Territory Development Department
NT East Development Office

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

QUARTERLY EM&A SUMMARY REPORT

JULY 2003 TO SEPTEMBER 2003

Prepared For:

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Signed
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Signed
Date 13 October 2003

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LIST OF APPENDICES

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ABBREVIATIONS AND ACRONYMS

AQO	Air Quality Objectives
Arup	Ove Arup & Partners Hong Kong Limited
ASR	Area Sensitive Rating
BOD_5	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 July 2003 to September 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).

Fourteen measurements were taken at each location during 0700-1900 and fourteen measurements were taken at NM3, NM4, NM6 and NM8 during 1900-2300 from July 2003 to September 2003. The recorded noise levels were in the range from 60.5 to 72.4 dB(A) during 0700-1900 and from 59.5 to 60.5 dB(A) during 1900-2300. All measurements were below the Limit Level of 70dB(A) at NM2 and 75dB(A) at other locations during 0700-1900, and below the Limited Level of 70 dB(A) during 1900-2300 for monitoring locations.

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

A total of fifteen 24-hour TSP monitoring were conducted at each location from July 2003 to September 2003. The recorded 24-hour TSP levels were in the range from 11.0 to 133.4 $\mu g/m^3$ and were below the Action and Limit Levels.

A total of forty-eight 1-hour TSP monitoring were conducted at each location from July 2003 to September 2003. The recorded 1-hour TSP levels were in the range from 104.3 to 259.7 $\mu g/m^3$ and were below the Action and Limit Levels.

A total of 16 loads of Construction and Demolition Waste (C&D waste) had been disposed of at NENT Landfill from July 2003 to September 2003. The total tonnage of the waste disposal from July 2003 to September 2003 was 133.83 tonnes.

A total of 2002 loads of rocks (ϕ > 400mm) have been disposed of at the follow government project sites from July 2003 to September 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. FL 27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai*
- *Contract No. HY/2001/18 Sai Sha Road Widening between Kam Ying Road and Future Truck Road T7 Junction*

The total quantity of the disposed rocks was 14314.30 m^3 from July 2003 to September 2003.

A total of 480 loads of inert material have been disposed of at Public Filling Area from July 2003 to September 2003. The total quantity of the disposed inert materials was 2880 m^3 from July 2003 to September 2003.

ET was informed by the CT that EPD visited the site on 08/07/03, 10/07/03, 18/07/03, 29/07/03, 28/07/03 and 15/09/03.

A total of eight public complaints regarding construction noise were received on 21/08/03, 23/08/03 and 15/09/03 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[1] 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[2].

The Environmental Permit (EP)[3] 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 July 2003 to September 2003.

1.2 Site Description

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

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

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2. ENVIRONMENTAL STATUS

2.1 Construction Activities in the Quarter

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

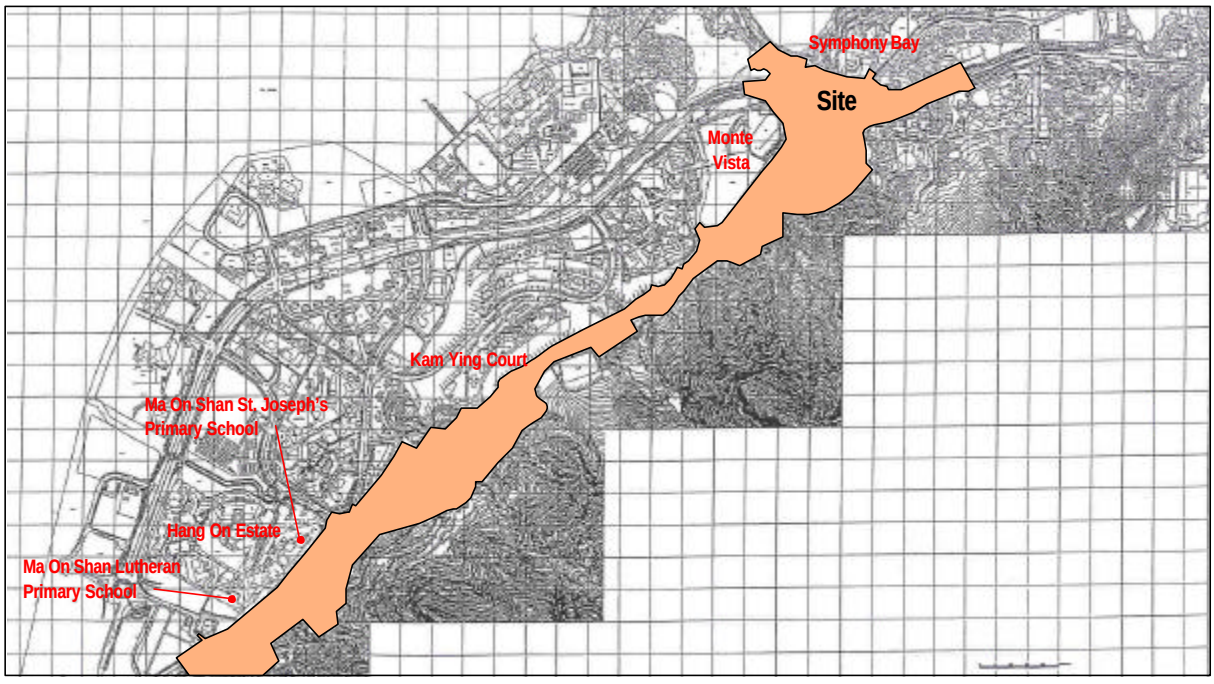
2.2 Environmental Sensitive Receivers

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

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

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

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



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3. SUMMARY OF EM&A REQUIREMENTS

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

3.1 Construction Noise Monitoring

3.1.1 Monitoring Parameters

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

3.1.2 Monitoring Frequency

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

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

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

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

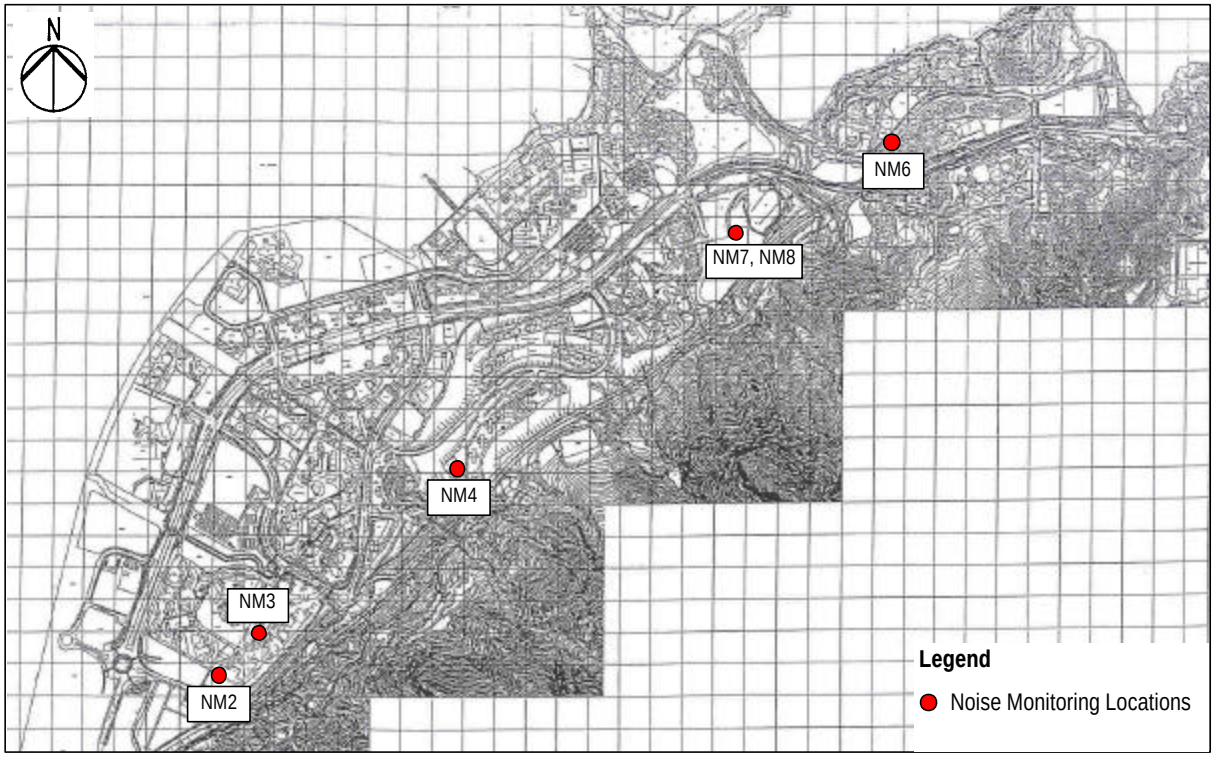
3.1.3 Monitoring Locations

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

Table 3-2 - Noise impact monitoring locations.

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

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



3.2 Air Quality Monitoring

3.2.1 Monitoring Parameters

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

3.2.2 Monitoring Frequency

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

Table 3-3 - TSP monitoring parameters and frequency.

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

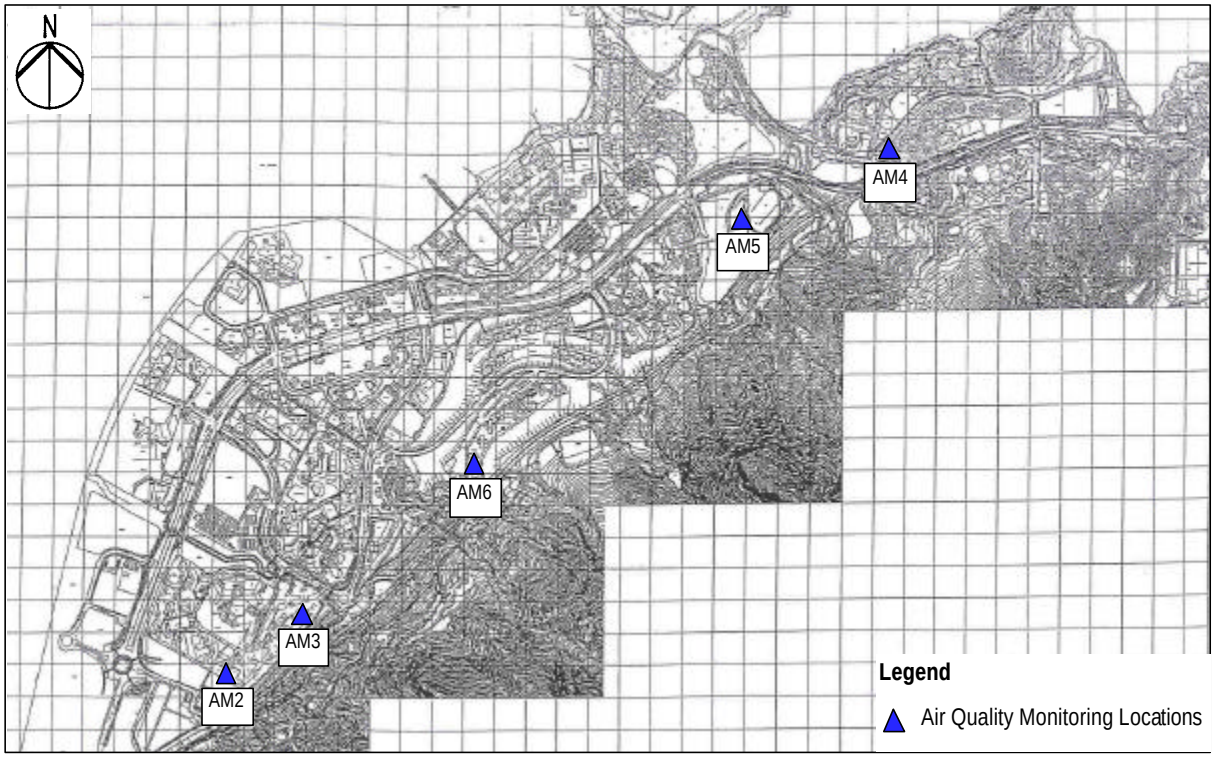
3.2.3 Monitoring Locations

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

Table 3-4 - Air quality monitoring locations.

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

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



3.3 Performance Limits and Event-Action Plans

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

3.3.1 Construction Noise Impact

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

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

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

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

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

Action		
ET	**ER**	**CT**
1. Notify ER and EPD 2. Identify source 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Discuss amongst ER and CT on the potential remedial actions 6. Review CT's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly 7. Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective 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	1. Confirm receipt of notification of failure in writing 2. Notify CT 3. Require CT to propose remedial measures for the noise exceedance 4. Ensure remedial measures are properly implemented 5. If exceedance continues, consider what portion of the work is responsible and instruct CT to stop that portion of work until the exceedance is abated	1. Take immediate action to avoid further exceedance. 2. Inform ET, ER and EPD of the actions taken for the exceedance. 3. Submit proposals for remedial actions to ET within 3 working days of notification 4. Implement the agreed proposals 5. Resubmit proposals if problem still not under control 6. Stop the relevant portion of works as determined by the ER until the exceedance is abated

3.3.2 Air Quality

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

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

Parameters	Action Level	Limit Level
24 Hour TSP Level in μg/m^3	• For baseline level < 108μg/m^3, Action Level = average of baseline level plus 30% and Limit Level • For 108μg/m^3 < baseline level < 154μg/m^3, Action Level = 200μg/m^3 • For baseline level > 154μg/m^3, Action Level = 130% of baseline level	260
1 Hour TSP Level in μg/m^3	• For baseline level < 154μg/m^3, Action Level = average of baseline level plus 30% and Limit Level • For 154μg/m^3 < baseline level < 269μg/m^3, Action Level = 350μg/m^3 • For baseline level > 269μg/m^3, Action Level = 130% of baseline level	500

The baseline checking was conducted on 3 September 2003. There was no significant difference when comparing the baseline checking results of September 2003 with previous baseline checking results. Therefore, the current A/L levels for 24-hour TSP and 1-hour TSP monitoring are still representative and valid. In accordance with the Baseline Monitoring Report[5] 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/m³		
	Baseline Level *	Action Level	Limit Level
Ma On Shan Lutheran Primary School	66.0	173	260
Ma On Shan St. Joseph's Primary School	57.7	168	
Villa Concerto, Symphony Bay	60.8	170	
Club House, Monte Vista#	-	185	
Kam Yiu House, Kam Ying Court#	-	194	

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

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/m³		
	Baseline Level *	Action Level #	Limit Level
Ma On Shan Lutheran Primary School	274	350	500
Ma On Shan St. Joseph's Primary School	274	350	
Villa Concerto, Symphony Bay	273	347	
Club House, Monte Vista	-	350	
Kam Yiu House, Kam Ying Court	-	349	

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

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

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

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

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

Action		
ET	**ER**	**CT**
Action Level 1 - Exceedance for one sample		
1. Identify source 2. Inform ER 3. Repeat measurement to confirm findings 4. Review the proposed remedial measures by CT and advise ER accordingly 5. Suggest any improvement or other 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	1. Notify CT 2. Check monitoring data and CT's working methods	1. Rectify any unacceptable practice 2. Amend working methods if appropriate
Action Level 2 - Exceedance for two or more consecutive samples		
1. Identify source 2. Inform ER 3. Repeat measurement to confirm findings 4. Review the proposed remedial measures by CT and advise ER accordingly 5. Discuss with ER for remedial actions required 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. Increase monitoring frequency to demonstrate efficacy of remedial measures 9. If exceedance continues, arrange meeting with ER 10. If exceedance stops, cease additional monitoring	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	1. Submit proposals for remedial actions to ER within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate

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

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

Action		
ET	**ER**	**CT**
Limit Level 1 - Exceedance for one sample		
1. Identify source 2. Inform ER 3. Repeat measurement to confirm findings 4. Discuss with ER for remedial actions required 5. Suggest any improvement or other 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	1. Confirm receipt of notification of failure in writing 2. Notify CT 3. Check monitoring data and CT's working methods 4. Discuss with ET and CT on potential remedial actions 5. Ensure remedial actions are properly implemented	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to ER within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate
Limit Level 2 - Exceedance for two or more consecutive samples		
1. Identify source 2. Inform ER the causes and actions taken for the exceedance 3. Repeat measurement to confirm findings 4. Investigate the causes of exceedance 5. Arrange meeting with ER to discuss the remedial actions to be taken 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. Increase monitoring frequency to demonstrate efficacy of remedial measures 9. If exceedance stops, cease additional monitoring	1. Confirm receipt of notification of failure in writing 2. Notify CT 3. Carry out analysis of CT's working procedures to determine possible mitigation to be implemented 4. Discuss amongst ET and CT on potential remedial actions 5. Review CT's remedial actions whenever necessary to assure their effectiveness 6. If exceedance continues, consider what portion of the work is responsible and instruct CT to stop that portion of work until the exceedance is abated	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to ER within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by ER until the exceedance is abated

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

Fourteen measurements were taken at each location during 0700-1900 and fourteen measurements were taken at NM3, NM4, NM6 and NM8 respectively during 1900-2300 from July 2003 to September 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 July 2003 to September 2003are 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 July 2003 to September 2003.

Date of Monitoring	Monitoring Parameters	Monitoring Results, dB(A) (30 min)					
		NM2	NM3	NM4	NM6	NM7	NM8
02/07/03 (Wed)	L_{eq}	64.5	62.5	67.5	65.0	66.5	69.0
	L_{10}	66.5	64.0	70.0	68.5	69.0	73.5
	L_{90}	60.5	59.0	63.0	61.0	62.0	63.5
09/07/03 (Wed)	L_{eq}	63.5	62.0	66.5	67.5	62.5	69.9
	L_{10}	65.0	65.0	71.0	70.0	65.0	72.5
	L_{90}	60.5	58.0	63.0	62.5	58.0	65.5
16/07/03 (Wed)	L_{eq}	62.0	60.5	64.5	67.0	64.5	70.5
	L_{10}	64.5	63.0	68.0	69.5	67.0	74.0
	L_{90}	58.0	57.0	60.0	61.5	59.5	62.0
22/07/03 (Tue)	L_{eq}	65.0	63.0	66.4	64.5	65.0	70.0
	L_{10}	68.0	66.5	68.0	67.0	69.5	72.5
	L_{90}	59.5	58.0	61.5	60.0	60.5	62.0
31/07/03 (Thu)	L_{eq}	62.5	60.5	66.0	67.5	64.0	69.0
	L_{10}	65.0	64.0	69.5	72.0	67.5	73.5
	L_{90}	60.0	58.0	62.0	62.0	62.0	62.0
06/08/03 (Wed)	L_{eq}	62.5	60.5	65.8	69.0	66.0	68.0
	L_{10}	65.0	64.5	68.0	74.5	69.0	73.5
	L_{90}	60.5	58.0	62.0	63.0	60.5	61.5
12/08/03 (Tue)	L_{eq}	62.5	60.5	67.5	69.5	68.0	70.5
	L_{10}	65.0	63.0	71.5	74.5	74.5	75.0
	L_{90}	60.0	57.5	62.5	63.0	62.0	62.5
20/08/03 (Wed)	L_{eq}	65.0	62.0	66.0	68.5	68.0	69.5
	L_{10}	68.5	64.5	69.5	73.0	74.0	73.0
	L_{90}	61.0	60.5	60.5	63.0	62.0	61.5
27/08/03 (Wed)	L_{eq}	64.0	62.5	69.5	68.8	67.7	70.0
	L_{10}	67.5	66.0	74.0	75.0	70.0	74.5
	L_{90}	59.0	60.0	61.0	63.0	62.0	63.5

Date of Monitoring	Monitoring Parameters	Monitoring Results, dB(A) (30 min)					
		NM2	NM3	NM4	NM6	NM7	NM8
05/09/03 (Fri)	L_{eq}	63.0	62.0	68.5	67.5	68.0	70.0
	L_{10}	65.5	66.0	71.5	71.5	73.5	75.5
	L_{90}	60.5	60.0	62.0	61.5	62.5	63.0
11/09/03 (Thu)	L_{eq}	63.0	60.5	66.8	67.5	68.0	69.5
	L_{10}	65.5	63.0	72.0	72.0	72.5	74.0
	L_{90}	60.5	58.0	61.5	60.5	62.0	63.0
19/09/03 (Fri)	L_{eq}	64.0	62.5	67.0	68.5	68.0	70.0
	L_{10}	66.0	65.5	70.5	73.0	71.5	74.5
	L_{90}	61.0	60.0	62.0	62.5	62.0	63.0
24/09/03 (Wed)	L_{eq}	65.0	63.0	68.5	67.0	65.8	67.5
	L_{10}	68.0	65.5	74.0	71.5	70.0	70.5
	L_{90}	60.5	60.0	62.0	63.0	60.5	62.5
29/09/03 (Mon)	L_{eq}	69.5	68.5	70.0	68.7	71.0	72.4
	L_{10}	72.5	73.0	72.0	71.0	74.0	75.5
	L_{90}	65.5	66.0	65.5	61.5	64.5	66.5

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

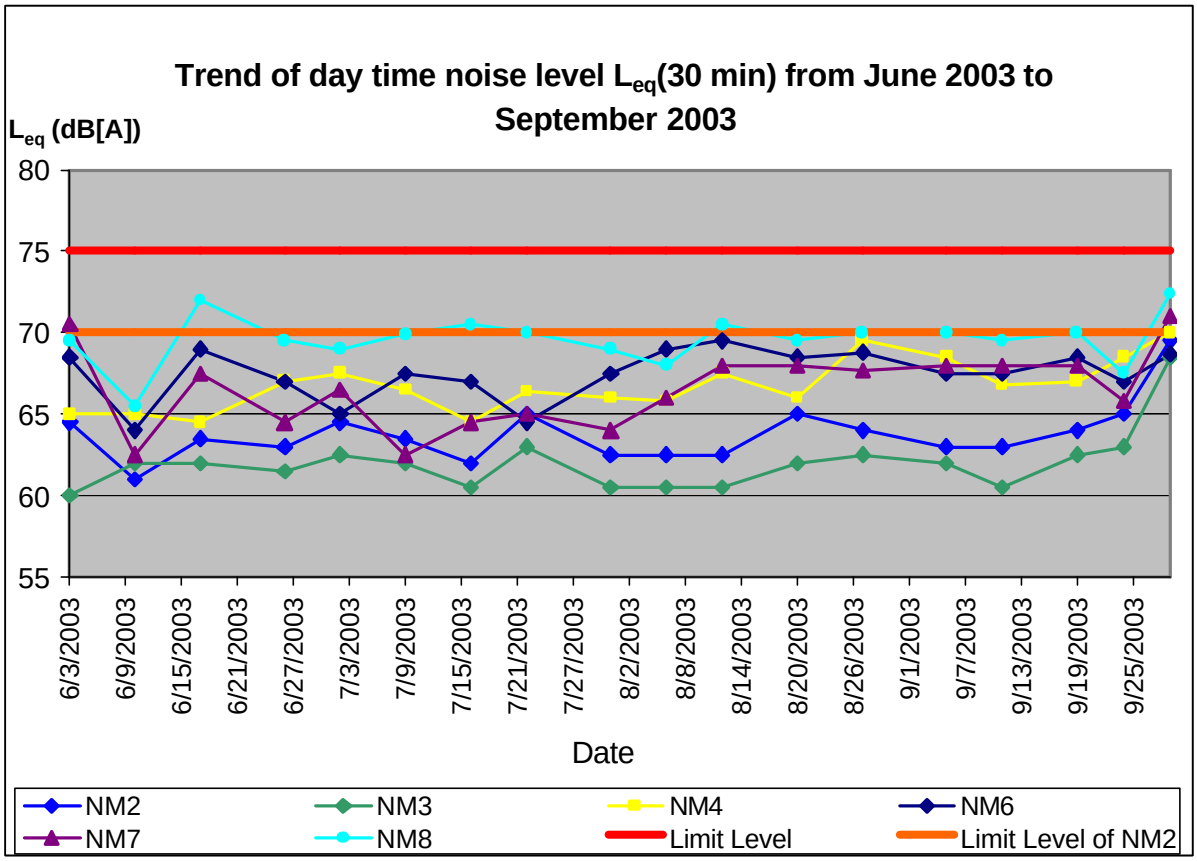


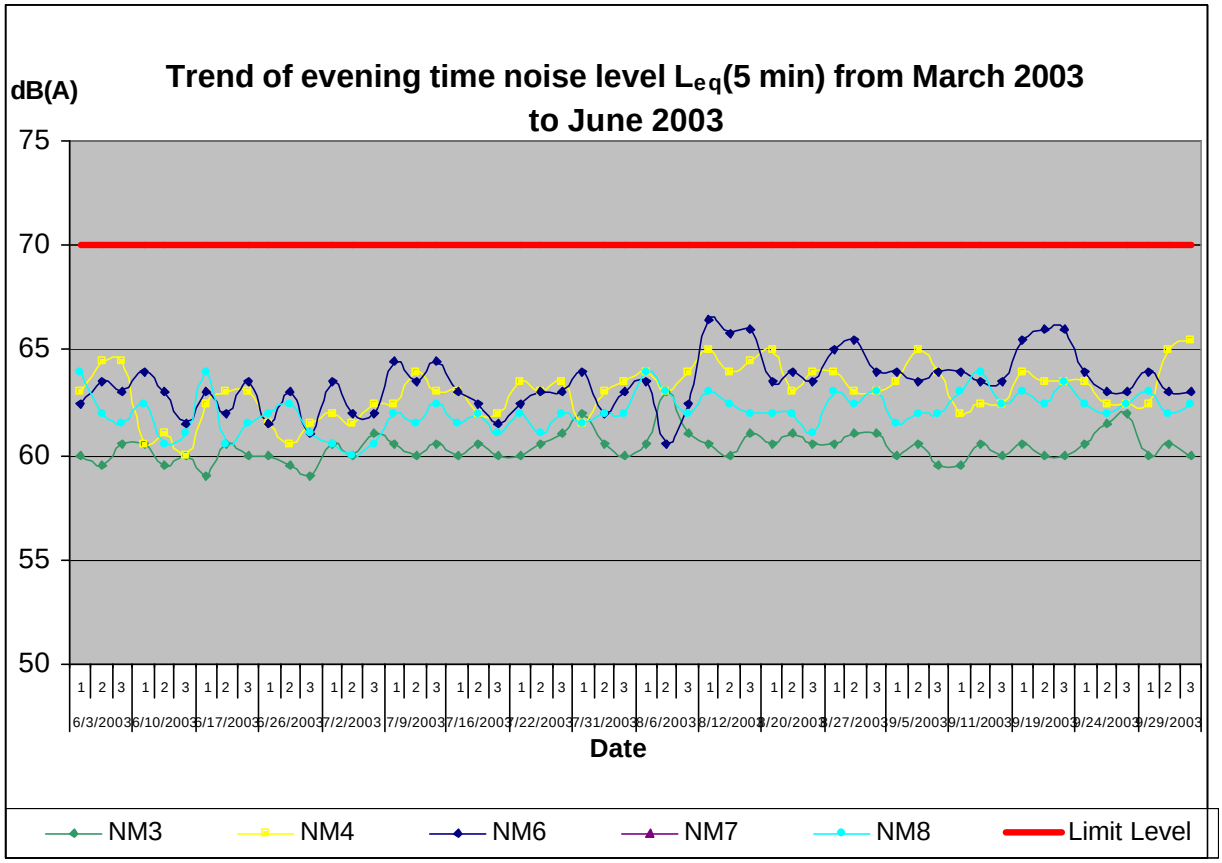
Table 4-2 - Construction evening time noise monitoring results from July 2003 to September 2003**.**

Date of Monitoring	Monitoring Results, L_{eq} dB(A) (5 min)				
	NM3	NM4	NM6	NM7*	NM8
02/07/03 (Wed)	60.5	62.0	63.5	-	60.5
	60.0	61.5	62.0	-	60.0
	61.0	62.5	62.0	-	60.5
09/07/03 (Wed)	60.5	62.5	64.5	-	62.0
	60.0	64.0	63.5	-	61.5
	60.5	63.0	64.5	-	62.5
16/07/03 (Wed)	60.0	63.0	63.0	-	61.5
	60.5	62.0	62.5	-	62.0
	60.0	62.0	61.5	-	61.0
22/07/03 (Tue)	60.0	63.5	62.5	-	62.0
	60.5	63.0	63.0	-	61.0
	61.0	63.5	63.0	-	62.0
31/07/03 (Thu)	62.0	61.5	64.0	-	61.5
	60.5	63.0	62.0	-	62.0
	60.0	63.5	63.0	-	62.0
06/08/03 (Wed)	60.5	64.0	63.5	-	64.0
	63.0	63.0	60.5	-	63.0
	61.0	64.0	62.5	-	62.0
12/08/03 (Tue)	60.5	65.0	66.5	-	63.0
	60.0	64.0	65.8	-	62.5
	61.0	64.5	66.0	-	62.0
20/08/03 (Wed)	60.5	65.0	63.5	-	62.0
	61.0	63.0	64.0	-	62.0
	60.5	64.0	63.5	-	61.0
27/08/03 (Wed)	60.5	64.0	65.0	-	63.0
	61.0	63.0	65.5	-	62.5
	61.0	63.0	64.0	-	63.0
05/09/03 (Fri)	60.0	63.5	64.0	-	61.5
	60.5	65.0	63.5	-	62.0
	59.5	64.0	64.0	-	63.5
11/09/03 (Thu)	59.5	62.0	64.0	-	63.5
	60.5	62.5	63.5	-	64.0
	60.0	62.5	63.5	-	62.5
19/09/03 (Fri)	60.5	64.0	65.5	-	63.0
	60.0	63.5	66.0	-	62.5
	60.0	63.5	66.0	-	63.5
24/09/03 (Wed)	60.5	63.5	64.0	-	62.5
	61.5	62.5	63.0	-	62.0
	62.0	62.5	63.0	-	62.5

Date of Monitoring	Monitoring Results, L_{eq} dB(A) (5 min)				
	NM3	NM4	NM6	NM7*	NM8
29/09/03 (Mon)	60.0	62.5	64.0	-	63.0
	60.5	65.0	63.0	-	62.0
	60.0	65.5	63.0	-	62.5

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

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



5. AIR QUALITY MONITORING

5.1 24-hour TSP Monitoring Results

A total of fifteen 24-hour TSP monitoring were conducted at each location from July 2003 to September 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 July 2003 to September 2003.

Date of Monitoring	24-hour TSP Monitoring Results,(μg/m³)				
	AM2	AM3	AM4	AM5	AM6
05/07/03 (Sat)	34.3	57.2	55.1	36.8	36.7
12/07/03 (Sat)	21.4	22.0	31.4	22.1	25.4
18/07/03 (Fri)	40.2	45.8	31.8	73.6	40.5
24/07/03 (Thu)	41.6	42.2	42.2	46.3	41.2
30/07/03 (Wed)	33.9	31.8	36.4	38.4	31.7
05/08/03 (Tue)	74.9	80.0	75.8	82.2	59.4
11/08/03 (Mon)	44.1	46.0	37.1	48.7	30.1
16/08/03 (Sat)	38.2	41.3	42.2	53.2	29.7
23/08/03 (Sat)	34.3	37.3	32.3	42.7	33.1
29/08/03 (Fri)	46.7	47.1	46.8	56.4	54.3
04/09/03 (Thu)	27.0	24.5	25.6	24.4	20.8
10/09/03 (Wed)	127.4	133.4	121.3	114.0	123.3
16/09/03 (Tue)	16.1	16.0	14.7	11.0	20.0
22/09/03 (Mon)	82.3	99.7	92.5	84.7	80.5
26/09/03 (Fri)	42.0	46.5	40.0	31.7	42.6

5.2 1-hour Monitoring Results

A total of forty-eight 1-hour TSP monitoring were conducted at each location from July 2003 to September 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 July 2003 to September 2003**.**

Date of Monitoring	1-hour TSP Monitoring Results, (μg/m³)				
	AM2	AM3	AM4	AM5	AM6
02/07/03 (Wed)	106.3	160.0	107.3	106.3	136.9
	110.7	158.5	104.1	105.5	136.4
	126.3	176.0	137.6	137.7	160.8
09/07/03 (Wed)	154.6	151.7	185.9	196.3	172.4
	142.1	114.6	163.2	175.4	148.7
	146.8	127.6	164.1	175.9	152.8
16/07/03 (Wed)	118.5	155.6	139.4	164.8	113.7
	118.5	152.6	142.5	163.7	111.9
	123.7	155.7	140.4	163.9	120.5
22/07/03 (Tue)	141.5	146.4	182.5	171.6	137.3
	140.1	143.5	180.3	166.6	135.8
	129.9	137.7	175.1	165.3	157.6
25/07/03 (Fri)	92.5	168.8	97.0	174.6	97.0
	91.0	171.6	97.6	174.6	101.7
	133.5	182.6	136.1	184.6	131.2
31/07/03 (Thu)	91.0	172.4	108.6	132.7	110.2
	91.7	173.3	113.7	114.0	105.5
	108.9	176.9	124.2	137.3	121.2
06/08/03 (Wed)	173.8	242.8	210.3	205.4	147.8
	167.9	216.5	177.0	203.7	137.7
	169.8	221.9	184.9	236.1	138.9
12/08/03 (Tue)	173.9	122.6	162.0	139.9	129.9
	170.3	125.2	159.5	133.0	131.7
	172.2	140.2	155.2	136.0	126.6
20/08/03 (Wed)	171.7	174.2	175.7	212.3	207.5
	156.1	156.6	160.8	202.3	196.1
	141.1	139.9	145.8	193.6	187.2
27/08/03 (Wed)	213.7	120.7	233.7	164.8	116.2
	195.6	130.9	216.6	163.7	104.3
	187.9	157.0	207.8	163.9	132.7

Date of Monitoring	1-hour TSP Monitoring Results, (μg/m³)				
	AM2	AM3	AM4	AM5	AM6
03/09/03 (Wed)	156.9	155.9	161.0	194.9	160.7
	143.0	136.2	128.8	185.2	136.8
	137.3	130.5	132.0	184.8	135.8
5/09/03 (Fri)	190.3	181.7	133.3	124.4	135.3
	184.9	175.0	116.8	110.9	121.6
	182.7	176.3	116.6	100.5	118.9
11/09/03 (Thu)	193.5	173.5	210.3	228.0	250.8
	192.9	174.7	210.0	238.5	259.7
	199.6	182.4	216.4	235.3	247.7
19/09/03 (Fri)	196.5	225.9	203.0	193.9	203.2
	184.5	214.7	187.4	181.3	189.9
	165.7	197.0	170.8	159.6	174.2
24/09/03 (Wed)	177.2	150.4	132.6	145.5	164.5
	172.2	138.6	147.2	130.0	154.4
	169.8	136.5	163.0	128.1	155.9
29/09/03 (Mon)	154.7	189.4	106.0	163.2	145.9
	146.7	159.2	112.3	144.3	125.1
	147.3	182.7	131.8	149.3	129.6

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

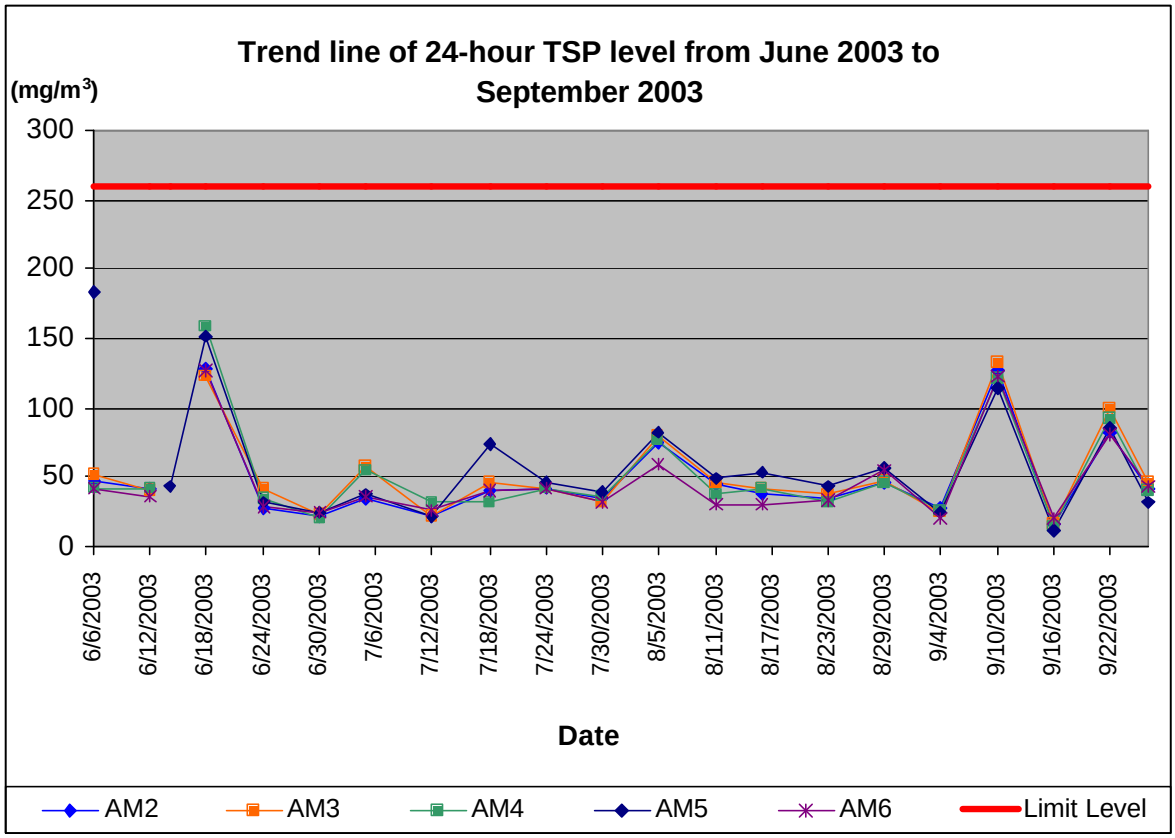
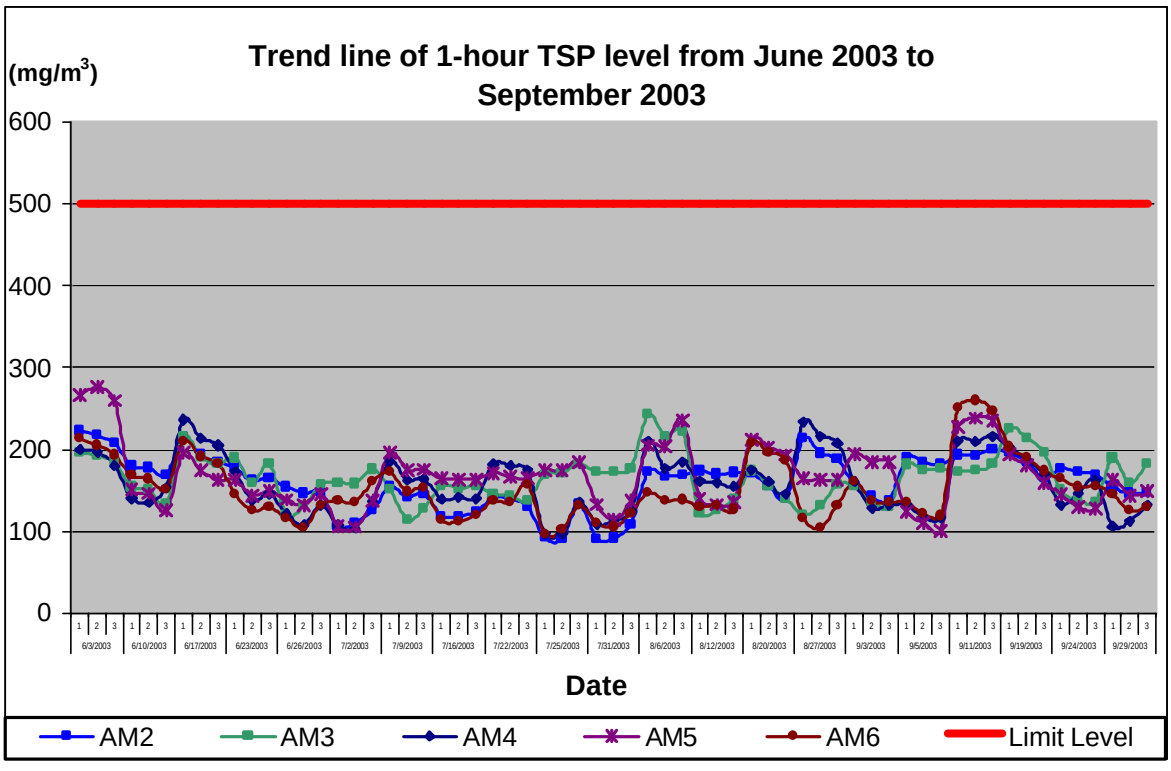


Figure 5-2 - Trend of 1-hour TSP levels from June 2003 to September 2003.



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

6.1 Waste Disposal

A total of 16 loads of Construction and Demolition Waste (C&D Waste) had been disposed of at NENT Landfill from July 2003 to September 2003. The total tonnage of the waste disposal from July 2003 to September 2003 was 133.83 tonnes.

A total of 2002 loads of rocks (ϕ > 400mm) have been disposed of at the follow government project sites from July 2003 to September 2003:

- *Contract No. FL 26/01 River Training for Upper River Indus – Completion of the Remaining Works between Man Kam To Road and KCRC Bridges*
- *Contract No. FL27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai, and*
- *Contract No. CV/2002/05 Public Filling Barging Point at Kai Tak*

The total quantity of the disposed rocks was 14314.3 m^3 from July 2003 to September 2003.

A total of 480 loads of inert material have been disposed of at Public Filling Area from July 2003 to September 2003. The total quantity of the disposed inert materials was 2880.0 m^3 from July 2003 to September 2003.

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

Table 6-1 - Waste Disposal Summary.

Month	Number of Loads to NENT	Total Disposed Tonnage (tonnes)	Number of Loads to others gov. designated project#	Total Disposed Quantity (m^3)	Number of Loads to Public Filling Area	Total Disposed Quantity (m^3)
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

Month	Number of Loads to NENT	Total Disposed Tonnage (tonnes)	Number of Loads to others gov. designated project#	Total Disposed Quantity (m^3)	Number of Loads to Public Filling Area	Total Disposed Quantity (m^3)
August 2002*	-	-	548	3,390.6	63	372.0
September 2002	42	225.6	3,732	22,719.8	9	54.0
October 2002	48	378.0	2,989	18,740.2	69	414.0
November 2002	94	725.0	1,232	7,565.7	80	480.0
December 2002	21	147.3	3,035	21,668.1	66	396.0
January 2003	7	45.5	2,351	16,809.7	150	900.0
February 2003	7	77.9	1,929	13,792.4	56	336.0
March 2003	39	267.5	740	5,291.0	49	294.0
April 2003	9	38.4	613	4,383.0	152	912.0
May 2003*	14	141.7	835	5,970.3	286	1,716.0
June 2003*	29	238.7	1,738	11826.1	172	1,914.0
July 2003	30	184.8	1563	11175.5	114	684.0
August 2003	29	210.3	1708	12212.2	276	1656.0
September 2003	16	133.8	2002	14314.3	480	2880.0
Total	1618	11749.1	33716	239939.1	7384	44814.0

Note: #

- TDD Contract No. YL 46/99 Tin Shui Wai Further Development - Road D3 and Constructed Wetland,
- Contract No. FL 27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai
- TDD Contract No. FL 26/01 River Training for Upper River Indus - Completion of the Remaining Works between Man Kam To Road and KCRC Bridges and
- CED Contract No. CV/99/10 Pak Shek Kok Reclamation for Public Filling, Remaining Works.
- HD Contract No. HY/2001/18 Sai Sha Road Widening between Kam Ying Road and Future Truck Road T7 Junction

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

6.2 EPD Site Inspection

ET was informed by the CT that EPD visited the site on 08/07/03, 10/07/03, 18/07/03, 29/07/03, 28/08/03 and 15/09/03.

6.3 Complaint Record

A total of three public complaints regarding construction noise were received on 21/08/03, 23/08/03 and 15/09/03 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
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

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

6.4 Non-compliance Record

There was no exceedance recorded in the period from July 2003 to September 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 September 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

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

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

Period	24-hours TSP Monitoring		
	Number of Monitoring	Number of Compliance	Compliance Percentage (%)
February 2001	-	-	-
March 2002	5	5	100
April 2001	5	5	100
May 2001	5	5	100
June 2001	5	5	100
July 2001	5	5	100
August 2001	5	5	100
September 2001	5	5	100
October 2001	5	5	100
November 2001	5	5	100

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

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

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

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

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

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 July 2003 to September 2003

Details of Day Time Noise Impact Monitoring

Month	Date	NSR No.	Time periods		Weather condition	Avg. wind speed (m/s)	Noise Level dB(A)		
			Start	Finish			L_{eq}	L_{10}	L_{90}
Jul-03	2-Jul-03	NM2	11:30	12:00	Sunny	0.5	64.5	66.5	60.5
Jul-03	2-Jul-03	NM3	10:45	11:15	Sunny	0.4	62.5	64.0	59.0
Jul-03	2-Jul-03	NM4	10:00	10:30	Sunny	0.5	67.5	70.0	63.0
Jul-03	2-Jul-03	NM6	8:00	8:30	Sunny	0.5	65.0	68.5	61.0
Jul-03	2-Jul-03	NM7	8:45	9:15	Sunny	0.4	66.5	69.0	62.0
Jul-03	2-Jul-03	NM8	9:20	9:50	Sunny	0.6	69.0	73.5	63.5
Jul-03	9-Jul-03	NM2	10:40	11:10	Sunny	0.5	63.5	65.0	60.5
Jul-03	9-Jul-03	NM3	11:20	11:50	Sunny	0.4	62.0	65.0	58.0
Jul-03	9-Jul-03	NM4	10:00	10:30	Sunny	0.5	66.5	71.0	63.0
Jul-03	9-Jul-03	NM6	9:15	9:45	Sunny	0.5	67.5	70.0	62.5
Jul-03	9-Jul-03	NM7	14:58	15:28	Sunny	0.7	62.5	65.0	58.0
Jul-03	9-Jul-03	NM8	14:20	14:50	Sunny	0.5	69.9	72.5	65.5
Jul-03	16-Jul-03	NM2	13:00	13:30	Sunny	0.5	62.0	64.5	58.0
Jul-03	16-Jul-03	NM3	11:00	11:30	Sunny	0.4	60.5	63.0	57.0
Jul-03	16-Jul-03	NM4	10:05	10:35	Sunny	0.4	64.5	68.0	60.0
Jul-03	16-Jul-03	NM6	8:05	8:35	Sunny	0.5	67.0	69.5	61.5
Jul-03	16-Jul-03	NM7	8:45	9:15	Sunny	0.5	64.5	67.0	59.5
Jul-03	16-Jul-03	NM8	9:20	9:50	Sunny	0.5	70.5	74.0	62.0
Jul-03	22-Jul-03	NM2	11:30	12:00	sunny	0.5	65.0	68.0	59.5
Jul-03	22-Jul-03	NM3	10:45	11:15	sunny	0.4	63.0	66.5	58.0
Jul-03	22-Jul-03	NM4	10:00	10:30	sunny	0.5	66.4	68.0	61.5
Jul-03	22-Jul-03	NM6	8:00	8:30	sunny	0.4	64.5	67.0	60.0
Jul-03	22-Jul-03	NM7	8:50	9:20	sunny	0.6	65.0	69.5	60.5
Jul-03	22-Jul-03	NM8	9:25	9:55	sunny	0.5	70.0	72.5	62.0
Jul-03	31-Jul-03	NM2	8:00	8:30	sunny	0.6	62.5	65.0	60.0
Jul-03	31-Jul-03	NM3	13:00	13:30	sunny	0.5	60.5	64.0	58.0
Jul-03	31-Jul-03	NM4	8:50	9:20	sunny	0.6	66.0	69.5	62.0
Jul-03	31-Jul-03	NM6	9:40	10:10	sunny	0.7	67.5	72.0	62.0
Jul-03	31-Jul-03	NM7	10:20	10:50	sunny	0.8	64.0	67.5	62.0
Jul-03	31-Jul-03	NM8	11:00	11:30	sunny	0.5	69.0	73.5	62.0
Aug-03	6-Aug-03	NM2	8:10	8:40	sunny	0.4	62.5	65.0	60.5
Aug-03	6-Aug-03	NM3	9:10	9:40	sunny	0.5	60.5	64.5	58.0
Aug-03	6-Aug-03	NM4	9:55	10:25	sunny	0.6	65.8	68.0	62.0
Aug-03	6-Aug-03	NM6	10:50	11:20	sunny	0.7	69.0	74.5	63.0
Aug-03	6-Aug-03	NM7	13:20	13:50	sunny	0.6	66.0	69.0	60.5
Aug-03	6-Aug-03	NM8	13:55	14:25	sunny	0.8	68.0	73.5	61.5
Aug-03	12-Aug-03	NM2	9:00	9:30	sunny	0.5	62.5	65.0	60.0
Aug-03	12-Aug-03	NM3	8:15	8:45	sunny	0.4	60.5	63.0	57.5
Aug-03	12-Aug-03	NM4	9:50	10:20	sunny	0.5	67.5	71.5	62.5
Aug-03	12-Aug-03	NM6	13:00	13:30	sunny	0.5	69.5	74.5	63.0
Aug-03	12-Aug-03	NM7	10:30	11:00	sunny	0.6	68.0	74.5	62.0
Aug-03	12-Aug-03	NM8	11:10	11:40	sunny	0.5	70.5	75.0	62.5
Aug-03	20-Aug-03	NM2	13:50	14:20	sunny	0.5	65.0	68.5	61.0
Aug-03	20-Aug-03	NM3	13:00	13:30	sunny	0.5	62.0	64.5	60.5
Aug-03	20-Aug-03	NM4	11:30	12:00	sunny	0.5	66.0	69.5	60.5
Aug-03	20-Aug-03	NM6	10:40	11:10	sunny	0.4	68.5	73.0	63.0
Aug-03	20-Aug-03	NM7	9:00	9:30	sunny	0.5	68.0	74.0	62.0
Aug-03	20-Aug-03	NM8	9:40	10:10	sunny	0.6	69.5	73.0	61.5
Aug-03	27-Aug-03	NM2	11:30	12:00	sunny	0.5	64.0	67.5	59.0
Aug-03	27-Aug-03	NM3	10:55	11:25	sunny	0.4	62.5	66.0	60.0
Aug-03	27-Aug-03	NM4	10:20	10:50	sunny	0.6	69.5	74.0	61.0
Aug-03	27-Aug-03	NM6	9:45	10:15	sunny	0.6	68.8	75.0	63.0
Aug-03	27-Aug-03	NM7	9:00	9:30	sunny	0.6	67.7	70.0	62.0
Aug-03	27-Aug-03	NM8	8:15	8:45	sunny	0.6	70.0	74.5	63.5

Details of Day Time Noise Impact Monitoring

Month	Date	NSR No.	Time periods		Weather condition	Avg. wind speed (m/s)	Noise Level dB(A)		
			Start	Finish			L_{eq}	L_{10}	L_{90}
Sep-03	5-Sep-03	NM2	10:45	11:15	Fine	0.4	63.0	65.5	60.5
Sep-03	5-Sep-03	NM3	11:30	12:00	Fine	0.3	62.0	66.0	60.0
Sep-03	5-Sep-03	NM4	10:10	10:40	Fine	0.6	68.5	71.5	62.0
Sep-03	5-Sep-03	NM6	9:25	9:55	Fine	0.7	67.5	71.5	61.5
Sep-03	5-Sep-03	NM7	8:40	9:10	Fine	0.5	68.0	73.5	62.5
Sep-03	5-Sep-03	NM8	8:00	8:30	Fine	0.6	70.0	75.5	63.0
Sep-03	11-Sep-03	NM2	13:00	13:30	Sunny	0.5	63.0	65.5	60.5
Sep-03	11-Sep-03	NM3	11:00	11:30	Sunny	0.4	60.5	63.0	58.0
Sep-03	11-Sep-03	NM4	10:20	10:50	Sunny	0.5	66.8	72.0	61.5
Sep-03	11-Sep-03	NM6	9:35	10:05	Sunny	0.6	67.5	72.0	60.5
Sep-03	11-Sep-03	NM7	8:00	8:30	Sunny	0.7	68.0	72.5	62.0
Sep-03	11-Sep-03	NM8	8:45	9:15	Sunny	0.7	69.5	74.0	63.0
Sep-03	19-Sep-03	NM2	9:00	9:30	Sunny	0.4	64.0	66.0	61.0
Sep-03	19-Sep-03	NM3	9:15	9:45	Sunny	0.3	62.5	65.5	60.0
Sep-03	19-Sep-03	NM4	9:50	10:20	Sunny	0.6	67.0	70.5	62.0
Sep-03	19-Sep-03	NM6	13:00	13:30	Sunny	0.5	68.5	73.0	62.5
Sep-03	19-Sep-03	NM7	10:40	11:10	Sunny	0.6	68.0	71.5	62.0
Sep-03	19-Sep-03	NM8	11:30	12:00	Sunny	0.5	70.0	74.5	63.0
Sep-03	24-Sep-03	NM2	13:00	13:30	sunny	0.4	65.0	68.0	60.5
Sep-03	24-Sep-03	NM3	11:25	11:55	sunny	0.5	63.0	65.5	60.0
Sep-03	24-Sep-03	NM4	10:50	11:20	sunny	0.5	68.5	74.0	62.0
Sep-03	24-Sep-03	NM6	10:00	10:30	sunny	0.6	67.0	71.5	63.0
Sep-03	24-Sep-03	NM7	9:15	9:45	sunny	0.5	65.8	70.0	60.5
Sep-03	24-Sep-03	NM8	8.30	9:00	sunny	0.6	67.5	70.5	62.5
Sep-03	29-Sep-03	NM2	11:00	11:30	sunny	0.5	69.5	72.5	65.5
Sep-03	29-Sep-03	NM3	11:15	11:45	sunny	0.6	68.5	73.0	66.0
Sep-03	29-Sep-03	NM4	10:00	10:30	sunny	0.5	70.0	72.0	65.5
Sep-03	29-Sep-03	NM6	10:10	10:40	sunny	0.6	68.7	71.0	61.5
Sep-03	29-Sep-03	NM7	9:00	9:30	sunny	0.6	71.0	74.0	64.5
Sep-03	29-Sep-03	NM8	9:10	9:40	sunny	0.5	72.4	75.5	66.5

Details of Evening time Noise Impact Monitoring

Month	Date	Set No.	NSR No.	Time periods		Weather condition	Avg. wind speed (m/s)	Noise Level dB(A)		
				Start	Finish			L_{eq}	L_{10}	L_{90}
Jul-03	2-Jul-03	1	NM3	20:30	20:35	fine	0.3	60.5	62.0	57.5
Jul-03	2-Jul-03	2	NM3	20:35	20:40	fine	0.3	60.0	61.5	58.0
Jul-03	2-Jul-03	3	NM3	20:40	20:45	fine	0.3	61.0	62.5	59.0
Jul-03	2-Jul-03	1	NM4	20:00	20:05	fine	0.5	62.0	64.5	59.0
Jul-03	2-Jul-03	2	NM4	20:05	20:10	fine	0.5	61.5	64.5	59.0
Jul-03	2-Jul-03	3	NM4	20:10	20:15	fine	0.5	62.5	65.0	60.0
Jul-03	2-Jul-03	1	NM6	19:00	19:05	fine	0.4	63.5	65.0	60.5
Jul-03	2-Jul-03	2	NM6	19:05	19:10	fine	0.4	62.0	64.5	60.0
Jul-03	2-Jul-03	3	NM6	19:10	19:15	fine	0.4	62.0	64.0	59.0
Jul-03	2-Jul-03	1	NM8	19:30	19:35	fine	0.4	60.5	63.0	57.5
Jul-03	2-Jul-03	2	NM8	19:35	19:40	fine	0.4	60.0	62.5	58.0
Jul-03	2-Jul-03	3	NM8	19:40	19:45	fine	0.4	60.5	63.0	58.5
Jul-03	9-Jul-03	1	NM3	20:35	20:40	fine	0.5	60.5	62.0	58.0
Jul-03	9-Jul-03	2	NM3	20:40	20:45	fine	0.5	60.0	62.5	57.5
Jul-03	9-Jul-03	3	NM3	20:45	20:50	fine	0.5	60.5	63.0	58.0
Jul-03	9-Jul-03	1	NM4	20:00	20:05	fine	0.4	62.5	65.0	59.0
Jul-03	9-Jul-03	2	NM4	20:05	20:10	fine	0.4	64.0	66.0	60.5
Jul-03	9-Jul-03	3	NM4	20:10	20:15	fine	0.4	63.0	65.5	60.0
Jul-03	9-Jul-03	1	NM6	19:00	19:05	fine	0.4	64.5	66.0	60.5
Jul-03	9-Jul-03	2	NM6	19:05	19:10	fine	0.4	63.5	65.5	60.0
Jul-03	9-Jul-03	3	NM6	19:10	19:15	fine	0.4	64.5	66.5	61.0
Jul-03	9-Jul-03	1	NM8	19:25	19:30	fine	0.4	62.0	64.0	60.5
Jul-03	9-Jul-03	2	NM8	19:30	19:35	fine	0.4	61.5	64.0	59.5
Jul-03	9-Jul-03	3	NM8	19:35	19:40	fine	0.4	62.5	65.0	60.0
Jul-03	16-Jul-03	1	NM3	21:00	21:05	fine	0.5	60.0	62.0	57.5
Jul-03	16-Jul-03	2	NM3	21:05	21:10	fine	0.5	60.5	63.0	58.0
Jul-03	16-Jul-03	3	NM3	21:10	21:15	fine	0.5	60.0	63.0	58.0
Jul-03	16-Jul-03	1	NM4	20:15	20:20	fine	0.5	63.0	65.0	60.0
Jul-03	16-Jul-03	2	NM4	20:20	20:25	fine	0.5	62.0	64.5	60.0
Jul-03	16-Jul-03	3	NM4	20:25	20:30	fine	0.5	62.0	65.0	59.0
Jul-03	16-Jul-03	1	NM6	19:00	19:05	fine	0.4	63.0	66.0	60.5
Jul-03	16-Jul-03	2	NM6	19:05	19:10	fine	0.4	62.5	65.0	60.0
Jul-03	16-Jul-03	3	NM6	19:10	19:15	fine	0.4	61.5	64.5	60.0
Jul-03	16-Jul-03	1	NM8	19:30	19:35	fine	0.5	61.5	64.0	59.5
Jul-03	16-Jul-03	2	NM8	19:35	19:40	fine	0.5	62.0	65.0	59.5
Jul-03	16-Jul-03	3	NM8	19:40	19:45	fine	0.5	61.0	64.0	60.0
Jul-03	22-Jul-03	1	NM3	19:00	19:05	fine	0.5	60.0	62.0	58.0
Jul-03	22-Jul-03	2	NM3	19:05	19:10	fine	0.5	60.5	63.0	58.0
Jul-03	22-Jul-03	3	NM3	19:10	19:15	fine	0.5	61.0	63.0	59.0
Jul-03	22-Jul-03	1	NM4	19:45	19:50	fine	0.5	63.5	66.0	60.5
Jul-03	22-Jul-03	2	NM4	19:50	19:55	fine	0.5	63.0	66.0	60.5
Jul-03	22-Jul-03	3	NM4	19:55	20:00	fine	0.5	63.5	66.5	60.0
Jul-03	22-Jul-03	1	NM6	21:30	21:35	fine	0.5	62.5	64.5	60.0
Jul-03	22-Jul-03	2	NM6	21:35	21:40	fine	0.5	63.0	66.0	60.5
Jul-03	22-Jul-03	3	NM6	21:40	21:45	fine	0.5	63.0	65.0	60.5
Jul-03	22-Jul-03	1	NM8	20:30	20:35	fine	0.5	62.0	65.0	58.0
Jul-03	22-Jul-03	2	NM8	20:35	20:40	fine	0.5	61.0	64.0	58.0
Jul-03	22-Jul-03	3	NM8	20:40	20:45	fine	0.5	62.0	64.0	58.5
Jul-03	31-Jul-03	1	NM3	10:00	10:05	fine	0.5	62.0	64.5	60.0
Jul-03	31-Jul-03	2	NM3	10:05	10:10	fine	0.5	60.5	62.0	58.0
Jul-03	31-Jul-03	3	NM3	10:10	10:15	fine	0.5	60.0	62.5	59.0
Jul-03	31-Jul-03	1	NM4	9:30	9:35	fine	0.5	61.5	63.0	60.0
Jul-03	31-Jul-03	2	NM4	9:35	9:40	fine	0.5	63.0	64.5	60.5
Jul-03	31-Jul-03	3	NM4	9:40	9:45	fine	0.5	63.5	65.0	61.0
Jul-03	31-Jul-03	1	NM6	8:40	8:45	fine	0.5	64.0	66.5	60.0
Jul-03	31-Jul-03	2	NM6	8:45	8:50	fine	0.5	62.0	64.0	60.0
Jul-03	31-Jul-03	3	NM6	8:50	8:55	fine	0.5	63.0	65.5	61.0
Jul-03	31-Jul-03	1	NM8	8:00	8:05	fine	0.5	61.5	64.5	60.0
Jul-03	31-Jul-03	2	NM8	8:05	8:10	fine	0.5	62.0	65.0	60.0
Jul-03	31-Jul-03	3	NM8	8:10	8:15	fine	0.5	62.0	64.5	59.0

Details of Evening time Noise Impact Monitoring

Month	Date	Set No.	NSR No.	Time periods		Weather condition	Avg. wind speed (m/s)	Noise Level dB(A)		
				Start	Finish			L_{eq}	L_{10}	L_{90}
Aug-03	6-Aug-03	1	NM3	19:00	19:05	fine	0.3	60.5	64.0	58.0
Aug-03	6-Aug-03	2	NM3	19:05	19:10	fine	0.3	63.0	65.5	59.0
Aug-03	6-Aug-03	3	NM3	19:10	19:15	fine	0.3	61.0	63.0	58.0
Aug-03	6-Aug-03	1	NM4	20:00	20:05	fine	0.4	64.0	67.0	60.5
Aug-03	6-Aug-03	2	NM4	20:05	20:10	fine	0.4	63.0	66.5	60.0
Aug-03	6-Aug-03	3	NM4	20:10	20:15	fine	0.4	64.0	66.5	61.0
Aug-03	6-Aug-03	1	NM6	21:50	21:55	fine	0.6	63.5	67.0	61.0
Aug-03	6-Aug-03	2	NM6	21:55	22:00	fine	0.6	60.5	64.0	58.0
Aug-03	6-Aug-03	3	NM6	22:00	22:05	fine	0.6	62.5	65.5	60.5
Aug-03	6-Aug-03	1	NM8	21:00	21:05	fine	0.5	64.0	66.0	60.5
Aug-03	6-Aug-03	2	NM8	21:05	21:10	fine	0.5	63.0	65.5	61.0
Aug-03	6-Aug-03	3	NM8	21:10	21:15	fine	0.5	62.0	65.5	60.0
Aug-03	12-Aug-03	1	NM3	21:00	21:05	fine	0.5	60.5	61.5	57.0
Aug-03	12-Aug-03	2	NM3	21:05	21:10	fine	0.5	60.0	62.5	58.0
Aug-03	12-Aug-03	3	NM3	21:10	21:15	fine	0.5	61.0	63.0	58.0
Aug-03	12-Aug-03	1	NM4	20:30	20:35	fine	0.6	65.0	68.0	60.5
Aug-03	12-Aug-03	2	NM4	20:35	20:40	fine	0.6	64.0	68.5	61.0
Aug-03	12-Aug-03	3	NM4	20:40	20:45	fine	0.6	64.5	68.0	60.5
Aug-03	12-Aug-03	1	NM6	19:00	19:05	fine	0.5	66.5	68.0	62.0
Aug-03	12-Aug-03	2	NM6	19:05	19:10	fine	0.5	65.8	68.0	62.5
Aug-03	12-Aug-03	3	NM6	19:10	19:15	fine	0.5	66.0	68.5	62.0
Aug-03	12-Aug-03	1	NM8	19:50	19:55	fine	0.6	63.0	65.5	60.0
Aug-03	12-Aug-03	2	NM8	19:55	20:00	fine	0.6	62.5	65.5	58.0
Aug-03	12-Aug-03	3	NM8	20:00	20:05	fine	0.6	62.0	65.0	58.5
Aug-03	20-Aug-03	1	NM3	21:30	21:35	fine	0.5	60.5	63.5	58.0
Aug-03	20-Aug-03	2	NM3	21:35	21:40	fine	0.5	61.0	64.5	60.0
Aug-03	20-Aug-03	3	NM3	21:40	21:45	fine	0.5	60.5	64.0	59.0
Aug-03	20-Aug-03	1	NM4	20:50	20:55	fine	0.6	65.0	67.5	61.0
Aug-03	20-Aug-03	2	NM4	20:55	21:00	fine	0.6	63.0	66.5	61.0
Aug-03	20-Aug-03	3	NM4	21:00	21:05	fine	0.6	64.0	67.0	61.5
Aug-03	20-Aug-03	1	NM6	19:00	19:05	fine	0.4	63.5	66.0	60.5
Aug-03	20-Aug-03	2	NM6	19:05	19:10	fine	0.4	64.0	67.5	61.0
Aug-03	20-Aug-03	3	NM6	19:10	19:15	fine	0.4	63.5	67.0	61.0
Aug-03	20-Aug-03	1	NM8	19:50	19:55	fine	0.5	62.0	64.5	60.5
Aug-03	20-Aug-03	2	NM8	19:55	20:00	fine	0.5	62.0	65.0	60.0
Aug-03	20-Aug-03	3	NM8	20:00	20:05	fine	0.5	61.0	64.5	59.0
Aug-03	27-Aug-03	1	NM3	19:00	19:05	fine	0.4	60.5	63.0	58.0
Aug-03	27-Aug-03	2	NM3	19:05	19:10	fine	0.4	61.0	64.0	58.0
Aug-03	27-Aug-03	3	NM3	19:10	19:15	fine	0.4	61.0	63.5	58.5
Aug-03	27-Aug-03	1	NM4	19:50	19:55	fine	0.5	64.0	66.5	60.5
Aug-03	27-Aug-03	2	NM4	19:55	20:00	fine	0.5	63.0	66.0	60.0
Aug-03	27-Aug-03	3	NM4	20:00	20:05	fine	0.5	63.0	66.5	60.5
Aug-03	27-Aug-03	1	NM6	20:45	20:50	fine	0.5	65.0	68.5	60.5
Aug-03	27-Aug-03	2	NM6	20:50	20:55	fine	0.5	65.5	69.0	62.0
Aug-03	27-Aug-03	3	NM6	20:55	21:00	fine	0.5	64.0	68.5	61.0
Aug-03	27-Aug-03	1	NM8	21:45	21:50	fine	0.6	63.0	66.5	60.0
Aug-03	27-Aug-03	2	NM8	21:50	21:55	fine	0.6	62.5	65.0	59.0
Aug-03	27-Aug-03	3	NM8	21:55	22:00	fine	0.6	63.0	65.5	59.0

Details of Evening time Noise Impact Monitoring

Month	Date	Set No.	NSR No.	Time periods		Weather condition	Avg. wind speed (m/s)	Noise Level dB(A)		
				Start	Finish			L_{eq}	L_{10}	L_{90}
Sep-03	5-Sep-03	1	NM3	19:00	19:05	fine	0.5	60.0	63.0	57.5
Sep-03	5-Sep-03	2	NM3	19:05	19:10	fine	0.5	60.5	63.5	58.0
Sep-03	5-Sep-03	3	NM3	19:10	19:15	fine	0.5	59.5	63.0	57.5
Sep-03	5-Sep-03	1	NM4	19:55	20:00	fine	0.5	63.5	66.0	60.0
Sep-03	5-Sep-03	2	NM4	20:00	20:05	fine	0.5	65.0	67.5	61.0
Sep-03	5-Sep-03	3	NM4	20:05	20:10	fine	0.5	64.0	66.5	60.5
Sep-03	5-Sep-03	1	NM6	21:50	21:55	fine	0.5	64.0	66.5	60.5
Sep-03	5-Sep-03	2	NM6	21:55	22:00	fine	0.5	63.5	67.0	61.0
Sep-03	5-Sep-03	3	NM6	22:00	22:05	fine	0.5	64.0	67.0	61.5
Sep-03	5-Sep-03	1	NM8	21:00	21:05	fine	0.5	61.5	65.0	60.0
Sep-03	5-Sep-03	2	NM8	21:05	21:10	fine	0.5	62.0	63.5	59.0
Sep-03	5-Sep-03	3	NM8	21:10	21:15	fine	0.5	62.0	65.0	59.0
Sep-03	11-Sep-03	1	NM3	19:00	19:05	fine	0.4	59.5	61.5	58.0
Sep-03	11-Sep-03	2	NM3	19:05	19:10	fine	0.4	60.5	62.0	58.5
Sep-03	11-Sep-03	3	NM3	19:10	19:15	fine	0.4	60.0	62.0	58.0
Sep-03	11-Sep-03	1	NM4	19:50	19:55	fine	0.5	62.0	65.0	59.5
Sep-03	11-Sep-03	2	NM4	19:55	20:00	fine	0.5	62.5	65.5	60.0
Sep-03	11-Sep-03	3	NM4	20:00	20:05	fine	0.5	62.5	66.0	60.0
Sep-03	11-Sep-03	1	NM6	20:40	20:45	fine	0.6	64.0	67.5	61.0
Sep-03	11-Sep-03	2	NM6	20:45	20:50	fine	0.6	63.5	67.0	60.5
Sep-03	11-Sep-03	3	NM6	20:50	20:55	fine	0.6	63.5	67.0	62.0
Sep-03	11-Sep-03	1	NM8	21:30	21:35	fine	0.5	63.0	65.0	60.5
Sep-03	11-Sep-03	2	NM8	21:35	21:40	fine	0.5	64.0	66.5	61.0
Sep-03	11-Sep-03	3	NM8	21:40	21:45	fine	0.5	62.5	65.5	60.0
Sep-03	19-Sep-03	1	NM3	19:00	19:05	fine	0.4	60.5	64.0	58.0
Sep-03	19-Sep-03	2	NM3	19:05	19:10	fine	0.4	60.0	63.5	58.0
Sep-03	19-Sep-03	3	NM3	19:10	19:15	fine	0.4	60.0	64.0	59.0
Sep-03	19-Sep-03	1	NM4	19:40	19:45	fine	0.6	64.0	67.0	60.5
Sep-03	19-Sep-03	2	NM4	19:45	19:50	fine	0.6	63.5	67.0	61.0
Sep-03	19-Sep-03	3	NM4	19:50	19:55	fine	0.6	63.5	67.0	60.0
Sep-03	19-Sep-03	1	NM6	20:30	20:35	fine	0.6	65.5	67.5	61.5
Sep-03	19-Sep-03	2	NM6	20:35	20:40	fine	0.6	66.0	68.0	60.5
Sep-03	19-Sep-03	3	NM6	20:40	20:45	fine	0.6	66.0	68.5	61.0
Sep-03	19-Sep-03	1	NM8	21:00	21:05	fine	0.5	63.0	65.5	60.5
Sep-03	19-Sep-03	2	NM8	21:05	21:10	fine	0.5	62.5	66.0	60.5
Sep-03	19-Sep-03	3	NM8	21:10	21:15	fine	0.5	63.5	66.0	61.0
Sep-03	24-Sep-03	1	NM3	21:20	21:25	fine	0.4	60.5	63.0	58.0
Sep-03	24-Sep-03	2	NM3	21:25	21:30	fine	0.4	61.5	64.0	59.0
Sep-03	24-Sep-03	3	NM3	21:30	21:35	fine	0.4	62.0	64.0	59.0
Sep-03	24-Sep-03	1	NM4	20:40	20:45	fine	0.4	63.5	66.0	60.5
Sep-03	24-Sep-03	2	NM4	20:45	20:50	fine	0.4	62.5	65.5	60.0
Sep-03	24-Sep-03	3	NM4	20:50	20:55	fine	0.4	62.5	66.0	59.0
Sep-03	24-Sep-03	1	NM6	19:00	19:05	fine	0.5	64.0	66.5	60.5
Sep-03	24-Sep-03	2	NM6	19:05	19:10	fine	0.5	63.0	66.0	60.0
Sep-03	24-Sep-03	3	NM6	19:10	19:15	fine	0.5	63.0	65.5	59.0
Sep-03	24-Sep-03	1	NM8	19:50	19:55	fine	0.6	62.5	65.0	59.0
Sep-03	24-Sep-03	2	NM8	19:55	20:00	fine	0.6	62.0	65.0	58.5
Sep-03	24-Sep-03	3	NM8	20:00	20:05	fine	0.6	62.5	64.0	60.0
Sep-03	29-Sep-03	1	NM3	19:00	19:05	fine	0.3	60.0	63.0	57.0
Sep-03	29-Sep-03	2	NM3	19:05	19:10	fine	0.3	60.5	64.0	57.5
Sep-03	29-Sep-03	3	NM3	19:10	19:15	fine	0.3	60.0	63.0	57.5
Sep-03	29-Sep-03	1	NM4	19:45	19:50	fine	0.5	62.5	65.0	60.0
Sep-03	29-Sep-03	2	NM4	19:50	19:55	fine	0.5	65.0	67.5	62.0
Sep-03	29-Sep-03	3	NM4	19:55	20:00	fine	0.5	65.5	68.0	62.0
Sep-03	29-Sep-03	1	NM6	21:40	21:45	fine	0.6	64.0	66.5	61.0
Sep-03	29-Sep-03	2	NM6	21:45	21:50	fine	0.6	63.0	67.0	60.5
Sep-03	29-Sep-03	3	NM6	21:50	21:55	fine	0.6	63.0	66.5	61.0
Sep-03	29-Sep-03	1	NM8	20:50	20:55	fine	0.5	63.0	65.5	61.0
Sep-03	29-Sep-03	2	NM8	20:55	21:00	fine	0.5	62.0	65.0	60.5
Sep-03	29-Sep-03	3	NM8	21:00	21:05	fine	0.5	62.5	65.0	60.0

APPENDIX 2

24-hour TSP Monitoring Results for July 2003 to September 2003

Details of 24-Hour TSP Monitoring

Filter No.	Month	Date	Receptor No.	Weather condition	Site condition	Filter Weight (g)		TSP weight (g)	Flow Rate (m^3/min)		Average Flow Rate (m^3/min)	Elapse Time		Sampling Time (mins.)	Total vol. (m^3)	24-hour TSP Level ($\mu g/m^3$)
						Initial	Final		Initial	Final		Start	Finish			
EI11	Jul-03	5-Jul-03	AM2	Sunny	normal operation	3.4554	3.5188	0.0634	1.2849	1.2824	1.2837	3675.64	3699.64	1440.00	1848.46	34.3
EI12	Jul-03	5-Jul-03	AM3	Sunny	normal operation	3.4750	3.5726	0.0976	1.1859	1.1828	1.1844	3620.89	3644.89	1440.00	1705.46	57.2
EI13	Jul-03	5-Jul-03	AM4	Sunny	normal operation	3.4546	3.5513	0.0967	1.2194	1.2164	1.2179	3658.22	3682.22	1440.00	1753.78	55.1
EI14	Jul-03	5-Jul-03	AM5	Sunny	normal operation	3.4609	3.5364	0.0755	1.4268	1.4202	1.4235	3360.84	3384.84	1440.00	2049.84	36.8
EI15	Jul-03	5-Jul-03	AM6	Sunny	normal operation	3.4548	3.5239	0.0691	1.3087	1.3053	1.3070	1792.45	1816.45	1440.00	1882.08	36.7
EI63	Jul-03	12-Jul-03	AM2	Sunny	normal operation	3.4987	3.5372	0.0385	1.2469	1.2507	1.2488	3699.64	3723.64	1440.00	1798.27	21.4
EI64	Jul-03	12-Jul-03	AM3	Sunny	normal operation	3.4976	3.5372	0.0396	1.2493	1.2541	1.2517	3644.89	3668.88	1439.40	1801.70	22.0
EI65	Jul-03	12-Jul-03	AM4	Sunny	normal operation	3.4846	3.5362	0.0516	1.1380	1.1420	1.1400	3682.22	3706.21	1439.40	1640.92	31.4
EI66	Jul-03	12-Jul-03	AM5	Sunny	normal operation	3.4796	3.5257	0.0461	1.4425	1.4523	1.4474	3384.84	3408.84	1440.00	2084.26	22.1
EI67	Jul-03	12-Jul-03	AM6	Sunny	normal operation	3.4716	3.5187	0.0471	1.2839	1.2881	1.2860	1816.45	1840.45	1440.00	1851.84	25.4
EJ01	Jul-03	18-Jul-03	AM2	Sunny	normal operation	3.4225	3.4948	0.0723	1.2507	1.2507	1.2507	3723.64	3747.63	1439.40	1800.26	40.2
EJ02	Jul-03	18-Jul-03	AM3	Sunny	normal operation	3.4328	3.5135	0.0807	1.2242	1.2242	1.2242	3668.88	3692.88	1440.00	1762.85	45.8
EJ03	Jul-03	18-Jul-03	AM4	Sunny	normal operation	3.4219	3.4657	0.0438	1.0181	0.8941	0.9561	3706.21	3730.22	1440.60	1377.36	31.8
EJ04	Jul-03	18-Jul-03	AM5	Sunny	normal operation	3.4267	3.5119	0.0852	0.8035	0.8035	0.8035	3408.84	3432.84	1440.00	1157.04	73.6
EJ05	Jul-03	18-Jul-03	AM6	Sunny	normal operation	3.4406	3.5173	0.0767	1.3145	1.3145	1.3145	1840.45	1864.45	1440.00	1892.88	40.5
EJ39	Jul-03	24-Jul-03	AM2	Sunny	normal operation	3.3909	3.4657	0.0748	1.2507	1.2471	1.2489	3747.63	3771.64	1440.60	1799.17	41.6
EJ40	Jul-03	24-Jul-03	AM3	Sunny	normal operation	3.3909	3.4652	0.0743	1.2242	1.2198	1.2220	3692.88	3716.89	1440.60	1760.41	42.2
EJ41	Jul-03	24-Jul-03	AM4	Sunny	normal operation	3.3827	3.4482	0.0655	1.0800	1.0766	1.0783	3730.22	3754.22	1440.00	1552.75	42.2
EJ42	Jul-03	24-Jul-03	AM5	Sunny	normal operation	3.4157	3.5060	0.0903	1.3596	1.3509	1.3553	3432.84	3456.84	1440.00	1951.56	46.3
EJ43	Jul-03	24-Jul-03	AM6	Sunny	normal operation	3.4212	3.5014	0.0802	1.3145	1.3892	1.3519	1864.45	1888.45	1440.00	1946.66	41.2
EK59	Jul-03	30-Jul-03	AM2	Sunny	normal operation	3.5122	3.5732	0.0610	1.2471	1.2493	1.2482	3771.64	3795.64	1440.00	1797.41	33.9
EK60	Jul-03	30-Jul-03	AM3	Sunny	normal operation	3.5243	3.5803	0.0560	1.2198	1.2225	1.2212	3716.89	3740.89	1440.00	1758.46	31.8
EK61	Jul-03	30-Jul-03	AM4	Sunny	normal operation	3.5266	3.5896	0.0630	1.2000	1.2025	1.2013	3754.22	3778.22	1440.00	1729.80	36.4
EK62	Jul-03	30-Jul-03	AM5	Sunny	normal operation	3.5406	3.6154	0.0748	1.3509	1.3563	1.3536	3456.84	3480.84	1440.00	1949.18	38.4
EK63	Jul-03	30-Jul-03	AM6	Sunny	normal operation	3.5369	3.5980	0.0611	1.3104	1.3656	1.3380	1888.45	1912.45	1440.00	1926.72	31.7
EK93	Aug-03	5-Aug-03	AM2	Sunny	normal operation	3.4146	3.5491	0.1345	1.2493	1.2457	1.2475	3795.64	3819.64	1440.00	1796.40	74.9
EK94	Aug-03	5-Aug-03	AM3	Sunny	normal operation	3.4214	3.5620	0.1406	1.2225	1.2181	1.2203	3740.89	3764.89	1440.00	1757.23	80.0
EK95	Aug-03	5-Aug-03	AM4	Sunny	normal operation	3.4293	3.5537	0.1244	1.1406	1.1368	1.1387	3778.22	3802.23	1440.60	1640.41	75.8
EK96	Aug-03	5-Aug-03	AM5	Sunny	normal operation	3.4402	3.6003	0.1601	1.3563	1.3475	1.3519	3480.84	3504.85	1440.60	1947.55	82.2
EK97	Aug-03	5-Aug-03	AM6	Sunny	normal operation	3.3965	3.4996	0.1031	1.2076	1.2040	1.2058	1912.45	1936.45	1440.00	1736.35	59.4
EL28	Aug-03	11-Aug-03	AM2	Sunny	normal operation	3.3930	3.4722	0.0792	1.2457	1.2485	1.2471	3819.64	3843.64	1440.00	1795.82	44.1
EL29	Aug-03	11-Aug-03	AM3	Sunny	normal operation	3.3981	3.4789	0.0808	1.2181	1.2215	1.2198	3764.89	3788.89	1440.00	1756.51	46.0
EL30	Aug-03	11-Aug-03	AM4	Sunny	normal operation	3.3731	3.4372	0.0641	1.1985	1.2015	1.2000	3802.23	3826.23	1440.00	1728.00	37.1
EL31	Aug-03	11-Aug-03	AM5	Sunny	normal operation	3.3834	3.4782	0.0948	1.3475	1.3542	1.3509	3504.85	3528.85	1440.00	1945.22	48.7
EL32	Aug-03	11-Aug-03	AM6	Sunny	normal operation	3.3926	3.4494	0.0568	1.3088	1.3120	1.3104	1936.45	1960.45	1440.00	1886.98	30.1
EL62	Aug-03	16-Aug-03	AM2	Sunny	normal operation	3.3795	3.4480	0.0685	1.2485	1.2424	1.2455	3843.64	3867.64	1440.00	1793.45	38.2

Details of 24-Hour TSP Monitoring

Filter No.	Month	Date	Receptor No.	Weather condition	Site condition	Filter Weight (g)		TSP weight (g)	Flow Rate (m^3/min)		Average Flow Rate (m^3/min)	Elapse Time		Sampling Time (mins.)	Total vol. (m^3)	24-hour TSP Level ($\mu g/m^3$)
						Initial	Final		Initial	Final		Start	Finish			
EL63	Aug-03	16-Aug-03	AM3	Sunny	normal operation	3.3902	3.4627	0.0725	1.2215	1.2141	1.2178	3788.89	3812.89	1440.00	1753.63	41.3
EL64	Aug-03	16-Aug-03	AM4	Sunny	normal operation	3.3855	3.4639	0.0784	1.3252	1.2561	1.2907	3826.23	3850.23	1440.00	1858.54	42.2
EL65	Aug-03	16-Aug-03	AM5	Sunny	normal operation	3.3768	3.4800	0.1032	1.3542	1.3394	1.3468	3528.85	3552.85	1440.00	1939.39	53.2
EL66	Aug-03	16-Aug-03	AM6	Sunny	normal operation	3.3775	3.4329	0.0554	1.3120	1.2790	1.2955	1960.45	1984.45	1440.00	1865.52	29.7
EM13	Aug-03	23-Aug-03	AM2	Sunny	normal operation	3.3911	3.4527	0.0616	1.2438	1.2505	1.2472	3867.64	3891.64	1440.00	1795.90	34.3
EM14	Aug-03	23-Aug-03	AM3	Sunny	normal operation	3.3827	3.4482	0.0655	1.2158	1.2239	1.2199	3812.89	3836.89	1440.00	1756.58	37.3
EM15	Aug-03	23-Aug-03	AM4	Sunny	normal operation	3.3537	3.4066	0.0529	1.1349	1.1418	1.1384	3850.23	3874.23	1440.00	1639.22	32.3
EM16	Aug-03	23-Aug-03	AM5	Sunny	normal operation	3.3798	3.4628	0.0830	1.3428	1.3591	1.3510	3552.85	3576.85	1440.00	1945.37	42.7
EM17	Aug-03	23-Aug-03	AM6	Sunny	normal operation	3.3843	3.4492	0.0649	1.3590	1.3669	1.3630	1984.45	2008.45	1440.00	1962.65	33.1
EM46	Aug-03	29-Aug-03	AM2	Cloudy	normal operation	3.5628	3.6468	0.0840	1.2505	1.2501	1.2503	3891.64	3915.64	1440.00	1800.43	46.7
EM47	Aug-03	29-Aug-03	AM3	Cloudy	normal operation	3.5397	3.6227	0.0830	1.2239	1.2235	1.2237	3836.89	3860.89	1440.00	1762.13	47.1
EM48	Aug-03	29-Aug-03	AM4	Cloudy	normal operation	3.5543	3.6416	0.0873	1.2967	1.2963	1.2965	3874.23	3898.23	1440.00	1866.96	46.8
EM49	Aug-03	29-Aug-03	AM5	Cloudy	normal operation	3.4015	3.5119	0.1104	1.3591	1.3583	1.3587	3576.85	3600.85	1440.00	1956.53	56.4
EM51	Aug-03	29-Aug-03	AM6	Cloudy	normal operation	3.3776	3.4763	0.0987	1.2615	1.2611	1.2613	2008.45	2032.45	1440.00	1816.27	54.3
EO09	Sep-03	4-Sep-03	AM2	Fine	normal operation	3.3867	3.4354	0.0487	1.2501	1.2505	1.2503	3915.64	3939.64	1440.00	1800.43	27.0
EO10	Sep-03	4-Sep-03	AM3	Fine	normal operation	3.4186	3.4617	0.0431	1.2235	1.2239	1.2237	3860.89	3884.89	1440.00	1762.13	24.5
EO11	Sep-03	4-Sep-03	AM4	Fine	normal operation	3.4186	3.4676	0.0490	1.3272	1.3277	1.3275	3898.23	3922.22	1439.40	1910.73	25.6
EO12	Sep-03	4-Sep-03	AM5	Fine	normal operation	3.4162	3.4640	0.0478	1.3583	1.3591	1.3587	3600.85	3624.85	1440.00	1956.53	24.4
EO13	Sep-03	4-Sep-03	AM6	Fine	normal operation	3.4185	3.4571	0.0386	1.2875	1.2879	1.2877	2032.45	2056.45	1440.00	1854.29	20.8
EO64	Sep-03	10-Sep-03	AM2	Cloudy	normal operation	3.3616	3.5961	0.2345	1.2749	1.2810	1.2780	3963.64	3987.64	1440.00	1840.25	127.4
EO65	Sep-03	10-Sep-03	AM3	Cloudy	normal operation	3.3724	3.6000	0.2276	1.1805	1.1886	1.1846	3908.89	3932.89	1440.00	1705.75	133.4
EO66	Sep-03	10-Sep-03	AM4	Cloudy	normal operation	3.4145	3.6547	0.2402	1.3705	1.3792	1.3749	3946.22	3970.22	1440.00	1979.78	121.3
EO67	Sep-03	10-Sep-03	AM5	Cloudy	normal operation	3.3741	3.6347	0.2606	1.5798	1.5949	1.5874	3648.85	3672.85	1440.00	2285.78	114.0
EO68	Sep-03	10-Sep-03	AM6	Cloudy	normal operation	3.3794	3.6030	0.2236	1.2551	1.2632	1.2592	2080.45	2104.45	1440.00	1813.18	123.3
EO83	Sep-03	16-Sep-03	AM2	Sunny	normal operation	3.4042	3.4349	0.0307	1.3243	1.3207	1.3225	3987.64	4011.64	1440.00	1904.40	16.1
EO84	Sep-03	16-Sep-03	AM3	Sunny	normal operation	3.4072	3.4345	0.0273	1.1886	1.1841	1.1864	3932.89	3956.89	1440.00	1708.34	16.0
EO85	Sep-03	16-Sep-03	AM4	Sunny	normal operation	3.3962	3.4242	0.0280	1.3246	1.3201	1.3224	3970.22	3994.22	1440.00	1904.18	14.7
EO86	Sep-03	16-Sep-03	AM5	Sunny	normal operation	3.4059	3.4275	0.0216	1.3631	1.3559	1.3595	3672.85	3696.85	1440.00	1957.68	11.0
EO87	Sep-03	16-Sep-03	AM6	Sunny	normal operation	3.4056	3.4419	0.0363	1.2632	1.2587	1.2610	2104.45	2128.45	1440.00	1815.77	20.0
EP33	Sep-03	22-Sep-03	AM2	Sunny	normal operation	3.5078	3.6645	0.1567	1.3207	1.3246	1.3227	4011.64	4035.64	1440.00	1904.62	82.3
EP34	Sep-03	22-Sep-03	AM3	Sunny	normal operation	3.4661	3.6364	0.1703	1.1841	1.1890	1.1866	3956.89	3980.89	1440.00	1708.63	99.7
EP35	Sep-03	22-Sep-03	AM4	Sunny	normal operation	3.4768	3.6531	0.1763	1.3201	1.3250	1.3226	3994.22	4018.23	1440.60	1905.27	92.5
EP36	Sep-03	22-Sep-03	AM5	Sunny	normal operation	3.4966	3.6860	0.1894	1.5480	1.5569	1.5525	3696.85	3720.85	1440.00	2235.53	84.7
EP37	Sep-03	22-Sep-03	AM6	Sunny	normal operation	3.5006	3.6531	0.1525	1.3122	1.3174	1.3148	2128.45	2152.47	1441.20	1894.89	80.5
EP52	Sep-03	26-Sep-03	AM2	Sunny	normal operation	3.4941	3.5741	0.0800	1.3246	1.3187	1.3217	4035.64	4059.64	1440.00	1903.18	42.0
EP53	Sep-03	26-Sep-03	AM3	Sunny	normal operation	3.4863	3.5657	0.0794	1.1890	1.1817	1.1854	3980.89	4004.89	1440.00	1706.90	46.5

Details of 24-Hour TSP Monitoring

Filter No.	Month	Date	Receptor No.	Weather condition	Site condition	Filter Weight (g)		TSP weight (g)	Flow Rate (m^3/min)		Average Flow Rate (m^3/min)	Elapse Time		Sampling Time (mins.)	Total vol. (m^3)	24-hour TSP Level ($\mu g/m^3$)
						Initial	Final		Initial	Final		Start	Finish			
EP54	Sep-03	26-Sep-03	AM4	Sunny	normal operation	3.5082	3.5827	0.0745	1.2977	1.2905	1.2941	4018.23	4042.23	1440.00	1863.50	40.0
EP55	Sep-03	26-Sep-03	AM5	Sunny	normal operation	3.5149	3.5839	0.0690	1.5183	1.5053	1.5118	3720.85	3744.85	1440.00	2176.99	31.7
EP56	Sep-03	26-Sep-03	AM6	Sunny	Normal operation	3.3726	3.4515	0.0789	1.2905	1.2830	1.2868	2152.47	2176.47	1440.00	1852.92	42.6

APPENDIX 3

1-hour TSP Monitoring Results for July 2003 to September 2003

Details of 1-Hour TSP Monitoring

Month	Date	Receptor No.	Set No.	Time periods		Weather condition	Site condition	Temp. (°C)	Pressure (mmHg)	1-hour TSP Level (μg/g³)
				Start	Finish					
Jul-03	2-Jul-03	AM2	1	8:50	9:50	Sunny	normal operation	31.0	761.0	106.3
Jul-03	2-Jul-03	AM2	2	9:10	10:10	Sunny	normal operation	31.0	761.0	110.7
Jul-03	2-Jul-03	AM2	3	10:50	11:50	Sunny	normal operation	31.0	761.0	126.3
Jul-03	2-Jul-03	AM3	1	8:12	9:12	Sunny	normal operation	31.0	761.0	160.0
Jul-03	2-Jul-03	AM3	2	9:12	10:12	Sunny	normal operation	31.0	761.0	158.5
Jul-03	2-Jul-03	AM3	3	10:12	11:12	Sunny	normal operation	31.0	761.0	176.0
Jul-03	2-Jul-03	AM4	1	8:16	9:16	Sunny	normal operation	31.0	761.0	107.3
Jul-03	2-Jul-03	AM4	2	9:16	10:16	Sunny	normal operation	31.0	761.0	104.1
Jul-03	2-Jul-03	AM4	3	10:16	11:16	Sunny	normal operation	31.0	761.0	137.6
Jul-03	2-Jul-03	AM5	1	8:19	9:19	Sunny	normal operation	31.0	761.0	106.3
Jul-03	2-Jul-03	AM5	2	9:19	10:19	Sunny	normal operation	31.0	761.0	105.5
Jul-03	2-Jul-03	AM5	3	10:19	11:19	Sunny	normal operation	31.0	761.0	137.7
Jul-03	2-Jul-03	AM6	1	8:17	9:17	Sunny	normal operation	31.0	761.0	136.9
Jul-03	2-Jul-03	AM6	2	9:17	10:17	Sunny	normal operation	31.0	761.0	136.4
Jul-03	2-Jul-03	AM6	3	10:17	11:17	Sunny	normal operation	31.0	761.0	160.8
Jul-03	9-Jul-03	AM2	1	9:02	10:02	Sunny	normal operation	32.0	758.0	154.6
Jul-03	9-Jul-03	AM2	2	10:02	11:02	Sunny	normal operation	32.0	758.0	142.1
Jul-03	9-Jul-03	AM2	3	11:02	12:02	Sunny	normal operation	32.0	758.0	146.8
Jul-03	9-Jul-03	AM3	1	9:07	10:07	Sunny	normal operation	32.0	758.0	151.7
Jul-03	9-Jul-03	AM3	2	10:07	11:07	Sunny	normal operation	32.0	758.0	114.6
Jul-03	9-Jul-03	AM3	3	11:07	12:07	Sunny	normal operation	32.0	758.0	127.6
Jul-03	9-Jul-03	AM4	1	8:53	9:53	Sunny	normal operation	32.0	758.0	185.9
Jul-03	9-Jul-03	AM4	2	9:53	10:53	Sunny	normal operation	32.0	758.0	163.2
Jul-03	9-Jul-03	AM4	3	10:53	11:53	Sunny	normal operation	32.0	758.0	164.1
Jul-03	9-Jul-03	AM5	1	9:06	10:06	Sunny	normal operation	32.0	758.0	196.3
Jul-03	9-Jul-03	AM5	2	10:06	11:06	Sunny	normal operation	32.0	758.0	175.4
Jul-03	9-Jul-03	AM5	3	11:06	12:06	Sunny	normal operation	32.0	758.0	175.9
Jul-03	9-Jul-03	AM6	1	8:58	9:58	Sunny	normal operation	32.0	758.0	172.4
Jul-03	9-Jul-03	AM6	2	9:58	10:58	Sunny	normal operation	32.0	758.0	148.7
Jul-03	9-Jul-03	AM6	3	10:58	11:58	Sunny	normal operation	32.0	758.0	152.8
Jul-03	16-Jul-03	AM2	1	8:22	9:22	Sunny	normal operation	30.0	760.0	118.5
Jul-03	16-Jul-03	AM2	2	9:22	10:22	Sunny	normal operation	30.0	760.0	118.5
Jul-03	16-Jul-03	AM2	3	10:22	11:22	Sunny	normal operation	30.0	760.0	123.7
Jul-03	16-Jul-03	AM3	1	8:22	9:22	Sunny	normal operation	30.0	760.0	155.6
Jul-03	16-Jul-03	AM3	2	9:22	10:22	Sunny	normal operation	30.0	760.0	152.6
Jul-03	16-Jul-03	AM3	3	10:22	11:22	Sunny	normal operation	30.0	760.0	155.7
Jul-03	16-Jul-03	AM4	1	8:21	9:21	Sunny	normal operation	30.0	760.0	139.4
Jul-03	16-Jul-03	AM4	2	9:21	10:21	Sunny	normal operation	30.0	760.0	142.5
Jul-03	16-Jul-03	AM4	3	10:21	11:21	Sunny	normal operation	30.0	760.0	140.4
Jul-03	16-Jul-03	AM5	1	8:13	9:13	Sunny	normal operation	30.0	760.0	164.8
Jul-03	16-Jul-03	AM5	2	9:13	10:13	Sunny	normal operation	30.0	760.0	163.7
Jul-03	16-Jul-03	AM5	3	10:13	11:13	Sunny	normal operation	30.0	760.0	163.9
Jul-03	16-Jul-03	AM6	1	8:15	9:15	Sunny	normal operation	30.0	760.0	113.7
Jul-03	16-Jul-03	AM6	2	9:15	10:15	Sunny	normal operation	30.0	760.0	111.9
Jul-03	16-Jul-03	AM6	3	10:15	11:15	Sunny	normal operation	30.0	760.0	120.5
Jul-03	22-Jul-03	AM2	1	8:17	9:17	Sunny	normal operation	30.0	760.0	141.5
Jul-03	22-Jul-03	AM2	2	9:17	10:17	Sunny	normal operation	30.0	760.0	140.1
Jul-03	22-Jul-03	AM2	3	10:17	11:17	Sunny	normal operation	30.0	760.0	129.9
Jul-03	22-Jul-03	AM3	1	8:25	9:25	Sunny	normal operation	30.0	760.0	146.4
Jul-03	22-Jul-03	AM3	2	9:25	10:25	Sunny	normal operation	30.0	760.0	143.5
Jul-03	22-Jul-03	AM3	3	10:25	11:25	Sunny	normal operation	30.0	760.0	137.7
Jul-03	22-Jul-03	AM4	1	8:06	9:06	Sunny	normal operation	30.0	760.0	182.5
Jul-03	22-Jul-03	AM4	2	9:06	10:06	Sunny	normal operation	30.0	760.0	180.3
Jul-03	22-Jul-03	AM4	3	10:06	11:06	Sunny	normal operation	30.0	760.0	175.1
Jul-03	22-Jul-03	AM5	1	8:21	9:21	Sunny	normal operation	30.0	760.0	171.6
Jul-03	22-Jul-03	AM5	2	9:21	10:21	Sunny	normal operation	30.0	760.0	166.6
Jul-03	22-Jul-03	AM5	3	10:21	11:21	Sunny	normal operation	30.0	760.0	165.3
Jul-03	22-Jul-03	AM6	1	8:42	9:42	Sunny	normal operation	30.0	760.0	137.3
Jul-03	22-Jul-03	AM6	2	9:42	10:42	Sunny	normal operation	30.0	760.0	135.8
Jul-03	22-Jul-03	AM6	3	10:42	11:42	Sunny	normal operation	30.0	760.0	157.6
Jul-03	25-Jul-03	AM2	1	8:17	9:17	Sunny	normal operation	30.0	760.0	92.5
Jul-03	25-Jul-03	AM2	2	9:17	10:17	Sunny	normal operation	30.0	760.0	91.0
Jul-03	25-Jul-03	AM2	3	10:17	11:17	Sunny	normal operation	30.0	760.0	133.5
Jul-03	25-Jul-03	AM3	1	7:22	8:22	Sunny	normal operation	30.0	760.0	168.8
Jul-03	25-Jul-03	AM3	2	8:22	9:22	Sunny	normal operation	30.0	760.0	171.6

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Details of 1-Hour TSP Monitoring

Month	Date	Receptor No.	Set No.	Time periods		Weather condition	Site condition	Temp. (°C)	Pressure (mmHg)	1-hour TSP Level (μg/g³)
				Start	Finish					
Jul-03	25-Jul-03	AM3	3	9:22	10:22	Sunny	normal operation	30.0	760.0	182.6
Jul-03	25-Jul-03	AM4	1	7:42	8:42	Sunny	normal operation	30.0	760.0	97.0
Jul-03	25-Jul-03	AM4	2	8:42	9:42	Sunny	normal operation	30.0	760.0	97.6
Jul-03	25-Jul-03	AM4	3	9:42	10:42	Sunny	normal operation	30.0	760.0	136.1
Jul-03	25-Jul-03	AM5	1	7:30	8:30	Sunny	normal operation	30.0	760.0	174.6
Jul-03	25-Jul-03	AM5	2	8:30	9:30	Sunny	normal operation	30.0	760.0	174.6
Jul-03	25-Jul-03	AM5	3	9:30	10:30	Sunny	normal operation	30.0	760.0	184.6
Jul-03	25-Jul-03	AM6	1	7:37	8:37	Sunny	normal operation	30.0	760.0	97.0
Jul-03	25-Jul-03	AM6	2	8:37	9:37	Sunny	normal operation	30.0	760.0	101.7
Jul-03	25-Jul-03	AM6	3	9:37	10:37	Sunny	normal operation	30.0	760.0	131.2
Jul-03	31-Jul-03	AM2	1	8:23	9:23	Sunny	normal operation	31.0	760.0	91.0
Jul-03	31-Jul-03	AM2	2	9:23	10:23	Sunny	normal operation	31.0	760.0	91.7
Jul-03	31-Jul-03	AM2	3	10:23	11:23	Sunny	normal operation	31.0	760.0	108.9
Jul-03	31-Jul-03	AM3	1	8:16	9:16	Sunny	normal operation	31.0	760.0	172.4
Jul-03	31-Jul-03	AM3	2	9:16	10:16	Sunny	normal operation	31.0	760.0	173.3
Jul-03	31-Jul-03	AM3	3	10:16	11:16	Sunny	normal operation	31.0	760.0	176.9
Jul-03	31-Jul-03	AM4	1	8:25	9:25	Sunny	normal operation	31.0	760.0	108.6
Jul-03	31-Jul-03	AM4	2	9:25	10:25	Sunny	normal operation	31.0	760.0	113.7
Jul-03	31-Jul-03	AM4	3	10:25	11:25	Sunny	normal operation	31.0	760.0	124.2
Jul-03	31-Jul-03	AM5	1	8:20	9:20	Sunny	normal operation	31.0	760.0	132.7
Jul-03	31-Jul-03	AM5	2	9:20	10:20	Sunny	normal operation	31.0	760.0	114.0
Jul-03	31-Jul-03	AM5	3	10:20	11:20	Sunny	normal operation	31.0	760.0	137.3
Jul-03	31-Jul-03	AM6	1	8:36	9:36	Sunny	normal operation	31.0	760.0	110.2
Jul-03	31-Jul-03	AM6	2	9:36	10:36	Sunny	normal operation	31.0	760.0	105.5
Jul-03	31-Jul-03	AM6	3	10:36	11:36	Sunny	normal operation	31.0	760.0	121.2
Aug-03	6-Aug-03	AM2	1	8:02	9:02	Sunny	normal operation	32.0	756.0	173.8
Aug-03	6-Aug-03	AM2	2	9:02	10:02	Sunny	normal operation	32.0	756.0	167.9
Aug-03	6-Aug-03	AM2	3	10:02	11:02	Sunny	normal operation	32.0	756.0	169.8
Aug-03	6-Aug-03	AM3	1	8:47	9:47	Sunny	normal operation	32.0	756.0	242.8
Aug-03	6-Aug-03	AM3	2	9:47	10:47	Sunny	normal operation	32.0	756.0	216.5
Aug-03	6-Aug-03	AM3	3	10:47	11:47	Sunny	normal operation	32.0	756.0	221.9
Aug-03	6-Aug-03	AM4	1	8:31	9:31	Sunny	normal operation	32.0	756.0	210.3
Aug-03	6-Aug-03	AM4	2	9:31	10:31	Sunny	normal operation	32.0	756.0	177.0
Aug-03	6-Aug-03	AM4	3	10:31	11:31	Sunny	normal operation	32.0	756.0	184.9
Aug-03	6-Aug-03	AM5	1	8:49	9:49	Sunny	normal operation	32.0	756.0	205.4
Aug-03	6-Aug-03	AM5	2	9:49	10:49	Sunny	normal operation	32.0	756.0	203.7
Aug-03	6-Aug-03	AM5	3	10:49	11:49	Sunny	normal operation	32.0	756.0	236.1
Aug-03	6-Aug-03	AM6	1	8:03	9:03	Sunny	normal operation	32.0	756.0	147.8
Aug-03	6-Aug-03	AM6	2	9:03	10:03	Sunny	normal operation	32.0	756.0	137.7
Aug-03	6-Aug-03	AM6	3	10:03	11:03	Sunny	normal operation	32.0	756.0	138.9
Aug-03	12-Aug-03	AM2	1	8:04	9:04	Sunny	normal operation	30.0	756.0	173.9
Aug-03	12-Aug-03	AM2	2	9:04	10:04	Sunny	normal operation	30.0	756.0	170.3
Aug-03	12-Aug-03	AM2	3	10:04	11:04	Sunny	normal operation	30.0	756.0	172.2
Aug-03	12-Aug-03	AM3	1	8:19	9:19	Sunny	normal operation	30.0	756.0	122.6
Aug-03	12-Aug-03	AM3	2	9:24	10:24	Sunny	normal operation	30.0	756.0	125.2
Aug-03	12-Aug-03	AM3	3	10:24	11:24	Sunny	normal operation	30.0	756.0	140.2
Aug-03	12-Aug-03	AM4	1	8:05	9:05	Sunny	normal operation	30.0	756.0	162.0
Aug-03	12-Aug-03	AM4	2	9:05	10:05	Sunny	normal operation	30.0	756.0	159.5
Aug-03	12-Aug-03	AM4	3	10:05	11:05	Sunny	normal operation	30.0	756.0	155.2
Aug-03	12-Aug-03	AM5	1	8:26	9:26	Sunny	normal operation	30.0	756.0	139.9
Aug-03	12-Aug-03	AM5	2	9:26	10:26	Sunny	normal operation	30.0	756.0	133.0
Aug-03	12-Aug-03	AM5	3	10:31	11:31	Sunny	normal operation	30.0	756.0	136.0
Aug-03	12-Aug-03	AM6	1	8:21	9:21	Sunny	normal operation	30.0	756.0	129.9
Aug-03	12-Aug-03	AM6	2	9:21	10:21	Sunny	normal operation	30.0	756.0	131.7
Aug-03	12-Aug-03	AM6	3	10:21	11:21	Sunny	normal operation	30.0	756.0	126.6
Aug-03	20-Aug-03	AM2	1	8:22	9:22	Sunny	normal operation	32.0	750.0	171.7
Aug-03	20-Aug-03	AM2	2	9:22	10:22	Sunny	normal operation	32.0	750.0	156.1
Aug-03	20-Aug-03	AM2	3	10:22	11:22	Sunny	normal operation	32.0	750.0	141.1
Aug-03	20-Aug-03	AM3	1	8:14	9:14	Sunny	normal operation	32.0	750.0	174.2
Aug-03	20-Aug-03	AM3	2	9:14	10:14	Sunny	normal operation	32.0	750.0	156.6
Aug-03	20-Aug-03	AM3	3	10:14	11:14	Sunny	normal operation	32.0	750.0	139.9
Aug-03	20-Aug-03	AM4	1	8:16	9:16	Sunny	normal operation	32.0	750.0	175.7
Aug-03	20-Aug-03	AM4	2	9:16	10:16	Sunny	normal operation	32.0	750.0	160.8
Aug-03	20-Aug-03	AM4	3	10:16	11:16	Sunny	normal operation	32.0	750.0	145.8
Aug-03	20-Aug-03	AM5	1	8:21	9:21	Sunny	normal operation	32.0	750.0	212.3

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Details of 1-Hour TSP Monitoring

Month	Date	Receptor No.	Set No.	Time periods		Weather condition	Site condition	Temp. (°C)	Pressure (mmHg)	1-hour TSP Level (μg/g³)
				Start	Finish					
Aug-03	20-Aug-03	AM5	2	9:21	10:21	Sunny	normal operation	32.0	750.0	202.3
Aug-03	20-Aug-03	AM5	3	10:21	11:21	Sunny	normal operation	32.0	750.0	193.6
Aug-03	20-Aug-03	AM6	1	8:06	9:06	Sunny	normal operation	32.0	750.0	207.5
Aug-03	20-Aug-03	AM6	2	9:06	10:06	Sunny	normal operation	32.0	750.0	196.1
Aug-03	20-Aug-03	AM6	3	10:06	11:06	Sunny	normal operation	32.0	750.0	187.2
Aug-03	27-Aug-03	AM2	1	8:39	9:39	Sunny	normal operation	29.0	757.0	213.7
Aug-03	27-Aug-03	AM2	2	9:39	10:39	Sunny	normal operation	29.0	757.0	195.6
Aug-03	27-Aug-03	AM2	3	10:39	11:39	Sunny	normal operation	29.0	757.0	187.9
Aug-03	27-Aug-03	AM3	1	8:38	9:38	Sunny	normal operation	29.0	757.0	120.7
Aug-03	27-Aug-03	AM3	2	9:38	10:38	Sunny	normal operation	29.0	757.0	130.9
Aug-03	27-Aug-03	AM3	3	10:38	11:38	Sunny	normal operation	29.0	757.0	157.0
Aug-03	27-Aug-03	AM4	1	8:44	9:44	Sunny	normal operation	29.0	757.0	233.7
Aug-03	27-Aug-03	AM4	2	9:44	10:44	Sunny	normal operation	29.0	757.0	216.6
Aug-03	27-Aug-03	AM4	3	10:44	11:44	Sunny	normal operation	29.0	757.0	207.8
Aug-03	27-Aug-03	AM5	1	8:13	9:13	Sunny	normal operation	29.0	757.0	164.8
Aug-03	27-Aug-03	AM5	2	9:13	10:13	Sunny	normal operation	29.0	757.0	163.7
Aug-03	27-Aug-03	AM5	3	10:13	11:13	Sunny	normal operation	29.0	757.0	163.9
Aug-03	27-Aug-03	AM6	1	8:27	9:27	Sunny	normal operation	29.0	757.0	116.2
Aug-03	27-Aug-03	AM6	2	9:27	10:27	Sunny	normal operation	29.0	757.0	104.3
Aug-03	27-Aug-03	AM6	3	10:27	11:27	Sunny	normal operation	29.0	757.0	132.7
Sep-03	3-Sep-03	AM2	1	13:03	14:03	Cloudy	normal operation	28.0	754.0	156.9
Sep-03	3-Sep-03	AM2	2	14:03	15:03	Cloudy	normal operation	28.0	754.0	143.0
Sep-03	3-Sep-03	AM2	3	15:03	16:03	Cloudy	normal operation	28.0	754.0	137.3
Sep-03	3-Sep-03	AM3	1	13:01	14:01	Cloudy	normal operation	28.0	754.0	155.9
Sep-03	3-Sep-03	AM3	2	14:01	15:01	Cloudy	normal operation	28.0	754.0	136.2
Sep-03	3-Sep-03	AM3	3	15:01	16:01	Cloudy	normal operation	28.0	754.0	130.5
Sep-03	3-Sep-03	AM4	1	13:05	14:05	Cloudy	normal operation	28.0	754.0	161.0
Sep-03	3-Sep-03	AM4	2	14:05	15:05	Cloudy	normal operation	28.0	754.0	128.8
Sep-03	3-Sep-03	AM4	3	15:05	16:05	Cloudy	normal operation	28.0	754.0	132.0
Sep-03	3-Sep-03	AM5	1	13:03	14:03	Cloudy	normal operation	28.0	754.0	194.9
Sep-03	3-Sep-03	AM5	2	14:03	15:03	Cloudy	normal operation	28.0	754.0	185.2
Sep-03	3-Sep-03	AM5	3	15:03	16:03	Cloudy	normal operation	28.0	754.0	184.8
Sep-03	3-Sep-03	AM6	1	13:05	14:05	Cloudy	normal operation	28.0	754.0	160.7
Sep-03	3-Sep-03	AM6	2	14:05	15:05	Cloudy	normal operation	28.0	754.0	136.8
Sep-03	3-Sep-03	AM6	3	15:05	16:05	Cloudy	normal operation	28.0	754.0	135.8
Sep-03	5-Sep-03	AM2	1	8:10	9:10	fine	normal operation	29.0	757.0	190.3
Sep-03	5-Sep-03	AM2	2	9:10	10:10	fine	normal operation	29.0	757.0	184.9
Sep-03	5-Sep-03	AM2	3	10:10	11:10	fine	normal operation	29.0	757.0	182.7
Sep-03	5-Sep-03	AM3	1	8:05	9:05	fine	normal operation	29.0	757.0	181.7
Sep-03	5-Sep-03	AM3	2	9:05	10:05	fine	normal operation	29.0	757.0	175.0
Sep-03	5-Sep-03	AM3	3	10:05	11:05	fine	normal operation	29.0	757.0	176.3
Sep-03	5-Sep-03	AM4	1	8:25	9:25	fine	normal operation	29.0	757.0	133.3
Sep-03	5-Sep-03	AM4	2	9:25	10:25	fine	normal operation	29.0	757.0	116.8
Sep-03	5-Sep-03	AM4	3	10:25	11:25	fine	normal operation	29.0	757.0	116.6
Sep-03	5-Sep-03	AM5	1	8:04	9:04	fine	normal operation	29.0	757.0	124.4
Sep-03	5-Sep-03	AM5	2	9:04	10:04	fine	normal operation	29.0	757.0	110.9
Sep-03	5-Sep-03	AM5	3	10:04	11:04	fine	normal operation	29.0	757.0	100.5
Sep-03	5-Sep-03	AM6	1	8:11	9:11	fine	normal operation	29.0	757.0	135.3
Sep-03	5-Sep-03	AM6	2	9:11	10:11	fine	normal operation	29.0	757.0	121.6
Sep-03	5-Sep-03	AM6	3	10:11	11:11	fine	normal operation	29.0	757.0	118.9
Sep-03	11-Sep-03	AM2	1	8:58	9:58	fine	normal operation	30.0	756.0	193.5
Sep-03	11-Sep-03	AM2	2	9:58	10:58	fine	normal operation	30.0	756.0	192.9
Sep-03	11-Sep-03	AM2	3	10:58	11:58	fine	normal operation	30.0	756.0	199.6
Sep-03	11-Sep-03	AM3	1	8:59	9:59	fine	normal operation	30.0	756.0	173.5
Sep-03	11-Sep-03	AM3	2	9:59	10:59	fine	normal operation	30.0	756.0	174.7
Sep-03	11-Sep-03	AM3	3	10:59	11:59	fine	normal operation	30.0	756.0	182.4
Sep-03	11-Sep-03	AM4	1	8:57	9:57	fine	normal operation	30.0	756.0	210.3
Sep-03	11-Sep-03	AM4	2	9:57	10:57	fine	normal operation	30.0	756.0	210.0
Sep-03	11-Sep-03	AM4	3	10:57	11:57	fine	normal operation	30.0	756.0	216.4
Sep-03	11-Sep-03	AM5	1	13:01	14:01	fine	normal operation	30.0	756.0	228.0
Sep-03	11-Sep-03	AM5	2	14:01	15:01	fine	normal operation	30.0	756.0	238.5
Sep-03	11-Sep-03	AM5	3	15:01	16:01	fine	normal operation	30.0	756.0	235.3
Sep-03	11-Sep-03	AM6	1	13:01	14:01	fine	normal operation	30.0	756.0	250.8
Sep-03	11-Sep-03	AM6	2	14:01	15:01	fine	normal operation	30.0	756.0	259.7
Sep-03	11-Sep-03	AM6	3	15:01	16:01	fine	normal operation	30.0	756.0	247.7

Details of 1-Hour TSP Monitoring

Month	Date	Receptor No.	Set No.	Time periods		Weather condition	Site condition	Temp. (°C)	Pressure (mmHg)	1-hour TSP Level (μg/g³)
				Start	Finish					
Sep-03	19-Sep-03	AM2	1	8:31	9:31	Sunny	normal operation	30.0	756.5	196.5
Sep-03	19-Sep-03	AM2	2	9:31	10:31	Sunny	normal operation	30.0	756.5	184.5
Sep-03	19-Sep-03	AM2	3	10:31	11:31	Sunny	normal operation	30.0	756.5	165.7
Sep-03	19-Sep-03	AM3	1	8:15	9:15	Sunny	normal operation	30.0	756.5	225.9
Sep-03	19-Sep-03	AM3	2	9:15	10:15	Sunny	normal operation	30.0	756.5	214.7
Sep-03	19-Sep-03	AM3	3	10:15	11:15	Sunny	normal operation	30.0	756.5	197.0
Sep-03	19-Sep-03	AM4	1	8:27	9:27	Sunny	normal operation	30.0	756.5	203.0
Sep-03	19-Sep-03	AM4	2	9:27	10:27	Sunny	normal operation	30.0	756.5	187.4
Sep-03	19-Sep-03	AM4	3	10:27	11:27	Sunny	normal operation	30.0	756.5	170.8
Sep-03	19-Sep-03	AM5	1	8:44	9:44	Sunny	normal operation	30.0	756.5	193.9
Sep-03	19-Sep-03	AM5	2	9:44	10:44	Sunny	normal operation	30.0	756.5	181.3
Sep-03	19-Sep-03	AM5	3	10:44	11:44	Sunny	normal operation	30.0	756.5	159.6
Sep-03	19-Sep-03	AM6	1	8:21	9:21	Sunny	normal operation	30.0	756.5	203.2
Sep-03	19-Sep-03	AM6	2	9:21	10:21	Sunny	normal operation	30.0	756.5	189.9
Sep-03	19-Sep-03	AM6	3	10:21	11:21	Sunny	normal operation	30.0	756.5	174.2
Sep-03	24-Sep-03	AM2	1	8:52	9:52	Sunny	normal operation	26.0	758.0	177.2
Sep-03	24-Sep-03	AM2	2	9:52	10:52	Sunny	normal operation	26.0	758.0	172.2
Sep-03	24-Sep-03	AM2	3	10:52	11:52	Sunny	normal operation	26.0	758.0	169.8
Sep-03	24-Sep-03	AM3	1	8:47	9:47	Sunny	normal operation	26.0	758.0	150.4
Sep-03	24-Sep-03	AM3	2	9:47	10:47	Sunny	normal operation	26.0	758.0	138.6
Sep-03	24-Sep-03	AM3	3	10:47	11:47	Sunny	normal operation	26.0	758.0	136.5
Sep-03	24-Sep-03	AM4	1	8:49	9:49	Sunny	normal operation	26.0	758.0	132.6
Sep-03	24-Sep-03	AM4	2	9:49	10:49	Sunny	normal operation	26.0	758.0	147.2
Sep-03	24-Sep-03	AM4	3	10:49	11:49	Sunny	normal operation	26.0	758.0	163.0
Sep-03	24-Sep-03	AM5	1	8:49	9:49	Sunny	normal operation	26.0	758.0	145.5
Sep-03	24-Sep-03	AM5	2	9:49	10:49	Sunny	normal operation	26.0	758.0	130.0
Sep-03	24-Sep-03	AM5	3	10:49	11:49	Sunny	normal operation	26.0	758.0	128.1
Sep-03	24-Sep-03	AM6	1	8:40	9:40	Sunny	normal operation	26.0	758.0	164.5
Sep-03	24-Sep-03	AM6	2	9:40	10:40	Sunny	normal operation	26.0	758.0	154.4
Sep-03	24-Sep-03	AM6	3	10:40	11:40	Sunny	normal operation	26.0	758.0	155.9
Sep-03	29-Sep-03	AM2	1	8:38	9:38	Sunny	normal operation	30.0	756.0	154.7
Sep-03	29-Sep-03	AM2	2	9:38	10:38	Sunny	normal operation	30.0	756.0	146.7
Sep-03	29-Sep-03	AM2	3	10:38	11:38	Sunny	normal operation	30.0	756.0	147.3
Sep-03	29-Sep-03	AM3	1	8:37	9:37	Sunny	normal operation	30.0	756.0	189.4
Sep-03	29-Sep-03	AM3	2	9:37	10:37	Sunny	normal operation	30.0	756.0	159.2
Sep-03	29-Sep-03	AM3	3	10:37	11:37	Sunny	normal operation	30.0	756.0	182.7
Sep-03	29-Sep-03	AM4	1	8:26	9:26	Sunny	normal operation	30.0	756.0	106.0
Sep-03	29-Sep-03	AM4	2	9:26	10:26	Sunny	normal operation	30.0	756.0	112.3
Sep-03	29-Sep-03	AM4	3	10:26	11:26	Sunny	normal operation	30.0	756.0	131.8
Sep-03	29-Sep-03	AM5	1	8:53	9:53	Sunny	normal operation	30.0	756.0	163.2
Sep-03	29-Sep-03	AM5	2	9:53	10:53	Sunny	normal operation	30.0	756.0	144.3
Sep-03	29-Sep-03	AM5	3	10:53	11:53	Sunny	normal operation	30.0	756.0	149.3
Sep-03	29-Sep-03	AM6	1	8:56	9:56	Sunny	normal operation	30.0	756.0	145.9
Sep-03	29-Sep-03	AM6	2	9:56	10:56	Sunny	normal operation	30.0	756.0	125.1
Sep-03	29-Sep-03	AM6	3	10:56	11:56	Sunny	normal operation	30.0	756.0	129.6

APPENDIX 4

Correspondences of the Public Complaints from July 2003 to September 2003

本署檔號 OUR REF: EP 580/E6/3/9
來函檔號 YOUR REF:
電話 TEL. NO.
傳真 FAX NO.: 2158 5823 2685 1155
電子郵件 E-MAIL:
網址 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
上禾輋路一號
沙田政府合署 10 樓

21 August 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 (Attn: Mr. Felix Yung Fax.: 2721 8630)
Maunsell (Attn: Mr. Albert Lam Fax.: 2643 3559)
CHEC (Attn: Mr. Chan Man Fax.: 2492 3701)

NOTICE OF COMPLAINT

Complaint Ref. : N01/TN/00012313-03

EPIC Ref:

CASE DETAILS

(1) Incident Date/Time: 21/08/2003

(2) Incident Location : Monte Vista, Sha Tin 地址 : 翠擁華庭,

(3) TPU : 757

(4) Description : COMPLAINT OF NOISE NUISANCE FROM DOG BARKING FROM A CONSTRUCTION SITE OF T7 ROAD NEAR MONTE VISTA, SHA TIN

(5) Nature	(6) Affected Party	(7) Pollution Pattern
N79-Other noise nuisance, please specify in "Remarks"	DMS-Domestic Premises	C-Continuous, N-Night Time, A-Daily

(8) Priority class : C - Routine i.e. substantive reply to be made on or before 11/09/2003

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name : 姓名 : 中國海灣建築公司

(2) Premises Address : 地址 :

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

COMPLAINT CASE(S) NEAR INCIDENT LOCATION

Complaint Ref.	Cpt. Received Date	Sub. Reply Date	Nature Code	Nature Description
N01/TN/0000			N66	General construction
N01/TN/0000			N66	General construction
N01/TN/0000			N66	General construction
N01/TN/0000			N66	General construction

COMPLAINANT

(1) Name :

(2) Tel. No. : Day :
Night :
Mobile:

(3) Address : 地址 :

(4) Email Address :

CHANNEL OF COMPLAINT

Source channel: 01 - Phone

Source code : P - Public

Remarks : 先生投訴在T7工程的地盤,有多隻屬於地盤的狗於晚上吠,發出強烈的噪音,滋擾翠擁華庭的居民,強烈要求環保署的同事跟進

ACTION OFFICERS

	Nature Code	SEPO	EPO	CI
Coordinator	N79	S[TN]2		CI[TN]2

INFORMATION INPUTTED BY

Name : TNTELE Date : 21/08/2003 Time : 10:52

Maunsell Consultants Asia Ltd
茂盛(亞洲)工程顧問有限公司
23156
8/F., Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Sha Tin, N.T., Hong Kong
香港新界沙田鄉事會路 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

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(0222)

22 August 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-65
Public Complaint- Dog Barking

I attach for your attention and necessary action a copy of a letter from EPD- Ref. EP580/E6/3/9 dated 21 August 2003, regarding a complaint of noise nuisance due to dog barking from the construction site of Road T7 near Monte Vista on 21 August 2003.

Will you please give me a response before 1 September 2003.

Yours faithfully,

Allan Poon
Senior Resident Engineer

AP:li

Encl.

cc : MCAL } w/encl
OAP } w/encl
SIOW1 } w/encl (Please investigate)
CHEC – HO } w/encl

本署檔號
OUR REF: EP 580/E6/3/9
來函檔號
YOUR REF:
電 話
TEL. NO.: 2158 5823
圖文傳真
FAX NO.: 2685 1155
電子郵件
E-MAIL:
網 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.

污染管制辦事處
(新界北)
香港新界沙田
上禾輋路一號
沙田政府合署 10 樓

"10029051"

21 August 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

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 (Attn: Mr. Felix Yung Fax.: 2721 8630)
Maunsell (Attn: Mr. Albert Lam Fax.: 2643 3559)
CHEC (Attn: Mr. Chan Man Fax.: 2492 3701)

NOTICE OF COMPLAINT

Complaint Ref. : N01/TN/00012313-03

EPIC Ref:

CASE DETAILS

(1) Incident Date/Time: 21/08/2003

(2) Incident Location : Monte Vista, Sha Tin 地址： 翠薈華庭,

(3) TPU : 757

(4) Description : COMPLAINT OF NOISE NUISANCE FROM DOG BARKING FROM A CONSTRUCTION SITE OF T7 ROAD NEAR MONTE VISTA, SHA TIN

(5) Nature	(6) Affected Party	(7) Pollution Pattern
N79-Other noise nuisance, please specify in "Remarks"	DMS-Domestic Premises	C-Continuous, N-Night Time, A-Daily

(8) Priority class : C - Routine i.e. substantive reply to be made on or before 11/09/2003

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name : 姓名： 中國海灣建築公司

(2) Premises Address : 地址：

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

COMPLAINT CASE(S) NEAR INCIDENT LOCATION

Complaint Ref.	Cpt. Received Date	Sub. Reply Date	Nature Code	Nature Description
N01/TN/000(			N66	General construction
N01/TN/000(			N66	General construction
N01/TN/000.			N66	General construction
N01/TN/0000			N66	General construction

COMPLAINANT

(1) Name :

(2) Tel. No. : Day :
Night :
Mobile:

(3) Address : 地址：

(4) Email Address :

CHANNEL OF COMPLAINT

Source channel: 01 - Phone

Source code : P - Public

Remarks : 先生投訴在T7工程的地盤,有多隻屬於地盤的狗於晚上吠,發出強烈的噪音,滋擾翠薈華庭的居民,強烈要求冠保多的同事跟進

ACTION OFFICERS

	Nature Code	SEPO	EPO	CI
Coordinator	N79	S[TN]2		CI[TN]2

INFORMATION INPUTTED BY

Name : TNTELE Date : 21/08/2003 Time : 10:52

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: 22 August 2003
Our Ref.: T7/02.03/O/06777

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

Attn.: The Environmental Protection Officer

Dear Sir,

Contract No. ST86/2000
Sha Tin New Town, Stage II
Construction of Road T7 in Ma On Shan
Public complaint – Dog barking near Monte Vista on 21 August 2003

We refer to your letter dated 21 August 2003 regarding the captioned complaint.

We would like to clarify that the dogs straying in our construction site were not belong to us or our subcontractors. We have already sought the assistance from AFCD in catching the straying dogs and regular patrol has been arranged by AFCD for our construction site. So we would like to draw your attention in the efforts we put and your further assistance in the issue would be greatly appreciated.

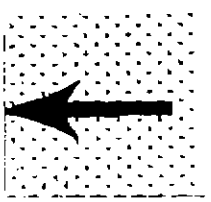
Thank you very much for your kind attention.

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

Chan Man
Project Manager

CM/CL/PW/GH

c.c. MCAL – H.O.
CHEC – H.O.(w/o)
OAP – Mr. Fredrick Leong (F: 2268 3950)
TDD – Mr. Felix Yung (F: 2721 8630)
MCAL - Mr. Albert Lam



香港北角英皇道370-374號振華大廈19樓
19/F., China Harbour Building, 370-374 King's Road, North Point, Hong Kong.
Tel: (852) 2887 8118 Fax: (852) 2512 0427 Website: http://www.chcehk.com

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

香港新界沙田鄉事會路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.: EP 580/E6/3/9
Our Ref. : T7(ST86/2000)/M05/412(0226)

28 August 2003

23156

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
Environmental Complaint EC-65
Public Complaint – Dog Barking

I refer to your letter of 21 August 2003, concerning the complaint of noise nuisance from dog barking from the captioned site near Monte Vista.

The complaint was brought to the attention of the Contractor on 22 August 2003 who confirmed later in the day that the dogs straying within the site did not belong to the Contractor or the subcontractors. Assistance from AFCD had been requested to catch the straying dogs and arrange a regular patrol to the site.

We will continue to monitor the situation and carry out necessary actions in order to prevent similar nuisance to the nearby residents.

Yours faithfully,

Allan Poon
Senior Resident Engineer

AP:li

cc : PM/NTE, TDD - Attn: Mr. Felix Yung
OAP - Attn: Mr. Fredrick Leong
MCAL
CHEC-HO

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 : 1 September 2003
Your Ref : T7/(ST86/2000)/M05/412(0226)
Our Ref. : T7/01.01/O/08070

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

Attention: Mr. K.H. Cheng - CRE

Dear Sir,

Contract No. ST86/2000
Sha Tin New Town, Stage II
Construction of Road T7 in Ma On Shan
Environmental Complaint EC-65 – Dog barking

We refer to your letter dated 22 August 2003 regarding the captioned complaint.

We would like to clarify that the straying dogs were not belong to us or our subcontractors. We have already sought the assistance from AFCD in catching the straying dogs and regular patrol has been arranged by AFCD for our construction site. We had also sought the help from EPD after receiving the complaint and enclosed please find the letter 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/CL/PL/GT/fc

c.c. MCAL – H.O.
CHEC – H.O.
OAP – Mr. Fredrick Leong (F: 2268 3950)
TDD – Mr. Felix Yung (F: 2721 8630)

香港北角英皇道 370-374 號振華大廈 19 樓
19/F., China Harbour Building, 370-374 King's Road, North Point, Hong Kong.
Tel: (852) 2887 8118 Fax: (852) 2512 0427 Website: http://www.chechk.com

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: 22 August 2003
Our Ref.: T7/02.03/O/06777

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

Attn.: The Environmental Protection Officer

Dear Sir,

Contract No. ST86/2000
Sha Tin New Town, Stage II
Construction of Road T7 in Ma On Shan
Public complaint – Dog barking near Monte Vista on 21 August 2003

We refer to your letter dated 21 August 2003 regarding the captioned complaint.

We would like to clarify that the dogs straying in our construction site were not belong to us or our subcontractors. We have already sought the assistance from AFCD in catching the straying dogs and regular patrol has been arranged by AFCD for our construction site. So we would like to draw your attention in the efforts we put and your further assistance in the issue would be greatly appreciated.

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/FW/CH

c.c. MCAL – H.O.
CHEC – H.O.(w/o)
OAP – Mr. Fredrick Leong (F: 2268 3950)
TDD – Mr. Felix Yung (F: 2721 8630)
MCAL - Mr. Albert Lam

本署檔號
OUR REF: EP 580/E6/3/9
來函檔號
YOUR REF:
電 話
TEL. NO.:
圖文傳真 2158 5823
FAX NO.: 2685 1155
電子郵件
E-MAIL:
網 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
上禾輋路一號
沙田政府合署 10 樓

25 August 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.

23156

Yours faithfully,

(Jack KAN)
Environmental Protection Officer
for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD	(Attn: Mr. Felix Yung	Fax.: 2721 8630)
Maunsell	(Attn: Mr. Albert Lam	Fax.: 2643 3559)
CHEC	(Attn: Mr. Chan Man	Fax.: 2492 3701)

NOTICE OF COMPLAINT

Complaint Ref. : N01/TN/00012495-03

EPIC Ref:

CASE DETAILS

(1) Incident Date/Time: 23/08/2003 10:57

(2) Incident Location : Kam Ying Court, Kam Ying Road, Sha Tin 地址 : 錦英路 錦英苑,

(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.

(5) Nature	(6) Affected Party	(7) Pollution Pattern
N66-General construction noise except renovation	DMS-Domestic Premises	

(8) Priority class : C - Routine i.e. substantive reply to be made on or before 16/09/2003

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

COMPLAINT CASE(S) NEAR INCIDENT LOCATION

Complaint Ref.	Cpt. Received Date	Sub. Reply Date	Nature Code	Nature Description
N01/TN/000[illegible]	-	-	N66	. .. - -

COMPLAINANT

(1) Name :

(2) Tel. No. : Day :
Night :
Mobile:

(3) Address : 地址 :

(4) Email Address :

CHANNEL OF COMPLAINT

Source channel: 01 - Phone

Source code : P - Public

Remarks : 投訴在錦良閣對出的T7公路的地盤於平日凌晨4:00及星期日有工程進行,發出強烈的噪音,要求跟進

- HAS MADE THE COMPLAINT BEFORE, REF NO.: N01/TN/000(. .

ACTION OFFICERS

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

INFORMATION INPUTTED BY

Name : HAUE4 Date : 23/08/2003 Time : 11:09

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
香港新界沙田鄉事會路 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

Maunsell

Your Ref.:
Our Ref. : T7/(ST86/2000)/M05/412(0225)

23156

27 August 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-66
Public Complaint –Working during Nighttime and Sundays

I attach for your attention and necessary action a copy of a letter from EPD – Ref. EP 580/E6/3/9 dated 25 August 2003, regarding a complaint of construction activities during nighttime (4:00 am) and Sundays by a resident of Kam Ying Court on 23 August 2003.

Will you please give me a response before 7 September 2003.

Yours faithfully,

Allan Poon
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)

OUR REF:
來函檔號
YOUR REF:
電 話
TEL. NO.: 2158 5823
圖文傳真
FAX NO.: 2685 1155
電子郵件
E-MAIL:
網 址
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)
香港新界沙田
上禾輋路一號
沙田政府合署10樓

25 August 2003

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

(Attn: Mr. Sam Tsoi)

10029126

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

Sha Tan 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 (Attn: Mr. Felix Yung Fax.: 2721 8630)
Maunsell (Attn: Mr. Albert Lam Fax.; 2643 3559)
CHEC (Attn: Mr. Chan Man Fax.: 2492 3701)

NOTICE OF COMPLAINT

Complaint Ref. : N01/TN/00012495-03

EPIC Ref:

CASE DETAILS

(1) Incident Date/Time: 23/08/2003 10:57

(2) Incident Location : Kam Ying Court, Kam Ying Road, Sha Tin　　地址 : 錦英路 錦英苑,

(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.

(5) Nature	(6) Affected Party	(7) Pollution Pattern
N66-General construction noise except renovation	DMS-Domestic Premises	

(8) Priority class : C - Routine　　i.e. substantive reply to be made on or before 16/09/2003

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

COMPLAINT CASE(S) NEAR INCIDENT LOCATION

Complaint Ref.	Cpt. Received Date	Sub. Reply Date	Nature Code	Nature Description
N01/TN/000..			N66	

COMPLAINANT

(1) Name :

(2) Tel. No. : Day :
Night :
Mobile:

(3) Address :　　地址 :

(4) Email Address :

CHANNEL OF COMPLAINT

Source channel: 01 - Phone

Source code : P - Public

Remarks : 投訴在錦良閣對出的T7公路的地盤於平日凌晨4:00及星期日有工程進行,發出強烈的噪音,要求跟進

HAS MADE THE COMPLAINT BEFORE, REF NO.: N01/TN/000(

ACTION OFFICERS

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

INFORMATION INPUTTED BY

Name : HAUE4　　Date : 23/08/2003　　Time : 11:09

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.

Date : 29 August 2003
Your Ref : T7/(ST86/2000)/M05/412(0225)
Our Ref. : T7/01.01/O/08069

23156

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

Attention: Mr. Albert Lam- CRE

ST FL Steve LL
87 11 RC

Dear Sir,

Contract No. ST86/2000
Sha Tin New Town, Stage II
Construction of Road T7 in Ma On Shan
Environmental Complaint EC-66 – Working during Nighttime and Sundays

We refer to your letter dated 27 August 2003 regarding the captioned complaint.

In order to suit the progress, we have obtained a Construction Noise Permit (CNP) from EPD of ref: GW-TN0022-2003 and GW-TN0272-2003 in order to carry out bridge works at restricted hours near Kam Yau Court. We would like to emphasize that the powered mechanical equipment (PME) used in restricted hours (including Sunday and 19:00-23:00 every day) were permitted in this CNP and we would try to reduce the noise impact during the course of construction works.

After our checking with the subcontractors and security, there should not be any construction activity carried out at 04:00 within our construction site and we are not allow any our sub-contractor to carry out the works without CNP at night. So,the noise nuisance might possibly come from other construction site.

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/GT
c.c. MCAL – H.O.
CHEC – H.O.
OAP – Mr. Fredrick Leong (F: 2268 3950)
TDD – Mr. Felix Yung (F: 2721 8630)
EPD - Mr. Jack Kan (F:2685 1155)

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

香港新界沙田鄉事會路 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

Maunsell

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(0228)

3 September 2003

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
Environmental Complaint EC-66
Public Complaint – Working during Nighttime and Sundays

I refer to your letter of 25 August 2003, concerning the complaint of nighttime and Sunday construction in the site near Kam Leung House in Kam Ying Court.

I would advise you that the Contractor has been granted Construction Noise Permits (CNP) – Ref.: GW-TN002202003 and GW-TN0272-2003, for carrying out bridge works at restricted hours (between 19:00 and 23:00 every day, including Sundays) near Kam Ying Court. The Contractor had only used the powered mechanical equipment (PME) as permitted in the CNP; furthermore, he had tried to reduce the noise nuisance as much as possible during the course of work.

In our investigation, the Contractor and his subcontractor/security personnel confirmed that there had not been any construction activities at 04:00 a.m. early in the morning within the construction site. So, it was apparent that the noise nuisance might possibly come from other construction site.

Yours faithfully,

Allan Poon
Senior Resident Engineer

AP:li

cc: PM/NTE, TDD - Attn: Mr. Felix Yung
OAP - Attn: Mr. Fredrick Leong
MCAL
CHEC-HQ

本署檔號 OUR REF: EP 580/E6/3/9
來函檔號 YOUR REF:
電話 TEL. NO.:
圖文傳真 FAX NO.: 2158 5823 2685 1155
電子郵件 E-MAIL:
網址 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
上禾輋路一號
沙田政府合署 10 樓

15 September 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 additional daytime noise measurement at location near complainant's premises and 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. Felix Yung Fax.: 2721 8630)
Maunsell (Attn: Mr. Albert Lam Fax.: 2643 3559)
CHEC (Attn: Mr. Chan Man Fax.: 2492 3701)

To: S[TN]2

COMPLAINT CASE - FOLLOW UP CALL

Complaint reference: N01/TN/00007793-03

EPIC reference:

Incident address: Monte Vista,

地址: 新界, 沙田區

Complaint Description: COMPLAINT OF DAYTIME & NIGHTTIME CONSTRUCTION NOISE FROM T7 CONSTRUCTION SITE NEAR BLOCK 3 OF MONTE VISTA , SHA TIN

1 I understand that you are processing the above case.

2 The complainant Tel No. (D): Mobile:
has made an enquiry on the matter on 13/09/2003 at 09:24 and requested EPD staff to:-

contact him as soon as possible.

3 For your necessary action, please.

Remark

– As least from the complainant, he complained about daytime construction noise and dust nuisance from T7 construction site near his premises at block 3 of Monte Vista.

INFORMATION INPUTTED BY

Name : HAUE2 Date : 13/09/2003 Time : 09:25

+852 2685 1155 P.02

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 September 2003
Your Ref: T7/(ST86/2000)/M05/412(0231)
Our Ref.: T7/01.01/O/08314

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

Arup Acoustics Job No 23156
File No.
Master Ref: 24607
Project Ref.:
Reply Ref.:
By: Date
Action Required:
Received 30 SEP 2003
Inits. EC FL AC
Action FC 1 AC
Info.
Copy

Attention: Mr. K.H. Cheng - CRE

Dear Sir,

Contract No. ST86/2000
Sha Tin New Town, Stage II
Construction of Road T7 in Ma On Shan
Environmental Complaint EC67 – Daytime and Nighttime Construction Noise

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

We had inspected around the area upon receiving the complaint and found that the water sprinklers were operating; and from the record photos taken on 13 September 2003, the soil materials were found to be wet around the area. The ET had measured the 1hr TSP level at Monte Vista before (11 September 2003) and after (19 September 2003) the complaint and the results were shown to be below the alert level (350 $\mu g/m^3$).

Date	Start Time	Finish Time	Level (μg/m3)
11-Sept-03	13:01	14:01	228.0
	14:01	15:01	238.5
	15:01	16:01	235.3
19-Sept-03	08:44	09:44	193.9
	09:44	10:44	181.3
	10:44	11:44	159.6

To reduce the noise nuisance arising to the nearby residents, we had installed temporary noise barriers for the breaking activities of the excavator mounted hydraulic breakers. According to the results of our noise measurements taken at the roof top of Block 1 of Monte Vista and podium of Block 3 of Monte Vista, the noise levels were found to be acceptable and below the limit:

Roof top of Block 1 of Monte Vista

Date	Start Time	Finish Time	L_{eq}	L_{10}	L_{90}
8-Sept-03	10:07	10:37	70.1	72.8	65.4
9-Sept-03	09:12	09:42	68	71.2	61.8
10-Sept-03	10:21	10:51	68.6	70.2	64.3
11-Sept-03	10:49	11:19	69.4	71.7	66.1
12-Sept-03	09:40	10:10	71.1	73.1	66.4
13-Sept-03	10:00	10:30	71.2	73.2	68.1

.../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.

Date : 26 September 2003
Your Ref: T7/(ST86/2000)/M05/412(0231)
Our Ref.: T7/01.01/O/08314

Podium of Block 3 of Monte Vista

Date	Start Time	Finish Time	L_{eq}	L_{10}	L_{90}
15-Sept-03	15:30	16:00	66.0	70.6	61.2

We however would continue to maintain or add temporary noise barriers for the breaking activities of excavator mounted hydraulic breakers to reduce the noise nuisance arising to the public. We would also ensure that all the night works are covered by Construction Noise Permit (CNP).

Thank you very much for your kind attention.

Yours faithfully,

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

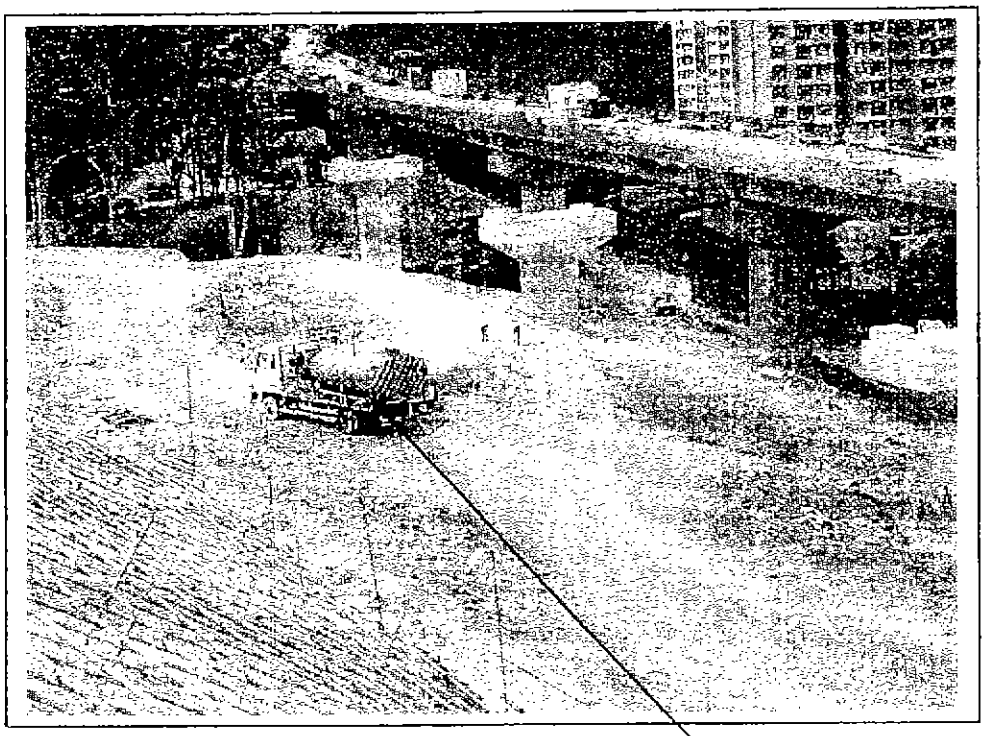
.....
Chris Lau
Project Manager

CL/PM/GH/fc

c.c. MCAL – H.O.
CHEC – H.O.
OAP – Mr. Fredrick Leong (F: 2268 3950)
TDD – Mr. Felix Yung (F: 2721 8630)
EPD- Mr. Jack Kan (F: 2685 1155)

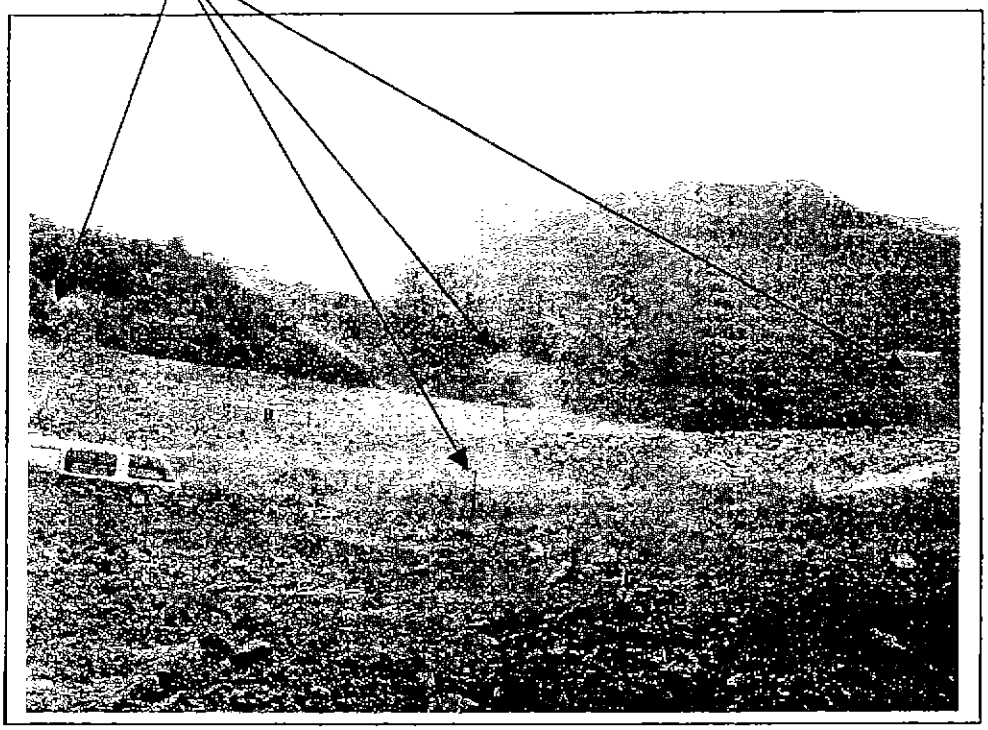
香港北角英皇道 370-374 號振華大廈 19 樓
19/F., China Harbour Building, 370-374 King's Road, North Point, Hong Kong.
Tel: (852) 2887 8118 Fax: (852) 2512 0427 Website: http://www.chechk.com

Photos



Sprinklers were operating during the inspection

Water browser was operating and the soil was found to be wet



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

Maunsell

Chief Resident Engineer's Office
Trunk Road T7
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Your Ref.: EP 580/E6/3/9
Our Ref. : T7(ST86/2000)/M05/412(0236)

Arup Acoustics Job No. 23456
File No.
Master Ref: AE/3572 Project Ref.:
Reply Ref.: By: Date
Action Required:

3 October 2003

Received - 7 OCT 2003

Inits.	ST	FL	AC
Action			
Info.	ST	1	AC
Copy			

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.

By Fax & Post
(Fax: 2685 1155)

Attn: Mr. Jack KAN

Dear Sirs,

Shatin New Town Stage II
Contract No. ST86/2000
Construction of Road T7 in Ma On Shan
Environmental Complaint – EC-67
Public Complaint on Day-time and Night-time Construction Noise

I refer to your letter of 15 September 2003, regarding the complaint on the day-time and night-time construction noise, as well as dust nuisance, from a resident in Block 3 of Monte Vista.

According to the record of noise measurements taken on the roof of Block 1 of Monte Vista during the week prior to the complaint, the noise level were found to be acceptable as listed below:

Date	Start Time	Finish Time	L_{eq} dB(A)*
8-Sept-03	10:07	10:37	70.1
9-Sept-03	09:12	09:42	68
10-Sept-03	10:21	10:51	68.6
11-Sept-03	10:49	11:19	69.4
12-Sept-03	09:40	10:10	71.1
13-Sept-03	10:00	10:30	71.2

Note : Limit Level – 75 dB(A)

The Contractor had also erected temporary noise barriers around the hydraulic breakers in order to reduce further the noise nuisance.

..../P.2

Our Ref. : T7(ST86/2000)/M05/412(0236)

Regarding the complaint on dust nuisance, our Environmental Team had measured the 1 hr TSP level at Monte Vista on 11th and 19th of September 2003 and recorded the results as below:

Date	Start Time	Finish Time	Level ($\mu g/m^3$)
11-Sept-03	13:01	14:01	228.0
	14:01	15:01	238.5
	15:01	16:01	235.3
19-Sept-03	08:44	09:44	193.9
	09:44	10:44	181.3
	10:44	11:44	159.6

It is apparent that the 1 hr TSP levels were well below the action level of $350\mu g/m^3$. Furthermore, the Contractor had provided water browser and sprinklers for dust suppression purposes. Please refer to the attached photographs.

We therefore would conclude that the complaint was not substantiated.

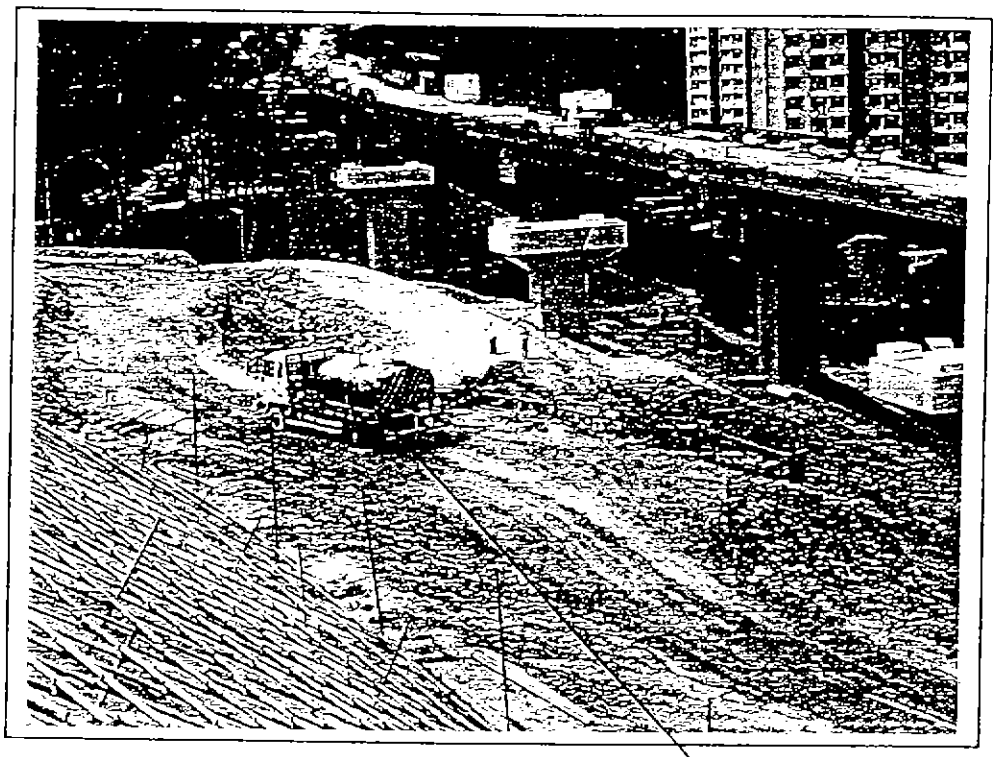
Yours faithfully,

Allan Poon
Senior Resident Engineer

AP:li

cc : PM/NTE, TDD - Attn: Mr. Felix Yung
OAP - Attn: Mr. Fredrick Leong
MCAL
CHEC – HO

Photos



Water browser was operating and the soil was found to be wet

Sprinklers were operating during the inspection