6	3	10:56	11:56	Cloudy	normal operation	31.0	765.8	129.6
Jun-03	26-Jun-03	AM2	1	8:38	9:38	Sunny	normal operation	30.0	760.0	154.7
Jun-03 Jun-03	26-Jun-03 26-Jun-03	AM2 AM2	2 3	9:38	10:38	Sunny	normal operation	30.0	760.0	146.7
Jun-03 Jun-03	26-Jun-03 26-Jun-03	AM3	3 1	10:38 8:38	11:38	Sunny	normal operation	30.0	760.0	147.3
Jun-03 Jun-03	26-Jun-03	AM3	2	9:38	9:38 10:38	Sunny	normal operation	30.0	760.0	120.7
Jun-03	26-Jun-03	AM3	3	10:38	11:38	Sunny Sunny	normal operation	30.0 30.0	760.0 760.0	130.9 157.0
Jun-03	26-Jun-03	AM4	1	8:20	9:20	Sunny	normal operation normal operation	30.0	760.0	121.2
Jun-03	26-Jun-03	AM4	2	9:20	10:20	Sunny	normal operation	30.0	760.0	107.6
Jun-03	26-Jun-03	AM4	3	10:20	11:20	Sunny	normal operation	30.0	760.0	132.7
Jun-03	26-Jun-03	AM5	1	8:28	9:28	Sunny	normal operation	30.0	760.0	138.6
Jun-03	26-Jun-03	AM5	2	9:28	10:28	Sunny	normal operation	30.0	760.0	132.1
Jun-03	26-Jun-03	AM5	3	10:28	11:28	Sunny	normal operation	30.0	760.0	146.4
Jun-03	26-Jun-03	AM6	1	8:27	9:27	Sunny	normal operation	30.0	760.0	116.2
Jun-03	26-Jun-03	AM6	2	9:27	10:27	Sunny	normal operation	30.0	760.0	104.3
Jun-03	26-Jun-03	AM6	3	10:27	11:27	Sunny	normal operation	30.0	760.0	132.7

# APPENDIX 4 Correspondences of the Public Complaints from April 2003 to June 2003

# Maunsell Consultants Asia Ltd

茂盛(亞洲)工程顧問有限公司

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

> 哲港新界沙田鄉中會盟 138 號 新城市中央的場第2座8機

> > Tel (852) 2605 6262 Fax (852) 2691 2649 www.maunsell.com.hk



Chief Resident Engineer's Office Trunk Road T7 7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.:

Our Ref. : T7(ST86/2000)/M05/412(0182)

11 April 2003

The Agent China Harbour Engineering Company (Group) 9 Lok Wo Sha Lane Ma On Shan, NT

Dear Sirs,

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan Environmental Complaint EC-59 Complaint of Construction Noise on Sunday, 6 April 2003

We attach for your attention and necessary action a copy of a letter from EPD- Ref. EP 580/E6/3/9 dated 9 April 2003, regarding a complaint of construction noise on Sunday, 6 April 2003.

AL:li

Encl.

cc : MCAL

} w/encl

OAP

w/o encl. (by fax only)

CHEC - HO

} w/o encl.

Yours faithfully,

Allan Poon

Senior Resident Engineer

CHAIRMAN : F S Y BONG, MANAGING DIRECTUR : U S LO FRECUTIVE DIRECTORS : R I CARRETT, P C N YM, R D TAYLOR, M R CTA, D C S LEE, L I CNOKOTT, C W T WONG, E K I I CHAN. 1 11 Y NG, A K W LI, M CINARSON, S A ROBINSUN, K Y WONG, F S K YAN, K L WONG, S H R SHAM, 11 C PANG, D 5 5 LIV, A Y KWOK. CONSULTANTS . A HAMILTON, P K F LEUNG, J C M CHIM. ASSOCIATES : ESTEF, P.K. YUNG, A.S.POON, P.C.ANSON, C.A.JOHNSON, W.K.H.L.IAN, C.H.T.SO, J.Y.LING, C.C.W.NG, T.K.S. IANG, ES.C.MA, K.K.H.TDANG, R.J.MICKELL OFFICES ; AUSTRALIA, CANADIA, CHINA, DENMARK, EGYI'I, CAZA, GREECE, HONG KONG, INDIA, INDONESIA, INFLAND, ISRAEL, MALAYSIA, NETHERLANDS, OMAN, PHILIPPINES, PULAND, PUERTO RICO, ROMANIA, QATAR, SINCAPOKE, SOUTH KORFA, THAILAND, UNITED ARAB EMIRAICS, UNITED KINIDOUM, UNITED STATES UP AMERICA, VIETNAM. AN AECOM COMPANY MAUNSELL GROUP - HONG KONG / OBBA / SINGAPORE CHIEF EXECUTIVE: I C K SHUM



CEHK

OUR REF:

EP 580/E6/3/9

YOUR REF: TEL: NO.:

2158 5823 腐文傳宣 FAX NO.: 2685 1155

電子郵件 E-MAIL: 址

Homepage: http://www.info.gov.hk/epd/

**Environmental Protection Department** Local Control Office/Territory North

> 10/F, Sha Tin Government Offices, No. 1 Sheung Wo Che Road, . Sha Tin, New Territories, Hong Kong,



環境保護署 污染管制辦事處 香港新界沙田 上不產路一號

沙田政府合署 10 罄

9 April 2003

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk, 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong

(Attn: Mr Sam Tsoi)

By Fax Only (Fax: 2865 6493)

Total 2 pages

Dear Sir,

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of a public complaint made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.c. list below should take actions to rectify the situation. Please report the outcome of the action to us within 2 weeks.

Yours faithfully,

23156

( Jack KAN )

**Environmental Protection Officer** for Director of Environmental Protection

Encl.

c.c. (all w/e)

Maunsell

CHEC

(Attn: Mr. George Mak

(Attn: Mr. Y H Fung (Attn: Mr. Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

#### NOTICE OF COMPLAINT

Complaint Ref.:

N01/TN/00003677-03

ICC Ref:

CASE DETAILS

(1) Incident

07/04/2003

(2) Incident Location : BLOCK 8, Saddle Ridge Garden,

地址:

N01 - SHA TIN

(3) TPU:

757

(4) Description:

COMPLAINT OF SUNDAY CONSTRUCTION NOISE FROM A SITE OPPOSITE OF BLOCK 8, SADDLE

RIDGE GARDEN, SHA TIN

(5) Nature

(6) Affected Party

(7) Pollution Pattern

N66-General construction noise except renovation

**COM-Commerical Premises** 

C-Continuous, D-Day Time,

S-Sunday

(8) Priority class:

- Routine

i.e. substantive reply to be made on or before 30/04/2003

#### DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name:

姓名: 中國港灣建築公司

(2) Premises Address:

地址:

(3) Business Type: 511 - Construction site except renovation

#### COMPLAINT LOCATION HISTORY

Complaint Ref No.

Complainant JD

Date of Complaint Substantive Reply Date

Nature Code

COMPLAINANT

(1) Name:

Mr.

(2) Tel. No.: Day:

Night:

Mobile:

(3) Address:

地址:

(4) Email Address:

#### CHANNEL OF COMPLAINT

Source channel:

01

Phone

Source code:

Public

Remarks:

先生投訴在官實花園第八座對出的17公路工程,地盤於6/4星期日開工,發出強烈的嗓音,要求跟進

#### **ACTION OFFICERS**

	Nature Code	SEPO	EPO	CI
Coordinator	N66	S[TN]2		CI[TN]2

INFORMATION INPUTTED BY

Name:

HAUE3

Date:

07/04/2003

Time:

17:03

P.02 +825 S682 1122

+825 S982 II22



# 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Date

: 11 April 2003

Our Ref.: T7/01.01/O/06558

Maunsell Consultants Asia Ltd. 7 Lok Wo Sha Lane, Ma On Shan,

N.T.

Attention: Mr. Albert Lam-CRE

Dear Sir.

Contract No. ST86/2000 Sha Tin New Town, Stage II

Construction of Road T7 in Ma On Shan

Environmental Complaint EC-59 - Complaint of Construction Noise on Sunday, 6 April 2003

We refer to your letter dated 11 April 2003 regarding the captioned complaint involving the carrying out of construction works near Saddle Ridge Garden on Sunday, 6 April 2003.

We have obtained the Construction Noise Permit (CNP) of no. GW-TN0022-2002 from Environmental Projection Department so as to suit the progress of segment launching works in the Bridge TC area near Saddle Ridge Garden. And according to our site records on that day, the powered mechanical equipment used was covered by this CNP.

In this regard, we have informed the Saddle Ridge Garden Management Office about the above works and they will notify their residents about the arrangement. We will instruct our site foreman assigned on Sunday duty to ensure the construction works compile with the conditions stated in the CNP and to keep the noise nuisance to minimal as practical as possible.

Enclosed please find the fax to Saddle Ridge Garden Management Office regarding the captioned subject for your information.

Thank you very much for your kind attention.

Yours faithfully,

For and on behalf of

China Harbour Engineering Co. (Group)

Chan Man

Project Manager CM/PA/PA/F

MCAL – HO.

CHEC - H.O.

TDD – Mr. George Mak

EPD- Mr. Jack Kan (F: 2685 1155)

OAP - Mr. Thomas Chan (F: 2268 3950)

香港北角英皇道 370 第23

North Point, Hong Kong. Website: http://www.chechk.com

ST TC Roy

19/F., China Harbour Building, 370-374 King's Road, Tel: (852) 2887 8118

Fax: (852) 2512 0427



# 中國港灣建設(集團)總公司

香港代表: 振举工程有限公司

# CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LITD.



#### Fax Transmission

Date :

10 April 2003

Γo

Saddle Ridge Garden Management Office

Attn

General Manager

Fax No:

26401575

Our Ref.

T7/03.06/O/05698

lirom :

Phillip Leung

Pages:

2 pages (including this page)

Subject:

Working hour for construction of Road T7 in Ma On Shan near Saddle Ridge

Garden

Contract No. S186/2000

Construction of Road T7 in Ma On Shan

We are the main contractor for carry out the construction of road T7 in Ma On Shan near Saddle Ridge Garden.

We would like to inform you that EPD had issued a Construction noise Permit (GW-TN0022-2003) for carry out the construction work at Road T7 in Ma On Shan near Saddle Ridge Garden at any day including holiday and Sunday between 07:00 and 23:00. This permit was effected from the March 2003 19:00 and will be expired on 31 August 2003 23:00.

Please inform the Saddle Ridge Garden resident for the above works and contact the undersigned at phone no. 24118524 or 94512363 for further details.

finclosed please find the sketch to show out the location for your reference.

Thank you for your kindly attention.

Regards.

Phillip Leung

Community Relations Officer

Uncl.

C.C.

George Mak (TDD) (Fax No. 27218630)

Albert Lin (MCAL) (Fax No 26433559)

CL/WW/kcw

Contract No. ST86/2000
Correspondence Distribution
Position
Acides Copy
Traced Munitor
- for Manager FDR3
- to Manager FDR3
- to Manager FDR3
- A Manager FDR3
- A Manager FDR3
- Copy Vanager
- copy Vanager
- copy Manager
- Copy Man

in the same of

Construction Site ENVIRONMENTAL PROTECTION DEPARTMENT Scale Legend 國例 環境保護署 比例 Construction Site 建築地盤 1:3,000 Plan attached to Construction Noise Permit No. GW-TN0022-2003 建築噪音許可證編號 GW-TN0022-2003 的附圖

man and mark out the

, ಭರ್ವ ಆಭ<del>್ರ</del>ಕ್ಷ ಇದರಲ್ಲಿ Maunsell Consultants Asia Lto

茂盛(亞洲)工程顧問有限公司

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.L., Hong Kong

音港新岸沙田鄉平齊路 138 寮 新城市中央路場第2座8模

> Tel (852) 2605 6262 Fax (852) 2691 2649 www.maunsell.com.hk



Chief Resident Engineer's Office

24"HFK"ZUUD 110°ZU

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator,com

Your Ref.:

Our Ref.: T7/(ST86/2000)/M05/412(0188)

24 April 2003

The Agent China Harbour Engineering Company (Group) 9 Lok Wo Sha Lane Ma On Shan, NT

Dear Sirs,

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan Environmental Complaint EC-60 Complaint of Construction Noise and Stagnant Water

I attach for your attention and necessary action a copy of an e-mail of 19 April 2003 from a resident in Monte Vista, regarding a complaint of construction noise and stagnant water causing the breeding of mosquitoes.

I would be grateful if you would give me your response on or before 26 April 2002, so that I can reply to the complainant.

EIF 5559

Yours faithfully,

Senior Resident Engineer

AP:sci

cc: MCAL

} w/encl

OAP

w/o encl, (by fax only)

CHEC-HO

} w/o encl.

CHAIRMAN - 1 S Y BONG, MANAGING DIRECTOR : O S LO. LALCUTIVE DIRECTORS : R I GARRETT, P C N YIM, R D TAYLOR, M R C LAI, D L S LEF, I JENDICOTT, C W T WUNG, F R H CHAN, I HYNG, AKWLI, HCPENSON, SAROBINSON, KYWONG, ESKYAN, KLWONG, SHRSHAM, HCPANG, DSSLU, AYXWOK CUNSULTANTS: A HAMILTON, PKI LLUNG, ICM CINM. ASSOCIATES IL S LCC, P X YUNG, A 5 POON, P C ANSON, C A KHINSON, W & II CHAN, C H I SO, I Y LING, L C W NG, T K S TANG, E S C MA, K K H TSANG, R J MKKELL OFFICES: AUSTRALIA, CANADA, CHINA, DENHARK, ECYPT, GAZA, GREECE, HONG KONG, INDIA, INDONESIA, IRTI AND, ISRALL, MAI AYSIA, NETHERLANDS, OMAN, PHILIPPINES, POLAND, PUERTO RICCO, ROMANIA, QATAR, SINGAPORE, SOUTH KOREA, IMAII AND, UNITEO ARAB EMIRATES. UNITEU KINGDOM, UNITEO STATES UI AMERICA, VIEINAM, AN AECOM COMPANY MAUNSELL GROUP - HONG KONG / CHINA / SINGAPORE CHIEF EXECUTIVE: T C K SHUM





#### 中國港灣建設(集團)總公司

智港代表:振攀工程有限公司

#### CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD

#### Fax

To

: Ove Arup & Partners Ltd.

From

: Mr. Gordon TANG

Attn

: Mr. Roy Leung

Our Ref

Fax No

: 2268 3950

Date

: 12/5/2003

No. of pages: (2 +1) including this page

Subject

: Reply letter for EC-60

Roy,

Enclosed please find the reply letter of EC-60 for your reference.

Thank you very much.

Yours sincerely,

Environmental Engineer

China Harbour Engineering Company (Group)

Encl.



# 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Date : 26 April 2003 Our Ref.: T7/01.01/O/06688

Maunsell Consultants Asia Ltd. 7 Lok Wo Sha Lane, Ma On Shan, N.T.

Attention: Mr. Albert Lam- CRE

Dear Sir.

Contract No. ST86/2000 Sha Tin New Town, Stage II Construction of Road T7 in Ma On Shan

Environmental Complaint EC-60 - Complaint of Construction Noise and Stagnant water

We refer to your letter dated 24 April 2003 regarding the captioned complaint near Monte Vista.

Upon receiving your letter, we then carried out a joint inspection at the concerned area with your staff Mr. H C Li on 25 April 2003 afternoon. We found that the possible mosquito breeding area are slowing flowing water courses near Bridge TC Cap 12 and at the rock slope opposite to Monte Vista. We have already carried out regular mosquito control exercise, including the spraying of pesticide, at these area if water could not be completely removed. Attached please find the record photos for your information.

Regarding to the construction noise complaint, please be reminded that the noise monitoring at Monte Vista have been carried out regularly to monitor the construction noise level, and temporary noise barriers have been installed to reduce the noise nuisance arising to the nearby area.

Thank you very much for your kind attention.

Yours faithfully, For and on behalf of China Harbour Engineering Co. (Group)

🗸 Chan Man 🗄

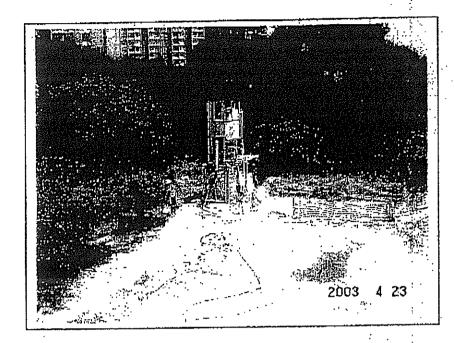
Project Manager

CM/CL/J/J/GA/fo

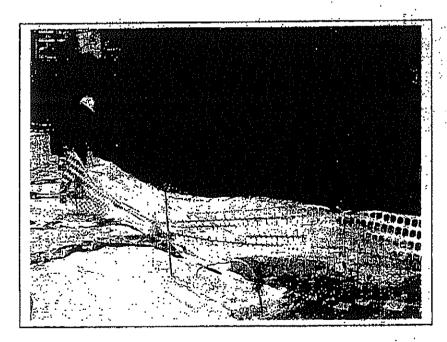
c.c. MCAL-H.O.

CHEC-H.O.

TDD - Mr. Goorge Mak



Spraying of pesticide at the slowing flowing water courses near Monte Vista



Spraying of pesticide at the ponding water near Monte Vista

# Maunsell Consultants Asia Liu 茂盛(亞洲)工程顧問有限公司

Chiel Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.:

Our Ref.: T7(ST86/2000)/M05/412(0193)

B/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

> 济港新界沙田鄉市會認 138 號 新城市中央廣場第 2 座 8 櫻

> > Tel (852) 2605 6262 Fax (852) 2691 2649 www.maunsell.com.hk

> > > 2 June 2003

The Agent China Harbour Engineering Company (Group) 9 Lok Wo Sha Lane Ma On Shan, NT

Dear Sirs,

Shatin New Town Stage II
Contract No. ST86/2000
Construction of Road T7 in Ma On Shan
Environmental Complaint EC-61
Complaint of Ponding Water

I attach for your attention a copy of a fax of 30 May 2003 from PM/NTE attaching a complaint letter from a STDC member, Mr. Wong Kwok Hung, regarding ponding water within the Site.

I would be grateful if you would take remedial action immediately and give me your proposal for long term mitigation measures on or before 6 June 2003, so that I can reply to PM/NTE.

Arup Acoustics Uce No. 23156

Claster Ref. Project Ref.

Fisch Requires:

Received - 7 114 2003

Inits. ST. Te Reg.

Action Region

Info. St. Am.

Copy

Yours faithfully,

Allan Poon

Senior Resident Engineer

AP:li

Enci.

cc : MCAL

} w/encl

OAP

w/o encl. (by fax only)

CHEC - HO

w/o cncl.

CHAIRMAN: F3 Y BONG, MANAGING DIRECTOR: DSFO. EXECUTIVE DIRECTORS: R J CARRETT, P C N YIM, R D TAYLOR, M K CTAIL, D CS LLL, I FENDICUTY, C W T WONG, I K M CHAN, ETH Y MG, A K W LI, M C FFARSON, S A ROBINSON, K Y WONG, I S K YAN, K L WONG, S H KNIMM, H C PANG, DSS TIJ, A Y KWOK CONSULTANTS: A HAMRTON, F KT LLUNG, J C M CHIM.

ASSOCIATES: LS LEE, P K YING, A S POON, F C ANSON, C A ICHINSON, W K H CHAN, C HT SO, J Y LING, C L W NG, T KS JANG, F S CMA, K K H TSANG, K J MICKELL.

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AN AECOM COMPANY MAUNSELL GROUP: HONG KONG / CHINA / SINGAPORE CHIFF EXECUTIVE: T C X SHUM



A C E H K



# 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

# CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Date

: 3 June 2003

Your Ref: T7/(ST86/2000)/ M05/412(0193)

Our Ref.: T7/01.01/O/07182

Maunsell Consultants Asia Ltd. 7 Lok Wo Sha Lane, Ma On Shan, N.T.

Attention: Mr. Albert Lam- CRE

Dear Sir,

Contract No. ST86/2000

Sha Tin New Town, Stage II

Construction of Road T7 in Ma On Shan

Environmental Complaint EC-61 – Complaint of ponding water

Arup Acoustics File No. 23 US6

Master Ret. Proposi Ref. Date
Regiv Ref. Lov Date
Action Requireo:

Thils ST TC Low
Info. Copy

We refer to your letter dated 2 June 2003 regarding the captioned complaint involving the ponding water at the footing of noise barrier NB3 near Kam Ying Court.

We have carried out an inspection with your SIOW, Mr. H C Li near the area and located the water ponding places. The ponding water was mainly came from the seepage of ground water behind the foundation wall of the noise barrier which was actually flowing. There was no sign of mosquito breeding. The ponding area was immediately filled up with crushed rocks and backfilling works were also started as a kind of preventive measures to avoid stagnant water and expected to be completed within 2 weeks.

We would also want to emphasize our strong efforts in prevention of stagnant water occurred in our construction site. Weekly site inspection has been jointly carried out with your site staff to eliminate mosquito larvae and remove ponding water. Enclosed please find a photos showing our operatives sprayed pesticide at the noise barrier NB3 footing near Kam Ying Court on 19 May 2003 for your record.

Enclosed please also find the photos of the corrective measures carried out at the noise barrier NB3 for your reference.

Thank you very much for your kind attention.

Yours faithfully, For and on behalf of China Harbour Engineering Co. (Group)

Chan Man

Project Manager CM/CL/J/1/GT/fc

Encl.

c.c.

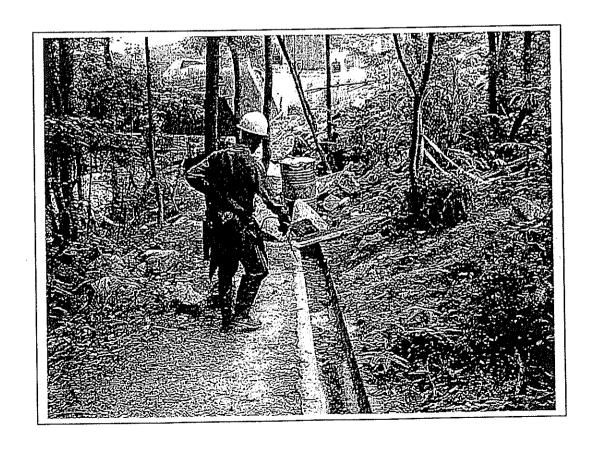
TDD- Mr. Fred Au

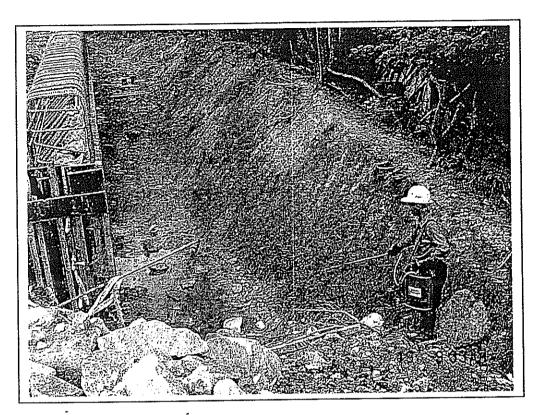
OAP- Mr. Thomas Chan (F: 2268 3950)

MCAL – H.O. CHEC – H.O.

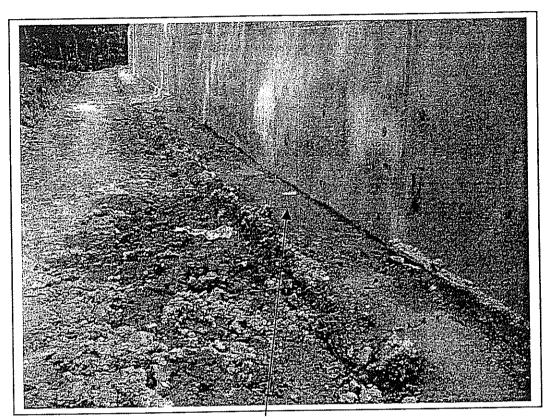


Our labour spraying pesticide near Kam Ying Court as part of the mosquito control activities done on 19 May 2003

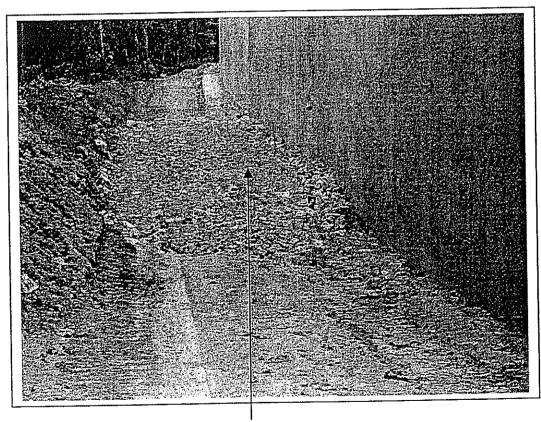




Our labour spraying pesticide at the water came from the seepage of ground water behind the foundation wall of the noise barrier in which water could not be pumped out completely and immediately on 19 May 2003



Ponding water was observed on 30 May 2003



The ponding area was rock-filled on 30 May 2003 and later earth-filled to prevent ponding water occurred again

本著檔: EP:

EP 580/E6/3/9

來函檔號 YOUR REF: 電話 TEL. NO.:

TEL. NO.: 開文傳章 2158 5823 FAX NO.: 2685 1155

電子郵件 E-MAIL: 納 址

Homepage: http://www.info.gov.hk/epd/

Environmental Protection Department Local Control Office/Territory North

> 10/F, Sha Tin Government Offices, No. 1 Sheung Wo Che Road, Sha Tin, New Territories, Hong Kong.



環境保護署 污染管制辦事處 (新界北) 香港新界沙田 上來保路一號

沙田政府合署 10 楼

16 June 2003

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk, 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong

(Attn: Mr Sam Tsoi)

By Fax Only (Fax : 2865 6493) Total 2 pages

Dear Sir,

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of a public complaint made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.c. list below should take actions to rectify the situation. Please arrange daytime and nighttime noise monitoring for the construction site of the captioned project near Monte Vista and report the outcome of the action to us within 2 weeks.

Arup Apoustics Job No. 13456

Marker Let WSQV Project Ret.

Prescione 17 JUN 2003

IT JUN 2003

Yours faithfully,

( Jack KAN )

Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

CHEC

Maunsell

(Attn: Mr. George Mak

(Attn: Mr. Albert Lam

(Attn: Mr. Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

#### CO G IVACA

#### NOTICE OF COMPLAINT

Complaint Ref. !

NO1/TN/00006721-03

EPIC Ref.

CASE DETAILS

(1) Incident Date/Time: 09/06/2003

(2) Incident Location: Monte Vista.

地址:

SHA TIN

(3) TPU:

757

(4) Description:

COMPLAINT OF GENERAL CONSTRUCTION NOISE FROM T7 ROAD NEAR MONTE VISTA . SHA TIN

(5) Nature

(6) Affected Party

(7) Pollution Pattern

N66-General construction noise except cnovation

DMS-Domestic Premises

(8) Priority class:

В - Urgent i.e. substantive reply to be made on or before

23/06/2003

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name: UNKNOWN

姓名: 不知名

(2) Premiscs Address:

iteht :

(3) Business Type: 511 - Construction site except renovation

COMPLAINT CASE(S) NEAR INCIDENT LOCATION

Complaint Ref. N01/TN/0000

Cpt. Received Date Sub. Reply Date

Nature Code
N66 Nature Description
General construction noise except renovation

COMPLAINANT

(1) Name:

姓名:

ANONYMOUS 近名

(2) Tel. No.: Day:

Night: Mobile:

(3) Address :

地址:

(4) Email Address:

CHANNEL OF COMPLAINT

Source channel:

Lener

Source code:

Remarks:

ACTION OFFICERS

	Nature Code	SEPO	EPO	
Coordinator	N66	S[NT]2		CI[TN]2

<sup>\*\*</sup>Latter / Memo to be faxed / passed to subject SEPO(s), EPO(s), CI(s).

INFORMATION INPUTTED BY

Name:

TNTELE

Date :

09/06/2003

Time:

14:28

P.02 +825 S882 1155



## 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

# CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Master Ret.:

Received

2 6 JUN 2003

Reply Ref.

Date : 24 June 2003 Our Ref.: T7/02.03/O/06305

Environmental Protection Department, 10/F., Sha Tin Government Offices, No. 1 Sheung Wo Che Road, Sha Tin, New Territories, Hong Kong

Attention: Mr. Jack Kan - EPO

Dear Sir,

Contract No. ST86/2000 Sha Tin New Town, Stage II Construction of Road T7 in Ma On Shan

Environmental Complaint - Noise complaint from resident of Monte Vista

We refer to your letter dated 16 June 2003 regarding to the captioned complaint.

For your information, noise measurements have been conducted by the environmental team on 10 June 2003 at the roof top of Block 15 of Monte Vista, and the noise measurements results were summarized as below:

Monitoring Period	$L_{co}$	$L_{10}$	$\mathbf{L}_{90}$
10:00 - 10:30 (daytime)	65.5	68.0	61.0
20:30 – 20:35 (nighttime)	62.5	64.0	57.5
20:35 – 20:40 (nighttime)	60.5	62.5	58.0
20:40 – 20:45 (nighttime)	61.0	63.0	58.0

All measurements results indicated that the construction noise levels are below the acceptable level. Temporary noise barriers and enclosures for construction works and our generators have already been erected before the complaint to reduce the noise nuisance arising to the public.

Enclosed please find the photos for your record.

Thank you very much for your kind attention.

Yours faithfully, For and on behalf of China Harbour Engineering Co. (Group)

Chan Man

Project Manager

CM/CL/J9Jy/G

c.c.

MCAL – H.O.

CHEC - H.O.

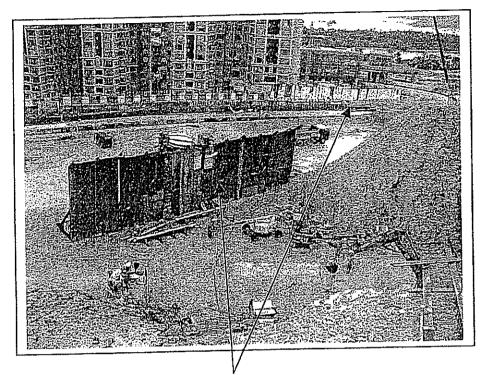
TDD - Mr. Felix Yung (F: 2721 8630)

MCAL- Mr. Albert Lam

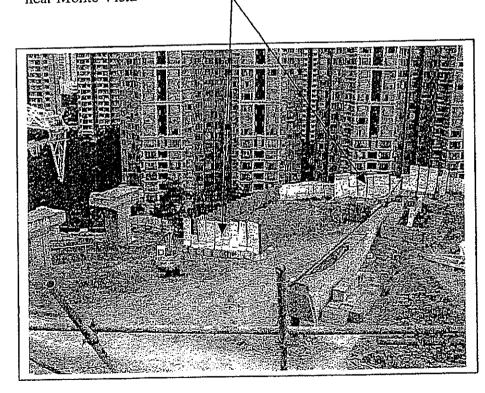
OAP - Mr. Thomas Chan (F: 2268 3950)

香港北角英皇道 370-374 號振華大廈 19 棲

## **Photos**



Temporary noise barriers have been erected for construction works near Monte Vista



# Maunsell

## Maunsell Consultants Asia Ltd

茂盛(亞洲)工程顧問有限公司

Chief Resident Engineer's Office

Trunk Road T7
7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

γ,

E-mail: t7cso@netvigator.com

Your Ref.: EP 580/E6/3/9

Our Ref.: T7/(ST86/2000)/M05/412(0205)

Environmental Protection Department Local Control Office/Territory North 10/F, Sha Tin Government Offices, No. 1 Sheung Wo Che Road, Sha Tin, N.T. Hong Kong.

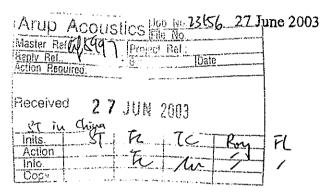
Attn.: Mr. Jack KAN

Dear Sirs,

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

香港新界沙田鄉平會路 138 號 新城市中央廣場第2 座 8 樓

> Tel (852) 2605 6262 Fax (852) 2691 2649 www.maunsell.com.hk



Shatin New Town Stage II
Contract No. ST86/2000
Construction of Road T7 in Ma On Shan
Public Complaint

I refer to your letter of 16 June 2003, containing a complaint received on 9 June 2003 on general construction noise near Moute Vista.

In our investigation, we note that there were intensive rainfall on 9 June 2003, both in the morning and in the afternoon. (Please refer to Annex 1.) Construction activities had been fairly slow. However, measurement of construction noise had been taken on 10 June 2003. This could be taken as a representative result for similar construction activities within the same area. The finding indicated that the Leq had a range between 60.5dB(A) and 65.5dB(A), L10 between 62.5dB(A) and 68.0dB(A) and L90 between 57.5dB(A) and 61.0dB(A). (Please refer to Annex 2.) In view of the noise level of construction work being far below the limit level of 75dB(A), this complaint cannot be substantiated nor established.

However, please note that the contractor for this Contract has taken additional mitigation measures by erecting temporary noise barriers. It appears that attempts have been made to reduce the noise nuisance as much as possible.

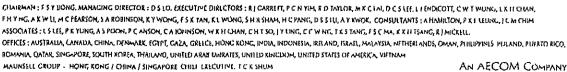
Yours faithfully,

Senior Resident Engineer

AP:sci

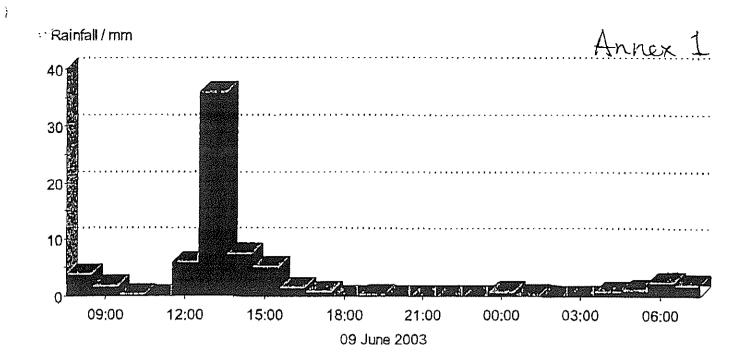
cc: PM/NTE (Attn.: Mr. Felix Yung)
OAP (Attn.: Mr. Thomas Chan)

SIOWI

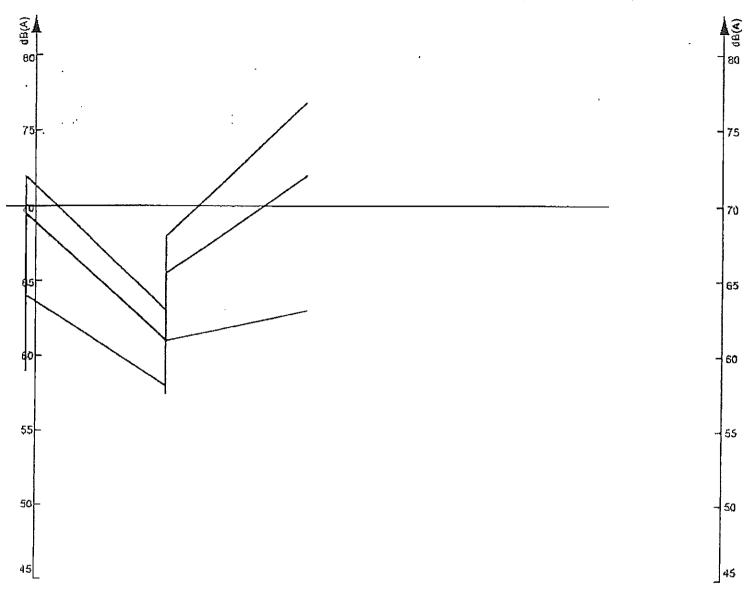








Leq - Black, L10 - Red, L90 - Blue



3/6 3/6 3/6 3/6

10/6 10/6 10/6 10/6

17/6

Date

2003 2003 2003 2003

2003 2003 2003 2003

2003

Year

Date	Start time	Finish time	Leq,dB(A)	L10,dB(A)	L90,dB(A)
3-Jun-2003	PM 07:10:00	PM 07:15:00	61.5	63.0	59.0
3-Jun-2003	PM 07:05:00	PM 07:10:00	62.0	64.5	60.0
3-Jun-2003	PM 07:00:00	PM 07:05:00	64.0	66.0	60.5
3-Jun-2003	PM 03:25:00	PM 03:55:00	69.5	72.0	64.0
10-Jun-2003	PM 08:40:00	PM 08:45:00	61.0	63.0	58.0
10-Jun-2003	PM 08:35:00	PM 08:40:00	60.5	62.5	58.0
10-Jun-2003	PM 08:30:00	PM 08:35:00	62.5	64.0	57.5
10-Jun-2003	AM 10:00:00	AM 10:30:00	65.5	68.0	61.0
17-Jun-2003	AM 10:35:00	AM 11:05:00	72.0	76.8	63.0

## Maunsell Consultants Asia Ltd

茂盛(亞洲)工程顧問有限公司

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

香港新界沙田鄉中會路 138 號 新城市中央廣場第2座8樓

Tel (852) 2605 6262 Fax (852) 2691 2649

www.maunsell.com.hk

Your Ref.:

Our Ref. : T7/(ST86/2000)/M05/412(0203)

The Agent China Harbour Engineering Company (Group) 9 Lok Wo Sha Lane Ma On Shan, NT

Dear Sirs,

Acoustics The No. Vaster Sei. Project Ref tienty Ref chan Required Received 2 6 JUN 7003 Ct in Ching FL Action Info

Shatin New Town Stage II Contract No. ST86/2000

Construction of Road T7 in Ma On Shan

Environmental Complaint EC-62 Public Complaint - Construction Noise

I attach for your attention and necessary action a copy of a letter from EPD -Ref. EP 580/E6/3/9 dated 24 June 2003, regarding a complaint of construction noise due to rock breaking in the daytime and hammering in the night time on 23<sup>rd</sup> June 2003.

Will you please give me a response before 4 July 2003.

Yours faithfully,

Allan Poon

Senior Resident Engineer

AP;jt

Encl.

cc: MCAL (w/e)

OAP - w/e (by fax only)

SIOW !- w/e (note: please investigate)

CHEC - HO (w/c)



OUR REF: 来固模或 YOUR REF: TEL. NO.:

2158 5823 翼文傳真

FAX NO.: 2685 1155 五十萬件

E-MAIL ÌŁ

Homepage: http://www.info.gov.hk/epd/

Local Control Office/Territory North

10/F. Sha Tin Government Offices. No. 1 Sheung Wo Che Road, Sha Tin, New Territories. Hong Kong.



污染管制辦事處 (新界北) で認新界が田 上:不量的 號 沙田政府合名 10 概

24 June 2003

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong

(Attn: Mr. Sam Tsoi)

By Fax Only (Fax: 2865 6493) Total 2 pages

Dear Sir,

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of a public complaint made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.c. list below should take actions to rectify the situation. Please arrange daytime and nighttime noise monitoring for the construction site of the captioned project near Block 3 of Monte Vista and report the outcome of the action to us within 2 weeks.

Course No. STATES Pank 1 M OS/4)つ Yours faithfully, JUN 2003 2 see RECAL BEE CRE 4 to chec/tiepo SEE 1 KK ( Jack KAN ) RB **Environmental Protection Officer** QS for Director of Environmental Protection ARE ARE SKOW 1 SIOW 2 <del>Attn: Mr. G</del> Replatin Mr. Albert Lam

Enol.

TDD Maunscli CHEC

c.c. (all w/e)

(Aftin: Mr. Chan Man

Fax.: 2721 8630) Fax.: 2643 3559)

Fax.: 2492 3701)

Con	nplaint Ref. :	NO1/TN/0000779	93-03					
EPI	C Ref:							
	SE DETAILS	ar 22/06/2002	•	•				
` '	Incident Date/Tim			454	L.			
(2)	Incident Location	SHA TIN		地址	Ľ.			
(3)	TPU:	757						
(4)	Description:	COMPLAINT OF D NEAR BLOCK 3 O		IIGHTTIME CONST STA . SHA TIN	RÜCTION Ì	VOISE FROM T	7 CONSTRUC	TION SITE
	Nature		(6) Affecte	d Party		(7) Pollution	Pattern	
1	o-General construct evation	ion noise except	DMS-Dom	estio Premises		C-Conunuous A-Daily	s, W.Whole?	lime,
(8)	Priority class:	C - Routine		i.e. substa	ntive reply	to be made or	or before	15/07/2003
DE	tails of the s	USPECTED PO	LUTER					
(1)	Premises Name:	UNKNOWN		姓名	3: 不知	3		
(2)	Premises Address	:		地址	<b>ት</b> :			
	-	511 - Constructio (S) NEAR INCID	·					
	nplaint Ref.	Cot. Received	Date Sub. F	Reply Date Na		Nature Des	cription	
M01	/TN/0000. /TN/0000. /TN/0000.				N66 N66 N66	÷ .	., .	•.
CO	MPLAINANT	•			•			
1(1)	Name :	,		(2)	Tel. No !	Day :		
						Night : Mobile:		
(3) A	Address :			地址				
			•	投訴(	را ان ال	打百時	39 光后	约
(4)	Email Address:						-	-
CHA	annel of com	PLAINT		(7	1 1961 (1 1 - 1	間不時	之川時	过行
		01	- Phone		39,7	学不极及	骚、	及從
	ce code : arks ;	P	- Public		高處	学本校 B 拉 T 木	极月	出巨
	ion officers				经			
		Nature Code		SEPO	EPO	-	CI	
Cod	ordinator	N66		S[TN]2				
Cod	ordinator	N66		S[TN]2			CI[TN]2	

Information inputted by ---

Name:

NIEGE

Date:

23/06/2003

Time:

16:09



# 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Master Raf

Received

4 JUL 2003

Date : 30 June 2003

Your Ref: T7/(ST86/2000)/ M05/412(0203)

Our Ref.: T7/01.01/O/07431

Maunsell Consultants Asia Ltd. 7 Lok Wo Sha Lane, Ma On Shan, N.T.

Attention: Mr. Albert Lam - CRE

Dear Sir.

Contract No. ST86/2000 Sha Tin New Town, Stage II Construction of Road T7 in Ma On Shan

Environmental Complaint EC62 – Daytime and nighttime construction noise complaint near

Block 3 of Monte Vista

We refer to your letter dated 26 June 2003 regarding to the captioned complaint.

The noise complaint, which involved: -

A) Noise generated from the rock breaking activity at daytime-

Noise measurements have been conducted on 14:30 of 23 June 2003 at the rooftop of Block 1 of Monte Vista during which rock breaking activity was in progress. The L<sub>eq</sub> measured was 71.6 dB (A) which indicated that the construction noise levels are below the acceptable level. We have already carried out all the possible noise mitigation measures to reduce the noise generated from rock breaking, including the erection of temporary noise barriers;

B) Noise generated from hammering and handling of wooden boards and steel materials at nighttime-

For your information, our construction works would not involve the throwing of wooden boards from height and our site staff would not allow our labours to carry out that kind of works for the sake of safety. We would restrict our site workers to carry out the hammering of wooden boards and steel materials at the restricted hours in order to reduce the nuisance arising to the public. We would make appropriate arrangement for construction works after 19:00 in order to mitigate any nuisance to the public as practical as possible.

Enclosed please find the photos for your record.

.../2



## 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Page 2

Date : 30 June 2003

Your Ref: T7/(ST86/2000)/ M05/412(0203)

Our Ref.: T7/01.01/O/07431

Thank you very much for your kind attention.

Yours faithfully, For and on behalf of China Harbour Engineering Co. (Group)

Chan Man

Project Manager

CM/CL/F

c.c.

MCAL - H.O.

CHEC-H.O.

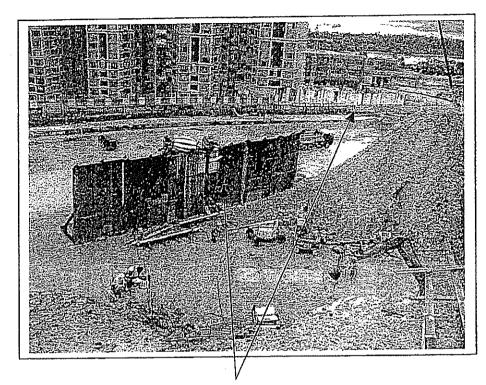
TDD - Mr. Felix Yung (F: 2721 8630)

EPD-Mr. Jack Kan (F:2685 1155)

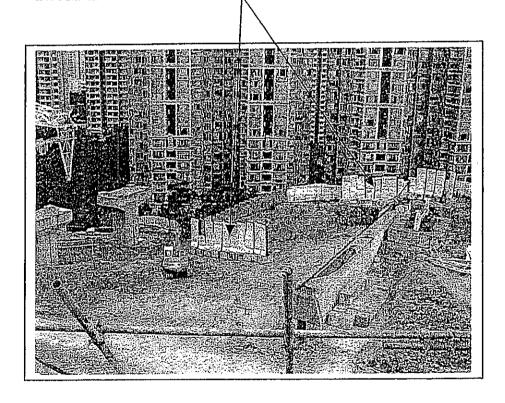
OAP - Mr. Thomas Chan (F: 2268 3950)

WW, KCW

## **Photos**



Temporary noise barriers have been erected for construction works near Monte Vista



Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.: EP 580/E6/3/9

Our Ref.: T7(ST86/2000)/M05/412(0212)

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

香港新昇沙田鄉宮會路 138 號 新城市中央质場第2㎡8樓

> Tel (852) 2605 6262 Fax (052) 2691 2649 www.maunsell.com.hk



**Environmental Protection Department** Local Control Office/ Territory North

10/F, Sha Tin Government Offices, No.1 Sheung Wo Che Road, Sha Tin, New Territories, Hong Kong.

Attn: Mr. Jack KAN

Dear Sirs,

Vista.

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan

Public Complaint - EC-62 I refer to your letter of 24 June 2003, attached with a Public Complaint of 23 June 2003 regarding daytime and nighttime construction noise near Block 3 of Monte

I have the following responses:

- 1) Noise generated from rock breaking activity at daytime -Noise measurements had been taken at 2:30pm on 23 June 2003 on the rooftop of Block 1 of Monte Vista when rock breaking activity was in progress. The Leq was recorded to be 71.6 dB(A), which was below the limit level of 75dB(A). It was therefore considered that no further action was required. However, the Contractor had willingly erected a row of temporary noise barrier near Monte Vista. At the same time, the Contractor engaged another rock breaker of silent type to work in the vicinity of Monte Vista in order not to irritate the complainant.
- 2) Noise generated from hammering and handling of wooden boards and steel materials at nighttime -
  - The Contractor had been working between 7pm to 11pm near Monte Vista under a Noise Permit. It appeared that the work carried out on 23 June 2003 would not involve removal of formwork causing timber boards falling on the ground by accident. However, the Contractor would restrict his workers from hammering at nighttime in order to reduce the nuisance to the public. The Contractor had also indicated that he would re-organise his work so that the amount of night work could be reduced as much as possible.

CHAIRMAN : F 5 Y DONG, MANACING DIXECTOR : O S 1 CL EXECUTIVE DIRECTORS : K J GARRETT, F C N YIM, R D TAYLOR, M K C LAI, D C S LEE, L J ENDICOTT, C W T WUNG. L N H CHAN, FILYING, A KIWIU, MIC PLARSON, SIA ROBINSON, KIY WONG, ES KYAN, KI WONG, SILR SHAM, HICPANG, OSSIU, AY NWOK, CONSUITANTS: A FIAMILTON, PIKI LEUNU, JU MICHIA ASSOCIATES : ESTEE, PIK YUNG, AS FOOM, PIC ANSON, CIA JOHNSON, WIKIN CHAN, CITTISO, JY LING, CICIMING, TIKS TANG, ESICHA, KIKIN TYANG, KIMICKEUI. OFFICES : AUSTRALIA, CANADA, CHINA, DENMARK, ECYPT, GAZA, GREELE, HONG KONG, INDIA, INDONESIA, IRELAND, ISRAEL, MALAYSIA, NETHERLANDS, CIMAN, MILLIPPINES, PULAND, PUERTO RICO, romania, qatar, singapore, suutet korfa, thailand, unitfd arab emirates, unitfd kingdom, unitfd states de america, viftnam

HAUNSFLE GROUP . HONG KONG / CHINA / SINGAPORE CHIEF FXECUTIVE, T.C.X SHIIM

AN AECOM COMPANY

ACEHK

HEGAA

..../P.2

4.62

-2-

I trust the above responses are acceptable to you.

Yours faithfully,

Allan Roon

Senior Resident Engineer

AP:li

cc: PM/NTE, TDD - Attn: Mr. Felix Yung OAP - Attn: Mr. Thomas Chan

SIOWI

CHEC - HO

本署構造 OUR REF

EP 580/E6/3/9

水函燃號 YOUR REF: 27

TEL, NO.: 2158 5823 阿文你员 FAX NO.:

電子郵件 E-MAIL: ħŀ:

Homepage: http://www.info.gov.hk/epd/

2685 1155

#### **Environmental Protection Department** Local Control Office/Territory North

10/F, Sha Tin Government Offices. No. 1 Sheung Wo Che Road, Sha Tin, New Territories, Hong Kong.



環境保護署 污染管制辦事處 (新界北) 香港新界沙田 上不從路一號 沙田政府合署 10 核

25 June 2003

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong

(Attn: Mr. Sam Tsoi)

By Fax Only (Fax: 2865 6493) Total 2 pages

Dear Sir,

#### Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of a public complaint made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.c. list below should take actions to rectify the situation. Please report the outcome of the action to us within 2 weeks.

> Received 28

Yours faithfully,

( Jack KAN )

**Environmental Protection Officer** for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

Maunsell

(Ann: Mr. George Mak

(Attn: Mr. Albert Lam

CHEC

(Attn: Mr. Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

Complaint Ref. :	N01/TN/00007733	-03			
EPIC Ref:					
CASE DETAILS					
(1) Incident Date/Tir	ne: 23/06/2003 10:0	9			
(2) Incident Location			地址:		
	SHA TIN				
(3) TPU:	220				
(4) Description:	757				
(1) Description.	MONTE VISTA BILOC	VERAL CONSTRUCTION N CK 1 , SHA TIN	VOISE WITHOUT PERM	TITTED HOURS & DUST	FROM
(5) Nature		(6) Affected Party	(7	) Pollution Pattern	
N66-General construction	tion noise except	DMS-Domestic Premise			
A42-Construction dus		DMS-Domestic Premise	S		
(8) Priority class:	C - Routine				
-	***************************************		Substantive reply to b	e made on or before	15/07/2003
DETAILS OF THE S		TER			
(1) Premises Name:	UNKNOWN		姓名: 不知名		
(2) Premises Address	:		地址:		
			,		
(3) Business Type:	511 - Construction s	ite except renovation			
COMPLAINT CASE	(S) NEAR INCIDENT	T LOCATION			
Complaint Ref.	Cpt. Received Da	te Sub. Reply Date	Nature Code N	ature Description	
N01/TN/0CI = N01/TN/00C = 1	-		N66		
N01/TN/000 ~~			N66 A49		-
COMPLAINANT					
(1) Name:			(2) Tel. No. : Day	, ,	
			Nig.		•
			Mol		
(3) Address:			地址:		
		APL -			. Ja
(A) Email Add-sau		nater	clarified with	h the complainent	, The comp
(4) Email Address:		ww (8	werned on used	idtime construction from TT constru	n what a
CHANNEL OF COM					
Source channel:	01	Phone Near	DIPCK I and	2 of Monte	Vista.
Source code : Remarks :	P -	Public			
20011BJ (3 )	其调项保督爲何批准	<b>t地盤在晚上7時後進行</b>	工程[		-
ACTION OFFICERS					
	Nature Code	SEPO	EPO	CI	
Coordinator	N66	S[TN]2		CI[IN]2	
	_	}			
INFORMATION INPU	TTED BY				
Name: TNTEL		Date: 23	/06/2003	Time	71
				Time: 10:	<b>)</b> [

## Maunsell Consultants Asia Ltd

#### 茂盛(亞洲)工程顧問有限公司

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: 17cso@netvigator.com

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

> 香港新界沙田鄉小會路 138 號 新城市中央风場第2厘8個

Tel (852) 2605 6262 Fax (852) 2691 2649 www.maunsell.com.hk

2 July 2003

Your Ref.:

Our Ref.: T7/(ST86/2000)/M05/412(0209)

viaster Reid The Agent China Harbour Engineering Company (Group) Received

9 Lok Wo Sha Lane Ma On Shan, NT

Dear Sirs,

2 JUL 2003

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan

Environmental Complaint EC-63 Public Complaint - Nighttime Construction Noise and Dust Emission

I attach for your attention and necessary action a copy of a letter from EPD -Ref. EP 580/E6/3/9 dated 25 June 2003, regarding a complaint of nighttime construction noise outside permitted hours and dust emission from T7 construction site near Blocks 1 and 2 of Monte Vista on 23 June 2003.

Will you please give me a response before 9 July 2003.

Yours faithfully,

Allan Poo Senior Resident Engineer

AP:jt

Encl.

cc: MCAL (w/e)

OAP - w/e (by fax only)

SIOW 1 - w/e (note: please investigate)

CTEC - HO (W/e)
CHARMAN : ESY BONG, MANAGING DIRECTOR, DESCRIPTE DIRECTORS : & LGARRETT, DEN 191M, NO TAYLOX, MIX CLAI, DESCRIPT, LENDICOTT, CIW LWUNG, LIK HELIAM, F H Y NG, A X W F J, M C PCARSON, S A KIDBINSON, K Y WONG, F S K YAN, K L WONG, S H R SHAW, H C PANG, U S S LU, A Y KWOK. CONSTITANTS : A HAMICTON, P K I LLUNG, J C M CHIM. ASSOCIATES : L S EEE, P K YUNG, A 3 YOUN, P C ANSON, C A JOHNSON, W K H CHAN, C H T SO, J Y LING, C C W NU, 1 K 3 IANG, E 5 C MA, K K H TSANG, B I MICKELL. OFFICES ; AUSTRAUS, CANADA, CHINA, DLNMAKK, ECYPT, CAZA, CREECE, HONG KONG, INDIA, INDONESIA, INLLAND, BRREL, MALAYSIA, NETHERLANDS, OMAN, MILLIMMINES, MCI AND, FLIERTO BICO, ROMANIA, QAIAR, SINGAPOKE, SCHITH KOKEA, THAN AND, UNITED ARAB CAIRATES, UNITED KINGDO-L UNITED STATES OF AMERICA, VIETNAM, MADNISELL GROUP - HONG KONG / CHINA / SINGAPORE CHILL EXECUTIVE Y.C.K. SHUM AN AECOM COMPANY



火山松蛙 YOUR REF:

TEL NO.: 2158 5823 四文低五

FAX NO.: 2685 1155 孩子您件

E-MAIL: At.

Homepage: http://www.info.gov.hk/epd/

FOCS! COURD OTHER JEHROLA MAKEN 10/F, Sha Tin Government Offices,

No. 1 Shoung Wo Che Road,. Sha Tin. New Territories, Hong Kong.



/ / / \* 🗀 (17)// 17 🛩 (新界北) 香港斯界步用 製一器銀禾工 沙川政府介署 10 独

25 June 2003

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk, 80 Tat Chee Avenue, Kowloon Tong. Kowloon, Hong Kong

(Attn: Mr. Sam Tsoi)



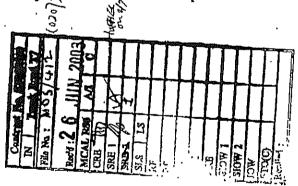
By Fax Only (Fax: 2865 6493) Total 2 pages

Dear Sir.

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of a public complaint made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.c. list below should take actions to rectify the situation. Please report the outcome of the action to us within 2 weeks.



Yours faithfully,

( Jack KAN )

**Environmental Protection Officer** for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

(Atm: Mr. George Mak

Fax.: 2721 8630)

Maunsell

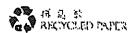
(Attn: Mr. Albert Lam

Fax.: 2643 3559)

CHEC

(Attn: Mr. Chan Man

Fax.: 2492 3701)



		ETO RACE.	OA OUT MILLIANT	
Complaint Ref. :	N01/TN/0000773	3-03		
EPIC Rof:	[10], [14]			
Case Details				
CASE DETAILS (1) Incident Date/Time	a; 23/06/2003 10:	09		
(2) Incident Location :			地址:	
	SHA TIN			
(3) TPU:	757			
(4) Description:			on noise without permit,	ITED HOURS & DUST FROM
(5) Nature	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(6) Affected Party	(7)	Pollution Partern
N66-General construction	on noise except	DMS-Domestic Proc	nisca	
A42-Construction dust		DMS-Domestic Pron	nises	
(8) Priority class;	C - Routine		i.e. submantive reply to be	made on or before 15/07/2003
DETAILS OF THE ST	uspected poli	LUTER		
(1) Premises Name:	UNKNOWN		姓名: 不知名	
(2) Premiscs Address:	:		地址;	
COMPLAINT CASE( Complaint Ref.		NT LOCATION  Date Sub. Reply Da	rg <u>Nature Code Na</u> N66	ture Description
N01/TN/000		·••	N66 A49	
COMPLAINANT				
(I) Name:			(2) Tel. No.; Day	:
			Nigh	τ!
			Mobi	ile:
(3) Address :			地址:	
		Af	ter clasified with	, the complement, the com-
(4) Email Address:		يرطها	concerned on user	stime construction wase o
CHANNEL OF COM	PLAINT	Con	stanotion dust emissi	, the complement, the constinct make of TT construction sorte
Source channel:	01			2 of Monte Vista,
Source code :	p.	- Public		•
Remarks:	-	世准地盤在晚上7時後	進行工程	
action officers				
	Nature Code	SEPO	EPO	CI
Coordinator	N66	\$(TN]2		CI[IN]2
nformation inpl	JTTED BY		<u> </u>	
lame: TNTEL	.E	Date:	23/06/2003	Time: 10:31

TOTAL P.02 P.02 TOTAL P.03



## 中國港灣建設(集團)總公司

振華工程有限公司 香港代表:

CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

: 7 July 2003

Your Ref: T7/(ST86/2000)/M05/412(0209)

Our Ref.: T7/01.01/O/07479

Maunsell Consultants Asia Ltd. 7 Lok Wo Sha Lane, Ma On Shan, N.T.

Attention: Mr. Albert Lam-CRE

Dear Sir,

Contract No. ST86/2000

Construction of Road T7 in Ma On Shan

Environmental Complaint EC63 - Complaint on nighttime construction noise and construction dust emission near Block 1 of Monte Vista

We refer to your letter dated 2 July 2003 regarding the captioned complaint.

To suit the progress of our construction works, we have obtained a Construction Noise Permit of no. GW-TN0022-2003 from EPD. According to our investigation, the powered mechanical equipments operated near Block I of Monte Vista on the night before the incident date at restricted hours were generator and winch, which were covered by this Construction Noise Permit.

For the construction dust emission near Monte Vista, water sprayers and mist-typed sprinklers were already installed around the area for the sole purpose of dust suppression. The ET had measured the 1hr TSP level at Monte Vista and the results were shown to be below the alert level (350 µg/m³).

Start Time	Finish Time	Level (µg/m3)
08:53 am	09:53 am	163,2
09:53 am	10:53 am	144.3
10:53 am	11:53 am	149,3

We would continue to keep effort in mitigating noise and dust nuisance arising to the public for our construction works.

Thank you very much for your kind attention.

Yours faithfully, For and on behalf of China Harbour Engineering Co. (Group)

Chan Man

Project Manager CM/CL/PL/QT

MCAL - H.O.

CHEC-H.O.

OAP - Mr. Thomas Chan (F: 2268 3950)

TDD - Mr. Felix Yung (F: 2721 8630)

EPD- Mr. Jack Kan (F: 2685 1155)

(Fax: 2685 1155)

P.01/02

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.: EP 580/E6/3/9

Our Ref.: T7(ST86/2000)/M05/412(0213)

11 July 2003 By Fax Only

**Environmental Protection Department** 

Local Control Office/ Territory North

10/F, Sha Tin Government Offices, No.1 Sheung Wo Che Road,

Sha Tin, New Territories, Hong Kong.

Attn: Mr. Jack KAN

Dear Sirs,

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan

Public Complaint - EC-63

Referring to your letter of 25 June 2003 and the Public Complaint of 23 June 2003 from a resident in Block 1 of Monte Vista, regarding general construction noise without permitted hours and dust emission, I would respond as follows:

1) General Construct Noise -

The Contractor carried out night work on 23 June 2003 under a Construction Noise Permit No. GW-TN0022-2003. A generator and an electric winch were the powered mechanical equipment being operated as permitted by the Noise Permit.

2) Dust Emission -

The Contractor has been using a number of water sprayers and mist-type sprinkers in the vicinity of Monte Vista for dust suppression. Our Environmental Team had recorded the 1 hour TSP level at Monte Vista as below.

Date	Start Time	Finish Time	Level (µg/m³)
23-June-2003	8:53am	9:53am	163,2
23-June-2003	9:53am	10:53am	144.3
23-June-2003	10:53am	11:53am	149.3

As the recorded level was well below the alert level of 350 µg/m³, it was considered that no further mitigation measures were necessary.

FHYNG, AKWEL, MCPEARSON, SAROBINSON, KYWONG, ESKYAN, KEWONG, SHRSHAM, HCPANG, DSSEU, AYKWOK CONSUTANTS: A HAMILTON, PKFIFING, ICM CHM. ASSOCIATES : LSTFE, PKYUNG, ASPOON, PLANSON, CATCHINSON, WKITCHAN, CHTSO, JYTING, CCWNG, TKSTANG, FYCMA, KKITTSANG, KJMICKFLE. OFFICES: ATTERNALIA, CANADA, CHINA, DENMARK, FGYPT, GAZA, GREECE, HONG KUNG, INDIA, INDONESIA, IRFLAND, ISRAEL, MALAYSIA, NETHERLANDS, CIMAN, PHILIPPINES, POLAND, PLIERTO RICU,

ROMANIA, QATAR, SINCAPURL, SCRITH KORFA, THAIRAND, UNITED ARAB FMIRATES, LINITED KINGDOM, UNITED STAILS OF AMERICA, VIFTNAM.

AN AECOM COMPANY

ACCHK

1500 9000) ; 20000 principles No. CC354

HEDAS

MAUNIFELL GROUP . HONG KONG / CHINA / SINGAPORE CHIEF LAECUTIVE: T C K SILUM

- 2 -

In view of the above findings, it appears that the complaint cannot be substantiated. However, the Contractor is willing to reduce his night work in order to minimize the nuisance to the neighbourhood.

Yours faithfully,

Allan Poon

Senior Resident Engineer

AP:li

cc : PM/NTE, TDD - Attn: Mr. Felix Yung

OAP

- Attn: Mr. Thomas Chan

SIOW1

CHEC-HO

本容器號 OUR RFS

EP 580/E6/3/9

來的檔號 YOUR REF: 電 話

TEL, NO.: 圖文與近

屬文傳度 FAX NO.: 2158 5823 2685 1155

電子郵件 E-MAIL: 網 上

Homepage: http://www.info.gov.hk/epd/

Environmental Protection Department Local Control Office/Territory North

10/F, Sha Tin Government Offices, No. 1 Sheung Wo Che Road, Sha Tin, New Territories, Hong Kong,



環境保護署 污染管制辦事處 (新界北) 香港新界沙田 上不從路一號 沙田政府合署 10 帳

27 June 2003

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk, 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong

(Attn: Mr. Sam Tsoi)

By Fax Only (Fax: 2865 6493) Total 3 pages

Dear Sir,

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of public complaints made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.c. list below should take actions to rectify the situation. Please report the outcome of the action to us within 2 weeks.

Yours faithfully,

( Jack KAN )

Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

Maunsell

uec

CHEC

(Attn: Mr. George Mak

(Attn: Mr. Albert Lam

(Attn: Mr. Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

EPIC Ref:									
CASE DETAILS									
(1) Incident Date/Time	: 27/06/2003 09:	43							
(2) Incident Location:	Lee On Estate, SHA TIN			地址:					
(3) TPU:	757								
(4) Description:	COMPLAINT OF NI BETWEEN LEE O	GHT TIME	GENERAL CO	NSTRUCTION	NOISE	FROM A SITE V	wнісн ві	IILD FLYOVEF	र
(5) Nature	BETWEEN DEE		& MONTE VIS	ia, sha iin		(7) Pollution	Pattern		
N66-General construction	on noise except		omestic Premi	scs		C-Continuous, W-Weekday		& Evening,	
(8) Priority class:	C - Routine		i.e	substantive	reniv to	be made on o	r before	21/07/200	
DETAILS OF THE SU	SPECTED POLL	ÚTER			rapij k	o o mado on c	. Deloie	211077200	•
(1) Premises Name:	UNKNOWN			姓名:	不知名				
(2) Premises Address:				地址:					
(3) Business Type:	511 - Construction	-							
COMPLAINT CASE(S	S) NEAR INCIDE	NT LOCA	ATION						
Complaint Ref. NO1/TN/000C NO1/TN/0000	Cpt. Received D	ate Sub	o. Reply Date	N	<u>e Code</u> 166 .42	Nature Desc	ription	•	
N01/TN/000C N01/TN/00C.	• • •			N	166 166		, ,,		
COMPLAINANT									
(1) Name:				(2) Tel.	1	Day : Night : Mobile:			
(3) Address:				地址;					
(4) Email Address:							7:	7 projec	t.
CHANNEL OF COMP	LAINT			Accordin	* * * *	he complet	inaut,	THE.	
Source channel:	01	- Phon	ıc	noisy wi	in it was	he complex so courries 2 26.6.03	Kauta S	<b>√</b>	
Source code :	P	- Public	:	med hi	J~~ °	~ UD. U. V.			
Remarks:	投訴在翠雍寺 其 得求跟進	壁庭及利安	<del>C</del> 村之間的天	橋工程,工人	第工至	00:00,發出強烈	11的機器	8, 滋援附近的	夕居
ACTION OFFICERS	Nature Code		SEPO		EPO		CI		
Coordinator		<del></del>			Ero		1	·	1
Continuent	N66		S[TN]2				CI[TN]	<u> </u>	]
INFORMATOR STORES									
INFORMATION INPU			~					20.41	
Name: HAUE3			Date :	27/06/2003		Ti	m¢: (	09:54	
									*

Complaint Ref. : N01/TN/00008149-03

Complaint Ref.: N01/TN/00008148-03 EPIC Ref: CASE DETAILS (1) Incident Date/Time; 27/06/2003 09:44 (2) Incident Location: KAM YING COURT, 地址: 錦英苑、 SHA TIN (3) TPU: 757 (4) Description: COMPLAINT OF NIGHT TIME AND SUNDAY CONSTRUCTION FROM THE CONSTRUCTION SITE NEAR KAM LEUNG HOUSE, KAM YING COURT, SHA TIN (6) Affected Party (5) Nature (7) Pollution Pattern N66-General construction noise except DMS-Domestic Premises C-Continuous, N-Night Time, A-Daily renovation (8) Priority class: - Routine С i.e. substantive reply to be made on or before 21/07/2003 DETAILS OF THE SUSPECTED POLLUTER (1) Premises Name: UNKNOWN 姓名: 不知名 (2) Premises Address: 地址: (3) Business Type: 511 - Construction site except renovation COMPLAINANT (I) Name: (2) Tel. No.: Day:

(3) Address:

地址:

Night: Mobile:

According to the complainant, the noisy work was carried out at mid night on 26.6.03

(4) Email Address:

CHANNEL OF COMPLAINT

Source channel:

01

Phone

Source code:

P

Public

Remarks:

投訴在錦良閣對出的17公路的地盤於平日凌晨2:00及星期日早上7:00有工程進行,發出強烈的

嗓音,要求跟進

**ACTION OFFICERS** 

Nature Code EPO CI SEPO CI[TN]2 Coordinator N66 S[TN]2

INFORMATION INPUTTED BY

Name:

HAUE1

Date:

27/06/2003

Time:

09:48

## Maunsell Consultants Asia Ltd

茂威(亞洲)工程顧問有限公司

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020

Fax: 2643 3559

E-mail: t7cso@netvigator.com

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.T., Hong Kong

> 香港新界沙田鄉中會路 138 號 新城市中央廣場第2件8模

> > Tel (852) 2605 6262 Fax (852) 2691 2649 www.maunsell.com.hk

Your Ref .:

Our Ref.: T7/(ST86/2000)/M05/412(0210)

The Agent China Harbour Engineering Company (Group) 9 Lok Wo Sha Lane Ma On Shan, NT

COUSTING Master Rate 2 July 2003 Received 3 ///

Dear Sirs.

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan Environmental Complaint EC-64 Public Complaint - Construction Noise

I attach for your attention and necessary action a copy of a letter from EPD -Rcf. EP 580/E6/3/9 dated 27 June 2003, regarding 2 complaints of construction noise due to work being carried out at mid-night near Lee On Estate and Kam Ying Court on 26 June 2003.

Will you please give me a response before 9 July 2003.

Yours faithfully,

Allan Poo Senior Resident Engineer

AP:jt

Encl.

cc: MCAL (w/e)

OAP - w/e (by fax only)

SIOW 1 - w/e (note: please investigate)

CHEC - HO (w/e)

CHAIRMAN : 1 SY BONG, MANAGING DIRECTOR : D SLO. EXECUTIVE DIRECTORS : R J CARRETT, P C N YIM, R D TAYLOR, M K C LAI, D C S LEL L LINDICOLL, C W L WONG, E K J CHAN, THY NG, A KW U, HICPEARSON, S A ROBINSON, X Y WONG, ES KYAN, X L WONG, S HR SHAM, HIC FANG, D S LLU, A Y KWOK CONSULTANTS: A HA-HILTON, P K L LLUNG, LL M (HIM. ASSIM INTES : LS TEF, F K YUNG, AS POXIN F CANSON, C A KHINSON, W KH CHAN, C HT SO, I Y LING, C C W NG T KS TANG, LS C MA, K KI I TSANG, R I MICKELL OFFICES: ALISTRALLA, CANADA, CHINA, DEHMARK, EGYFT, GAZA, CREFCE HONG KONG, HIDIA, INDONISIA, IRCLAND, ISRALL, MALAYSIA, NEITHEXLANDS, CAMAN, PHILIPPINES, FOE AND, PLIFETO RICO, ROMANIA, QATAR, SINGAPORE, SQUTH KORCA, THAILAND, UNITED ARAB EMIRATES, UNITED KINGDOM, UNITED STATES OF AMERICA, VIETNAM AN AECOM COMPANY MAUNSEEL GROUP - HONG TONG / CHINA / SINGAPORE CHIEF (ALCUTIVE: 1 C X SHUM



EP 580/E6/3/9 OUR REF 水品幣號 YOUR AEF: ., NO.: 2158 5823 图文解以 FAX NO. 2685 1155 10子级件 E-MAIL: ΔŁ

## Local Control Office/Territory North

10/F, She Tin Government Offices. No. 1 Shoung Wo Che Road, . Sha Tin, New Territories, Hong Kong.



力乐日刊州尹四 (新界北) 比承级路一强 沙州政府合署 10 槌

27 June 2003

Contract No. ST86/2002 Trunk Road T7 File No.: M 0.5/412 0>08 JUN 2003 Roed L MCAL/BSS CRE PUT SRE 1 SEE 2 SLS LS RE RE QS ARE

Dear Sir.

ARE

STOTY I 5.0%

Homepage: http://www.lnfo.gov.hk/epd/

Ove Arup & Partners Hong Kong Limited Level 5 Festival Walk, 80 Tat Chee Avenue, Kowloon Tong, Kowloon,

(Artn: Mr. Sam Tsoi)

Hong Kong



By Fax Only (Fax: 2865 6493) Total 3 pages

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Public Complaint

I refer to the captioned project, for which you hold the position of Environmental Team Leader.

Enclosed please find particulars of public complaints made on the date shown in the enclosure. The Environmental Team and all relevant parties in the c.o. list below should take actions to rectify the situation. Please report the outcome of the action to us within 2 weeks.

Yours faithfully,

( Jack KAN

Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

(Attn: Mr. George Mak

Fax.: 2721 8630)

Maunsell

(Ann: Mr. Albert Lam

Fax.: 2643 3559)

CHEC

(Attn: Mr. Chan Man

Fax.: 2492 3701)

RECYCLED PAPER

Complaint Ref. :	N01/TN/00008148-03		
EPIC Ref:			
CASE DETAILS	25/05/2023 2014		
(1) Incident Date/Tim		44.1.1	ch-wit-tm
(2) Incident Location	: KAM YING COURT, SHA TIN	地址;	<b>称火火</b> 。
(3) TPU:	757		
(4) Description:	COMPLAINT OF NIGHT TIN KAM LEUNG HOUSE , KAM		ON FROM THE CONSTRUCTION SITE NEAR
(5) Narure	(6) Af	fected Party	(7) Pollution Pattern
N66-General construct renovation	ion noise except DMS-	Domestic Premises	C-Continuous, N-Night Time, A-Dai
(8) Priority class:	C - Routine	i.c. substantive i	eply to be made on or before 21/07/20
details of the s	USPECTED POLLUTER		
(1) Premises Name:	NAKHOMA	姓名: 2	不知名
(2) Premises Address	:	地址;	
(3) Business Type:	511 - Construction site ex	ccpt renovation	
COMPLAINANT			
(1) Name:		(2) Tel. l	No.: Day:
		•	Night: Mobile:
(3) Address :		地址;	
			According to the complete wasy work was carried or mid next on 26.6.03
(4) Email Address			work work was comed or
(4) Email Address:			Just on 26.6.03
CHANNEL OF COM			many with
Source channel:		hone	
Source code ;	-	blic	
Remarks:	投訴在錦貝開對出的噪音,婆求跟這	付17公路的地盤於平日夜長2	:00及星期日早上7:00有工程進行,發出發

ACTION	OFFICERS

	Nature Code	Sepo	epo	CI
Coordinator	Nee	S[TN]2	·	CI[TN]2

#### INFORMATION INPUTTED BY

Name:

HAUEI

Date: 27/06/2003

Time: 09:48



## 中國港灣建設(集團)總公司

香港代表: 振華工程有限公司

CHINA HARBOUR ENGINEERING COMPANY (GROUP) HONG KONG REPRESENTATIVE: ZHEN HUA ENGINEERING CO., LTD.

Gaster Bank (5)

clog Required

Received

And Agolishes hat

Date : 7 July 2003

Our Ref.: T7/01.01/O/07488

Maunsell Consultants Asia Ltd. 7 Lok Wo Sha Lane, Ma On Shan, NT.

Attention: Mr. Albert Lam- CRE

Dear Sir.

Contract No. ST86/2000

Construction of Road T7 in Ma On Shan

Environmental Complaint EC64 - Two complaints on nighttime construction noise near Lee On Estate and Kam Ying Court on 26 June 2003

We refer to your letter dated 2 July 2003 regarding the captioned complaint.

To suit the progress of our construction works, we have obtained a Construction Noise Permit of no. GW-TN0022-2003 from EPD. According to our investigation, the Powered Mechanical Equipments (PME) operated on 26 June 2003 near Lee On Estate between 19:00- 23:00 were generator and winch, which were covered by this Construction Noise Permit. No PME was operated at mid night. After the discussion, we would schedule our works to be completed at 19:00 in order to mitigate the noise impact generated to the public, although Construction Noise Permit was granted in this case.

For the noise complaint near Kam Leung House of Kam Ying Court, we have checked that the Water Services Department has conducted the water diversion works near the area at that night, and the works were not part of T7 contract. We would also like to emphasize that no construction works would be carried out at restricted hours around the area unless Construction Noise Permit was granted by EPD.

Thank you very much for your kind attention.

Yours faithfully, For and on behalf of China Harbour Engineering Co. (Group)

Chan Man

Project Manager

CM/CL/PL/OVI

MCAL-H.O.

CHEC - H.O.

OAP – Mr. Thomas Chan (F: 2268 3950)

TDD - Mr. Felix Yung (F: 2721 8630)

EPD - Mr. Jack Kan (F: 2685 1155)

WW/KCW/CKL

香港北角英皇道 370-374 號振车大廈 19 梅

## Maunsell Consultants Asia Ltd

#### 茂盛(亞洲)工程顧問有限公司

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.: EP 580/E6/3/9

Our Ref.: T7(ST86/2000)/M05/412(0214)

8/F., Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Sha Tin, N.1., Hong Kong

> 香港新界沙田鄉郡會路138號 新城市中央區 悶第 2 座 8 樓

> > Tel (852) 2605 6262 Fax (052) 2691 2649 www.maunsell.com.hk

**Environmental Protection Department** Local Control Office/ Territory North (Fax: 2685 1155) (GCBIV6C

Attn: Mr. Jack KAN

10/F, Sha Tin Government Offices,

Sha Tin, New Territories, Hong Kong,

No.1 Sheung Wo Che Road,

Dear Sirs.

Shatin New Town Stage II Contract No. ST86/2000 Construction of Road T7 in Ma On Shan

Public Complaint - EC-64

I refer to your letter of 27 June 2003, attached with 2 Public Complaints of 27 June 2003 from residents of Kam Ying Court and Lee On Estate, regarding noisy work being carried out at mid-night of 26 June 2003.

I would advise you that the Contractor for the captioned Contract had been carrying out night work under a Construction Noise Permit No. GW-TN0022-2003. The Powered Mechanical Equipment (PME) operated on 26 June 2003 near Lee On Estate between 7 pm and 11pm were a generator and an electric winch, which were permitted by the Noise Permit. No PME was operated at midnight.

We understood that Water Supplies Department carried out water diversion work near the site of Road T7 Contract during the nighttime of 26 June 2003. We therefore would suggest you to check with WSD.

Yours faithfully.

Senior Resident Engineer

AP:li

cc : PM/NTE, TDD - Attn: Mr. Felix Yung

OAP

- Attn. Mr. Thomas Chan

SIOW1

CHAIRMAN : F S Y BONG, MANAGING DIRICTOR : D 5 LO. EXECUTIVE DIRICTORS : R | GARRETT, P C N YIM, R D TAYLOR, M & CLAI, D C S LEF, L INDICOTI, C W T WONG, C K IT CHAN, F H Y MG, A K W LI, M C PEAKSON, S A ROBINSON, K Y WONG, F S K YAN, K L WONG, S H R SHAM, H C PANG, D S S LU, A Y KWOK. CONSULTANTS : A HAMILION, P K F I FING, I C M CHIM. ASSOCIATES ; L \$ LEE, P K YUNG, A \$ POOR, P C ANSUN, T A JOHNSON, W KITCHAN, CHIT \$0, 1Y LING, LICWING, T K \$ TANG, ESICIMA, K KIH TSANG, R I MICKELL

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