

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

JANUARY 2003 TO MARCH 2003

Prepared For:

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Report No.: 23156-Q9



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Job No 23156

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Revision record

| Date | Description | Prepared | Checked | Approved |
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CONTENT

| EXECUTIVE SUMMARY | 1 |
|---|---------------------|
| 1. INTRODUCTION | 1-1 |
| 1.1 Purpose of the Report | 1-1 |
| 1.2 Site Description | 1-1 |
| 2. ENVIRONMENTAL STATUS | 2-1 |
| 2.1 Construction Activities in the Quarter | 2-1 |
| 2.2 Environmental Sensitive Receivers | 2-1 |
| 3. SUMMARY OF EM&A REQUIREMENTS | 3-1 |
| 3.1 Construction Noise Monitoring | 3-1 |
| 3.1.1 Monitoring Parameters | 3-1 |
| 3.1.2 Monitoring Frequency3.1.3 Monitoring Locations | 3-1 3-1 |
| | 3-1 |
| 3.2 Air Quality Monitoring 3.2.1 Monitoring Parameters | 3-2 |
| 3.2.2 Monitoring Frequency | 3-2 |
| 3.2.3 Monitoring Locations | 3-2 |
| 3.3 Performance Limits and Event-Action Plans | 3-3 |
| 3.3.1 Construction Noise Impact | 3-4 |
| 3.3.2 Air Quality | 3-5 |
| 4. CONSTRUCTION NOISE MONITORING | 4-1 |
| 4.1 Monitoring Results | 4-1 |
| 5. AIR QUALITY MONITORING | 5-1 |
| 5.1 24-hour TSP Monitoring Results | 5-1 |
| 5.2 1-hour Monitoring Results | 5-2 |
| 6. QUARTERLY SUMMARY, ENVIRONMENTAL COMPLA COMPLIANCE RECORDS | INT AND NON- 6-1 |
| 6.1 Waste Disposal | 6-1 |
| 6.2 EPD Site Inspection | 6-2 |
| 6.3 Complaint Record | 6-2 |
| 6.4 Non-compliance Record | 6-4 |
| 7. REFERENCES | 7-1 |

Content Ove Arup & Partners

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LIST OF APPENDICES

Appendix 1 - Noise Impact Monitoring Details from January 2003 to March 2003

Appendix 2 - 24-hour TSP Monitoring Details from January 2003 to March 2003

Appendix 3 - 1-hour TSP Monitoring Details from January 2003 to March 2003

Appendix 4 - Correspondences of the Public Complaints from January 2003 to March

2003

List of Appendices Ove Arup & Partners

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ABBREVIATIONS AND ACRONYMS

AQO Air Quality Objectives

Arup Ove Arup & Partners Hong Kong Limited

ASR Area Sensitive Rating

BOD₅ 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 January 2003 to March 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).

Twelve measurements were taken at each location during 0700-1900 and twelve measurements were taken at NM3, NM4, NM6 and NM8 during 1900-2300 from January 2003 to March 2003. The recorded noise levels were in the range from 60.9 to 74.7 dB(A) during 0700-1900 and from 50.2 to 64.8 dB (A) during 1900-2300. All measurements were below the Limit Level of 70dB(A) at NM2 and 75dB(A) at other locations during 0700-1900, and below the Limited Level of 70 dB(A) during 1900-2300 for monitoring locations.

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

A total of fifteen 24-hour TSP monitoring were conducted at each location from January 2003 to March 2003. The recorded 24-hour TSP levels were in the range from 26.8 to 151.1 $\mu g/m^3$ and were below the Action and Limit Levels.

A total of forty-five 1-hour TSP monitoring were conducted at each location from January 2003 to March 2003. The recorded 1-hour TSP levels were in the range from 132.1 to 324.2 $\mu g/m^3$ and were below the Action and Limit Levels.

A total of 53 loads of waste from site clearance (i.e. felled trees) have been disposed of at NENT Landfill from January 2003 to March 2003. The total tonnage of the waste disposal from January 2003 to March 2003 was 390.9 tonnes.

A total of 5,020 loads of rocks ($\phi > 400$ mm) have been disposed of at the follow government project sites from January 2003 to March 2003:

- Contract No. FL 26/01 River Training for Upper River Indus Completion of the Remaining Works between Man Kam To Road and KCRC Bridges, and
- Contract No. FL27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai

The total quantity of the disposed rocks was 35,893.1 m³ from January 2003 to March 2003.

A total of 255 loads of inert material have been disposed of at Public Filling Area from January 2003 to March 2003. The total quantity of the disposed inert materials was 1,530.0 m³ from January 2003 to March 2003.

ET was informed by the CT that EPD visited the site on 21/01/03, 25/01/03, 25/02/03, 03/03/03, 04/03/03, 13/03/03 and 27/03/03.

Executive Summary Ove Arup & Partners

Five public complaints regarding construction noise were received on 09/01/03, 13/01/03, 18/01/03, 20/01/03 and 06/02/03 respectively through the Environmental Protection Department and Territory Development Department. 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 January 2003 to March 2003.

1.2 Site Description

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

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



2. ENVIRONMENTAL STATUS

2.1 Construction Activities in the Quarter

The main construction activities from January 2003 to March 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 TB and TC bridge area.

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.

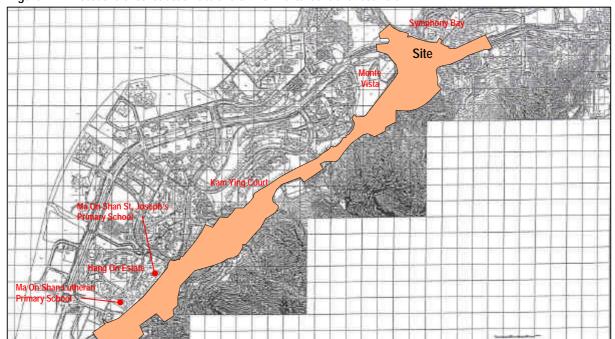


Figure 2-1 - Locations of construction site and environmental sensitive receivers.

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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)} | | 1 | |
| Between 1900-2300 hours on normal weekdays | | Once per week | | |
| Between 2300-0700 hours of next day | L _{eq(5 min)} * | Office per week | 3 (consecutive) | |
| 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 |

Section 3 Ove Arup & Partners

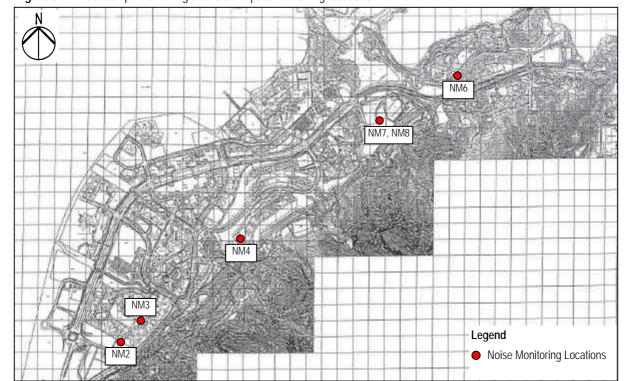


Figure 3-1 - Location plan showing the noise impact monitoring locations.

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 |

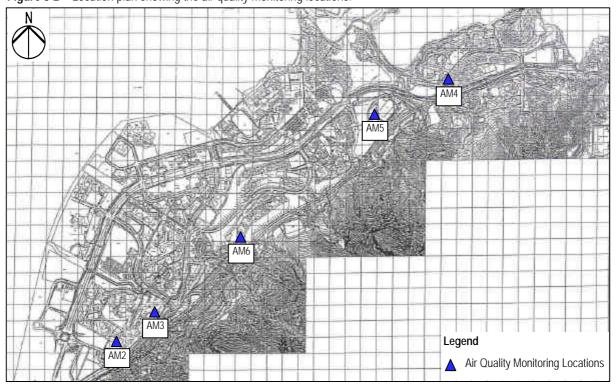
3.2.3 Monitoring Locations

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.

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3.3.1 Construction Noise Impact

The action and limit levels for the construction noise have been established in Project Specific EM&A Manual^[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 | | 75 * |
| 0700 – 2300 hours on General Holidays; & | When one documented | 50 or 55** ⁽¹⁾ |
| 1900 – 2300 hours on all other days | complaint is received | 65 or 70** ⁽²⁾ |
| 2200 0700 hours of poyt day | | 55 or 40** ⁽¹⁾ |
| 2300 – 0700 hours of next day | | 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 | | СТ | | |
| 2. | Notify ER and CT Carry out investigation Report the result of investigation to | Confirm receipt of notification of failure in writing Notify CT Progress CT to propose remedial. | 1. 2. | Submit noise mitigation proposals to ET Implement noise mitigation proposals | | |
| 4. | ER Increase monitoring frequency to check mitigation effectiveness | Require CT to propose remedial measures for the noise exceedance | | proposuis | | |
| 5. | Review the proposed remedial measures by CT and advise ER accordingly | Ensure remedial measures are properly implemented | | | | |
| 6. | Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective | | | | | |
| 7. | Supervise the implementation of remedial measures | | | | | |
| 8. | If exceedance stops, cease additional monitoring | | | | | |

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

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

3.3.2 Air Quality

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

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

| Parameters | Action Level | Limit Level |
|--|--|-------------|
| | For baseline level < 108μg/m³, Action Level = average of baseline level plus 30% and Limit Level | |
| 24 Hour TSP Level in μg/m ³ | For 108μg/m³ < baseline level < 154μg/m³, Action Level = 200μg/m³ | 260 |
| | For baseline level > 154μg/m³, Action Level = 130% of baseline level | |
| | For baseline level < 154μg/m³, Action Level = average of baseline level plus 30% and Limit Level | |
| 1 Hour TSP Level in μg/m³ | For 154μg/m³ < baseline level < 269μg/m³, Action Level = 350μg/m³ | 500 |
| | For baseline level > 269μg/m³, Action Level = 130% of baseline level | |

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The baseline checking was conducted on 16 March 2003. There was no significant difference when comparing the baseline checking results of March 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 | | | | |
|--|----------------------------|--------------|-------------|--|--|
| World ing Location | Baseline Level * | Action Level | Limit Level | | |
| Ma On Shan Lutheran Primary School | 66.0 | 173 | | | |
| Ma On Shan St. Joseph's Primary School | 57.7 | 168 | | | |
| Villa Concerto, Symphony Bay | 60.8 | 170 | 260 | | |
| Club House, Monte Vista# | - | 185 | | | |
| Kam Yiu House, Kam Ying Court# | - | 194 | | | |

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

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

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

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

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

| Action | | | | | | | | |
|---|--|--|---|--|--|--|--|--|
| ET | | ER | | СТ | | | | |
| Level 1 – Exceedance for one sar | nple |) | | | | | | |
| entify source form ER epeat measurement to confirm dings eview the proposed remedial easures by CT and advise ER cordingly aggest any improvement or other ernative mitigation measures ould the CT's proposal be found effective apervise the implementation of medial measures crease monitoring frequency to | 1. 2. | Notify CT Check monitoring data and CT's working methods | 1. 2. | Rectify any unacceptable practice Amend working methods if appropriate | | | | |
| monstrate efficacy of remedial easures exceedance stops, cease ditional monitoring | | | | | | | | |
| Level 2 –Exceedance for two or m | | • | | | | | | |
| entify source form ER expeat measurement to confirm dings eview the proposed remedial easures by CT and advise ER cordingly | 2. | Confirm receipt of notification of failure in writing Notify CT Check monitoring data and CT's working methods Discuss with Environmental Supervisor and CT on potential | 2. | Submit proposals for remedial actions to ER within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate | | | | |
| scuss with ER for remedial tions required aggest any improvement or other | 5. | remedial actions Ensure remedial actions are properly implemented | | | | | | |
| ernative mitigation measures ould the CT's proposal be found effective | | | | | | | | |
| pervise the implementation of medial measures | | | | | | | | |
| crease monitoring frequency to monstrate efficacy of remedial easures | | | | | | | | |
| exceedance continues, arrange eeting with ER exceedance stops, cease | | | | | | | | |
| m ea ea | ease monitoring frequency to constrate efficacy of remedial soures exceedance continues, arrange eting with ER exceedance stops, cease tional monitoring | ease monitoring frequency to constrate efficacy of remedial sources exceedance continues, arrange eting with ER exceedance stops, cease tional monitoring | ease monitoring frequency to constrate efficacy of remedial issures exceedance continues, arrange exceedance stops, cease | ease monitoring frequency to constrate efficacy of remedial sources exceedance continues, arrange esting with ER exceedance stops, cease tional monitoring | | | | |

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

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

| | | | Action | | |
|--|---|--|--|----|--|
| | ET | | ER | | СТ |
| Lin | nit Level 1 – Exceedance for one samp | ple | | | |
| 2.3.4.5.7. | Identify source Inform ER Repeat measurement to confirm findings Discuss with ER for remedial actions required Suggest any improvement or other alternative mitigation measures should the CT's proposal be found ineffective Supervise the implementation of remedial measures Increase monitoring frequency to demonstrate efficacy of remedial measures If exceedance stops, cease additional monitoring | 2. | Confirm receipt of notification of failure in writing Notify CT Check monitoring data and CT's working methods Discuss with ET and CT on potential remedial actions Ensure remedial actions are properly implemented | 2. | Take immediate action to avoid further exceedance Submit proposals for remedial actions to ER within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate |
| Lin | nit Level 2 – Exceedance for two or mo | ore (| consecutive samples | | |
| 2.3.4.5. | alternative mitigation measures | 2. 3. 4. 5. | Confirm receipt of notification of failure in writing Notify CT Carry out analysis of CT's working procedures to determine possible mitigation to be implemented Discuss amongst ET and CT on potential remedial actions Review CT's remedial actions whenever necessary to assure their effectiveness If exceedance continues, consider | 2. | Take immediate action to avoid further exceedance Submit proposals for remedial actions to ER within 3 working days of notification Implement the agreed proposals Resubmit proposals if problem still not under control Stop the relevant portion of works as determined by ER until the exceedance is abated |
| 7. 8. 9. | demonstrate efficacy of remedial measures | | what portion of the work is responsible and instruct CT to stop that portion of work 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

Twelve measurements were taken at each location during 0700-1900 and twelve measurements were taken at NM3, NM4, NM6 and NM8 respectively during 1900-2300 from January 2003 to March 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 between January 2003 and March 2003 are tabulated in Table 4-1 and Table 4-2 respectively. Detailed weather conditions and the monitoring period are given in Appendix 1. The trend of the noise levels at each monitoring location were plotted and presented in Figure 4-1 and Figure 4-2.

Table 4-1 - Construction noise monitoring results from January 2003 to March 2003.

| Data of Manitarina | Monitoring | | Monitoring Results, dB(A) (30 min) | | | | | |
|--------------------|-----------------|------|------------------------------------|------|------|------|------|--|
| Date of Monitoring | Parameters | NM2 | NM3 | NM4 | NM6 | NM7 | NM8 | |
| | Leq | 65.0 | 65.5 | 70.5 | 72.0 | 70.5 | 71.5 | |
| 08/01/03 (Wed) | L ₁₀ | 68.5 | 69.0 | 72.0 | 74.5 | 73.0 | 74.8 | |
| | L ₉₀ | 60.0 | 61.0 | 62.5 | 63.5 | 62.0 | 62.0 | |
| | Leq | 67.7 | 63.5 | 68.5 | 69.2 | 68.5 | 70.8 | |
| 16/01/03 (Thu) | L ₁₀ | 69.5 | 66.4 | 70.8 | 71.5 | 72.5 | 74.5 | |
| | L ₉₀ | 61.5 | 60.2 | 63.5 | 63.0 | 64.4 | 63.5 | |
| | Leq | 64.9 | 63.0 | 64.6 | 65.2 | 64.0 | 67.9 | |
| 22/01/03 (Wed) | L ₁₀ | 68.5 | 64.5 | 67.5 | 68.0 | 66.0 | 70.5 | |
| | L ₉₀ | 60.5 | 59.0 | 59.0 | 61.0 | 60.5 | 64.5 | |
| | L _{eq} | 65.7 | 64.4 | 60.9 | 66.2 | 66.3 | 74.7 | |
| 29/01/03 (Wed) | L ₁₀ | 67.5 | 66.5 | 62.5 | 68.0 | 68.5 | 77.0 | |
| | L ₉₀ | 63.0 | 59.5 | 58.0 | 62.5 | 61.5 | 70.5 | |
| | Leq | 65.0 | 62.5 | 62.0 | 67.5 | 67.0 | 70.0 | |
| 06/02/03 (Thu) | L ₁₀ | 68.5 | 64.0 | 65.5 | 70.0 | 69.5 | 73.5 | |
| | L ₉₀ | 62.5 | 60.0 | 60.5 | 63.0 | 61.5 | 67.5 | |
| | L _{eq} | 66.0 | 63.0 | 65.5 | 67.0 | 64.0 | 72.1 | |
| 12/02/03 (Wed) | L ₁₀ | 68.5 | 65.0 | 69.0 | 69.5 | 67.5 | 75.0 | |
| | L ₉₀ | 60.0 | 58.0 | 60.5 | 62.0 | 62.0 | 67.0 | |
| | Leq | 64.5 | 63.0 | 63.5 | 65.8 | 67.0 | 71.5 | |
| 19/02/03 (Wed) | L ₁₀ | 66.0 | 65.0 | 66.0 | 67.0 | 68.0 | 75.0 | |
| | L ₉₀ | 60.0 | 59.0 | 60.5 | 60.0 | 62.5 | 66.0 | |
| | Leq | 65.0 | 63.5 | 68.0 | 67.0 | 68.0 | 74.2 | |
| 26/02/03 (Wed) | L ₁₀ | 68.0 | 66.0 | 73.5 | 70.5 | 70.5 | 76.5 | |
| | L ₉₀ | 60.5 | 60.5 | 62.5 | 63.0 | 66.0 | 69.0 | |
| | L _{eq} | 64.0 | 62.0 | 67.0 | 68.5 | 71.0 | 70.4 | |
| 07/03/03 (Fri) | L ₁₀ | 66.5 | 63.8 | 71.5 | 73.5 | 74.5 | 75.0 | |
| | L ₉₀ | 60.8 | 57.5 | 62.5 | 64.0 | 64.2 | 63.0 | |

Section 4 Ove Arup & Partners

| Date of Monitoring | Monitoring | Monitoring Results, dB(A) (30 min) | | | | | | | | |
|--------------------|-----------------|------------------------------------|------|------|------|------|------|--|--|--|
| Date of Monitoring | Parameters | NM2 | NM3 | NM4 | NM6 | NM7 | NM8 | | | |
| | Leq | 66.1 | 63.5 | 66.7 | 69.3 | 70.8 | 71.4 | | | |
| 12/03/03 (Wed) | L ₁₀ | 70.0 | 66.5 | 67.5 | 72.5 | 71.0 | 71.0 | | | |
| | L ₉₀ | 60.5 | 54.0 | 57.0 | 61.5 | 60.0 | 62.5 | | | |
| | Leq | 65.7 | 66.1 | 70.7 | 66.3 | 73.0 | 66.5 | | | |
| 19/03/03 (Wed) | L ₁₀ | 68.0 | 70.0 | 73.0 | 68.0 | 75.5 | 69.0 | | | |
| | L ₉₀ | 60.0 | 51.0 | 63.0 | 58.0 | 61.5 | 58.5 | | | |
| | Leq | 68.8 | 65.8 | 67.3 | 69.9 | 70.2 | 68.7 | | | |
| 27/03/03 (Thu) | L ₁₀ | 71.0 | 67.5 | 70.5 | 72.0 | 73.0 | 71.5 | | | |
| | L ₉₀ | 54.5 | 59.5 | 57.5 | 56.5 | 58.5 | 54.5 | | | |

Figure 4-1 – Trend of Noise Level for daytime monitoring from December 2002 to March 2003.

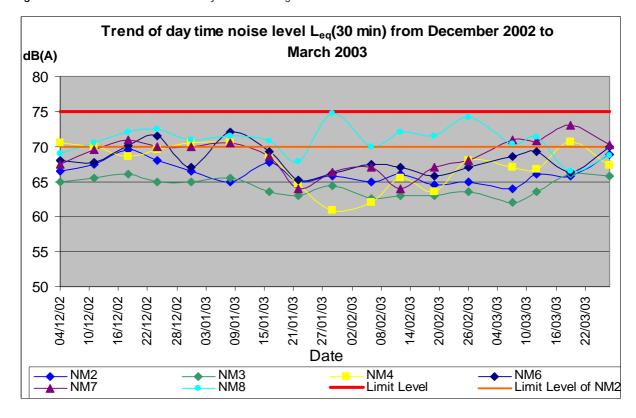


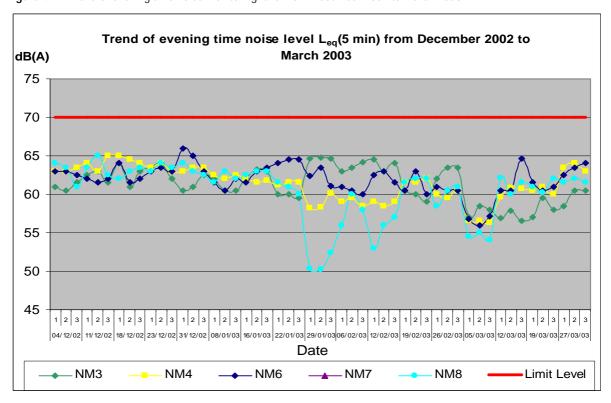
Table 4-2 - Construction evening time noise monitoring results from January 2003 to March 2003.

| ate of Monitoring | Monitoring Results, Leq dB(A) (5 min) | | | | | |
|-------------------|---------------------------------------|------|------|------|------|--|
| ate of Monitoring | NM3 | NM4 | NM6 | NM7* | NM8 | |
| | 62.0 | 62.5 | 61.5 | - | 61.5 | |
| 08/01/03 (Wed) | 60.5 | 62.0 | 60.5 | - | 63.0 | |
| | 60.5 | 62.5 | 62.0 | - | 62.0 | |
| | 62.0 | 62.0 | 61.5 | - | 62.5 | |
| 16/01/03 (Thu) | 63.2 | 61.5 | 63.0 | - | 63.0 | |
| | 63.0 | 61.8 | 63.5 | - | 63.0 | |
| | 60.0 | 61.2 | 64.0 | - | 61.5 | |
| 22/01/03 (Wed) | 60.0 | 61.5 | 64.5 | - | 61.0 | |
| | 59.5 | 61.5 | 64.5 | - | 60.0 | |
| | 64.7 | 58.2 | 62.4 | - | 50.4 | |
| 29/01/03 (Wed) | 64.8 | 58.3 | 63.5 | - | 50.2 | |
| | 64.7 | 60.1 | 61.1 | - | 52.4 | |
| | 63.0 | 59.0 | 61.0 | - | 56.0 | |
| 06/02/03 (Thu) | 63.5 | 59.5 | 60.5 | - | 60.0 | |
| | 64.2 | 58.5 | 60.0 | - | 58.0 | |
| | 64.5 | 59.0 | 62.5 | - | 53.0 | |
| 12/02/03 (Wed) | 63.0 | 58.5 | 63.0 | - | 56.0 | |
| | 64.0 | 59.0 | 61.5 | - | 57.0 | |
| | 60.5 | 61.5 | 60.5 | - | 61.5 | |
| 19/02/03 (Wed) | 60.0 | 61.5 | 63.0 | - | 62.0 | |
| | 59.0 | 62.0 | 60.0 | - | 62.0 | |
| | 62.0 | 60.0 | 61.0 | - | 58.5 | |
| 26/02/03 (Wed) | 63.5 | 59.5 | 60.5 | - | 60.5 | |
| | 63.5 | 60.5 | 60.5 | - | 61.0 | |
| | 57.0 | 56.5 | 56.8 | - | 54.5 | |
| 07/03/03 (Fri) | 58.5 | 56.6 | 56.0 | - | 55.0 | |
| | 58.0 | 56.3 | 57.2 | - | 54.0 | |
| | 56.9 | 59.7 | 60.5 | - | 62.2 | |
| 12/03/03 (Wed) | 57.9 | 60.8 | 60.5 | - | 60.0 | |
| | 56.6 | 60.7 | 64.7 | - | 61.6 | |
| | 57.0 | 60.5 | 61.5 | - | 61.0 | |
| 19/03/03 (Wed) | 59.5 | 60.9 | 60.5 | - | 60.2 | |
| | 58.0 | 60.0 | 61.0 | - | 62.0 | |
| | 58.5 | 63.5 | 62.5 | - | 61.5 | |
| 27/03/03 (Thu) | 60.5 | 64.0 | 63.5 | - | 62.0 | |
| | 60.5 | 63.0 | 64.0 | - | 61.5 | |

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

Section 4 Ove Arup & Partners

Figure 4-2 - Trend of evening time noise monitoring level from December 2002 to March 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 January 2003 to March 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 January 2003 to March 2003.

| Data of Manitorina | 24-hour TSP Monitoring Results,(µg/m³) | | | | | | | | |
|--------------------|--|-------|-------|-------|------|--|--|--|--|
| Date of Monitoring | AM2 | AM3 | AM4 | AM5 | AM6 | | | | |
| 02/01/03 (Thu) | 90.6 | 77.0 | 97.2 | 78.0 | 60.7 | | | | |
| 07/01/03 (Tue) | 46.6 | 46.8 | 41.6 | 39.5 | 38.7 | | | | |
| 13/01/03 (Mon) | 109.7 | 109.6 | 91.2 | 115.7 | 95.1 | | | | |
| 18/01/03 (Sat) | - | 77.8 | 64.0 | 65.2 | 56.4 | | | | |
| 22/01/03 (Wed)* | 151.1 | - | - | - | - | | | | |
| 25/01/03 (Sat) | 94.5 | 104.6 | 103.7 | 97.8 | 87.5 | | | | |
| 04/02/03 (Tue) | 47.9 | 47.4 | 37.7 | 54.8 | 47.5 | | | | |
| 07/02/03 (Fri) | 45.9 | 49.8 | 46.0 | 56.4 | 40.1 | | | | |
| 13/02/03 (Thu) | 51.4 | 57.6 | 50.1 | 61.3 | 49.4 | | | | |
| 18/02/03 (Tue) | 52.7 | 60.6 | 48.9 | 62.7 | 26.8 | | | | |
| 24/02/03 (Mon) | 63.7 | 70.4 | 60.7 | 73.2 | 56.3 | | | | |
| 01/03/03 (Sat) | 50.0 | 57.2 | 50.3 | 65.4 | 45.8 | | | | |
| 06/03/03 (Thu) | 50.8 | 53.8 | 40.7 | 42.1 | 41.5 | | | | |
| 13/03/03 (Thu) | - | 42.6 | 45.1 | 34.4 | 31.7 | | | | |
| 14/03/03 (Fri)# | 49.0 | - | - | - | - | | | | |
| 20/03/03 (Thu) | 37.9 | 39.7 | 43.1 | 39.2 | 40.4 | | | | |
| 26/03/03 (Wed) | 77.9 | 72.3 | 70.0 | 79.5 | 62.6 | | | | |

Note: * The 24-hour TSP monitoring at AM2 was postponed from 18/01/03 to 22/01/03 due to equipment failure.

[#] The 24-hour TSP monitoring at AM2 was postponed from 13/03/03 to 14/03/03 due to power supply shortage.

Section 5 Ove Arup & Partners

5.2 1-hour Monitoring Results

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

| Data of Manifeston | | 1-hour TSI | P Monitoring Res | ults,(µg/m³) | |
|--------------------|-------|------------|------------------|--------------|-------|
| Date of Monitoring | AM2 | AM3 | AM4 | AM5 | AM6 |
| | 144.1 | 177.6 | 174.5 | 142.4 | 148.2 |
| 03/01/03 (Fri) | 139.1 | 176.9 | 176.5 | 144.1 | 153.9 |
| | 148.7 | 188.3 | 184.9 | 142.3 | 162.0 |
| | 205.5 | 205.9 | 176.3 | 177.8 | 178.6 |
| 08/01/03 (Wed) | 225.4 | 220.9 | 193.7 | 196.6 | 192.0 |
| | 187.0 | 183.5 | 141.0 | 157.2 | 188.5 |
| | 199.6 | 225.9 | 139.5 | 156.0 | 157.5 |
| 16/01/03 (Thu) | 193.8 | 233.3 | 141.0 | 160.3 | 154.9 |
| | 239.4 | 206.2 | 147.9 | 158.6 | 157.3 |
| | 280.8 | 275.4 | 324.2 | 294.9 | 255.3 |
| 22/01/03 (Wed) | 277.9 | 269.8 | 318.0 | 290.6 | 262.6 |
| | 260.7 | 254.8 | 301.8 | 273.9 | 242.6 |
| | 200.6 | 188.2 | 173.0 | 217.2 | 216.4 |
| 29/01/03 (Wed) | 193.7 | 184.2 | 172.4 | 209.4 | 210.5 |
| | 181.6 | 163.2 | 168.8 | 203.2 | 200.1 |
| | 240.7 | 202.0 | 204.1 | 213.3 | 236.6 |
| 06/02/03 (Thu) | 224.3 | 209.0 | 231.4 | 221.7 | 222.8 |
| | 215.0 | 228.2 | 217.8 | 226.0 | 223.2 |
| | 157.4 | 192.8 | 157.4 | 176.6 | 185.0 |
| 12/02/03 (Wed) | 166.2 | 204.8 | 166.7 | 184.1 | 195.9 |
| | 164.8 | 200.0 | 164.1 | 177.5 | 191.5 |
| | 190.3 | 211.4 | 212.2 | 182.5 | 181.1 |
| 14/02/03 (Fri) | 173.7 | 198.1 | 196.0 | 163.5 | 169.0 |
| | 191.9 | 211.7 | 208.4 | 181.1 | 181.7 |
| | 238.1 | 223.3 | 249.0 | 230.3 | 262.0 |
| 19/02/03 (Wed) | 209.6 | 194.6 | 212.5 | 201.1 | 229.0 |
| | 197.0 | 195.8 | 211.2 | 195.0 | 227.7 |
| | 229.3 | 203.1 | 208.2 | 211.1 | 194.5 |
| 26/02/03 (Wed) | 200.0 | 203.8 | 211.2 | 221.2 | 202.6 |
| | 221.9 | 198.9 | 205.5 | 216.5 | 197.5 |

| Data of Manitorina | | 1-hour TSP Monitoring Results,(µg/m³) | | | | | | | |
|--------------------|-------|---------------------------------------|-------|-------|-------|--|--|--|--|
| Date of Monitoring | AM2 | AM3 | AM4 | AM5 | AM6 | | | | |
| | 177.0 | 203.4 | 172.8 | 156.9 | 180.1 | | | | |
| 07/03/03 (Fri) | 179.4 | 199.5 | 174.6 | 163.5 | 182.2 | | | | |
| | 174.9 | 195.2 | 173.3 | 167.1 | 183.9 | | | | |
| | 156.9 | 188.4 | 175.8 | 149.9 | 153.1 | | | | |
| 12/03/03 (Wed) | 139.4 | 176.2 | 160.2 | 140.6 | 143.1 | | | | |
| | 132.1 | 180.5 | 163.5 | 173.7 | 132.7 | | | | |
| | 173.6 | 159.5 | 189.6 | 146.0 | 148.2 | | | | |
| 19/03/03 (Wed) | 174.0 | 157.1 | 198.1 | 159.3 | 146.8 | | | | |
| | 176.0 | 168.2 | 208.8 | 170.3 | 148.5 | | | | |
| | 181.2 | 189.5 | 184.7 | 210.8 | 216.8 | | | | |
| 21/03/03 (Fri) | 176.1 | 180.5 | 178.9 | 205.2 | 203.5 | | | | |
| | 155.4 | 150.2 | 155.3 | 183.5 | 206.8 | | | | |
| | 202.4 | 203.2 | 231.1 | 233.5 | 203.2 | | | | |
| 27/03/03 (Thu) | 156.1 | 164.8 | 189.2 | 189.7 | 163.2 | | | | |
| | 158.6 | 173.8 | 188.3 | 184.9 | 144.4 | | | | |

Section 5 Ove Arup & Partners

Figure 5-1 - Trend of 24-hours TSP levels from December 2002 to March 2003.

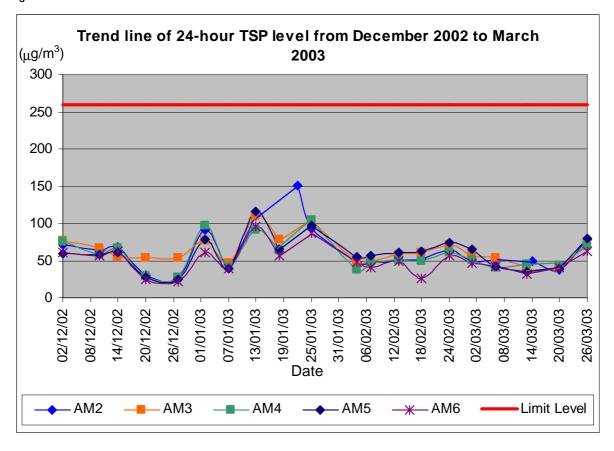
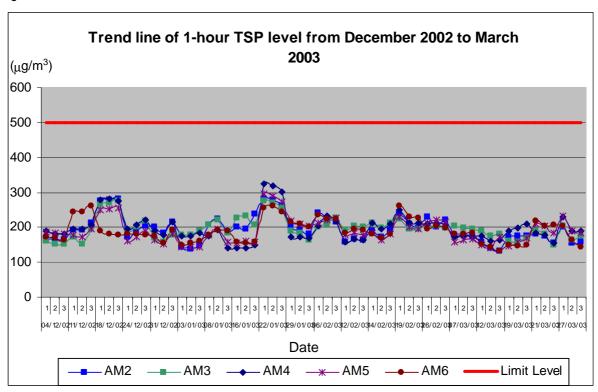


Figure 5-2 - Trend of 1-hour TSP levels from December 2002 to March 2003.



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

6.1 Waste Disposal

A total of 53 loads of waste from site clearance (i.e. felled trees) have been disposed of at NENT Landfill from January 2003 to March 2003. The total tonnage of the waste disposal from January 2003 to March 2003 was 390.9 tonnes.

A total of 5,020 loads of rocks ($\phi > 400$ mm) have been disposed of at the follow government project sites from January 2003 to March 2003:

- Contract No. FL 26/01 River Training for Upper River Indus Completion of the Remaining Works between Man Kam To Road and KCRC Bridges, and
- Contract No. FL27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai

The total quantity of the disposed rocks was 35,893.1 m³ from January 2003 to March 2003.

A total of 255 loads of inert material have been disposed of at Public Filling Area from January 2003 to March 2003. The total quantity of the disposed inert materials was 1,530.0 m³ from January 2003 to March 2003.

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

| Table 6-1 - | Waste [| Disposal | Summar | у. |
|-------------|---------|----------|--------|----|
|-------------|---------|----------|--------|----|

| Month | Number of Loads to NENT | Total Disposed Tonnage (tonnes) | Number of Loads to others gov. designated project# | Total Disposed Quantity (m³) | Number of Loads to Public Filling Area | Total Disposed Quantity (m³) |
|-----------------|-------------------------------|--|--|------------------------------------|---|------------------------------------|
| May 2001 | 83 | 588.3 | - | - | - | - |
| June 2001 | 48 | 326.1 | - | - | - | - |
| July 2001 | 82 | 723.4 | - | - | - | - |
| August 2001* | 62 | 513.8 | - | - | 14 | 96.0 |
| September 2001* | 114 | 772.2 | - | - | 456 | 2,718.0 |
| October 2001* | 60 | 478.8 | - | - | 431 | 2,586.0 |
| November 2001* | 131 | 863.3 | - | - | 853 | 5,154.0 |
| December 2001* | 123 | 822.5 | - | - | 790 | 3,990.0 |
| January 2002* | 204 | 822.3 | 410 | 3,114.0 | 688 | 4,128.0 |
| February 2002* | 73 | 483.6 | 362 | 2,260.0 | 287 | 1,722.0 |
| March 2002* | 88 | 645.1 | 737 | 5,018.4 | 437 | 2,622.0 |
| April 2002* | 29 | 169.8 | 2,265 | 24,881.5 | 492 | 2,946.0 |
| May 2002* | 10 | 773.3 | 2,478 | 17,295.9 | 351 | 2,460.0 |
| June 2002* | 81 | 624.7 | 2,077 | 14,850.6 | 451 | 2,712.0 |
| July 2002* | 45 | 327.4 | 372 | 2,659.8 | 112 | 672.0 |
| August 2002* | - | - | 548 | 3,390.6 | 63 | 372.0 |

Section 6 Ove Arup & Partners

| Month | Number of Loads to NENT | Total Disposed Tonnage (tonnes) | Number of Loads to others gov. designated project# | Total Disposed Quantity (m³) | Number of Loads to Public Filling Area | Total Disposed Quantity (m³) |
|----------------|-------------------------------|--|--|------------------------------------|---|------------------------------------|
| September 2002 | 42 | 225.6 | 3,732 | 22,719.8 | 9 | 54.0 |
| October 2002 | 48 | 378.0 | 2,989 | 18,740.2 | 69 | 414.0 |
| November 2002 | 94 | 725.0 | 1,232 | 7,565.7 | 80 | 480.0 |
| December 2002 | 21 | 147.3 | 3,035 | 21,668.1 | 66 | 396.0 |
| January 2003 | 7 | 45.5 | 2,351 | 16,809.7 | 150 | 900.0 |
| February 2003 | 7 | 77.9 | 1,929 | 13,792.4 | 56 | 336.0 |
| March 2003 | 39 | 267.5 | 740 | 5,291.0 | 49 | 294.0 |
| Total | 1,491.0 | 10,801.4 | 25,257.0 | 180,057.7 | 5,904.0 | 35,052.0 |

Note:

- -TDD Contract No. YL 46/99 Tin Shui Wai Further Development Road D3 and Constructed Wetland,
- -Contract No. FL27/02 Completion of the Remaining River Training Works for Upper Indus between Man Kam To & San Wai
- -TDD Contract No. FL 26/01 River Training for Upper River Indus Completion of the Remaining Works between Man Kam To Road and KCRC Bridges and
- -CED Contract No. CV/99/10 Pak Shek Kok Reclamation for Public Filling, Remaining Works.
- * The updated waste disposal data was provided by CT in March 2003

6.2 EPD Site Inspection

ET was informed by the CT that EPD visited the site on 21/01/03, 25/01/03, 25/02/03, 03/03/03, 04/03/03, 13/03/03 and 27/03/03.

6.3 Complaint Record

Five public complaints regarding construction noise were received on 09/01/03, 13/01/03, 18/01/03, 20/01/03 and 06/02/03 respectively through the EPD and TDD. 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) | (Kam Ying Court) Noise | |
| 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) | District Councillor for Shatin District Board) Water I | |
| 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 | |

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

Section 6 Ove Arup & Partners

6.4 Non-compliance Record

There was no exceedance recorded in the period from January 2003 to March 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 March 2003.

| Dor's d | Noise Monitoring | | | |
|----------------|----------------------|----------------------|---------------------------|--|
| Period | Number of Monitoring | Number of Compliance | Compliance Percentage (%) | |
| February 2001 | 3 | 3 | 100 | |
| March 2002 | 5 | 5 | 100 | |
| April 2001 | 4 | 4 | 100 | |
| May 2001 | 5 | 5 | 100 | |
| June 2001 | 4 | 4 | 100 | |
| July 2001 | 5 | 5 | 100 | |
| August 2001 | 4 | 4 | 100 | |
| September 2001 | 4 | 4 | 100 | |
| October 2001 | 5 | 4 | 100 | |
| November 2001 | 4 | 4 | 100 | |
| December 2001 | 4 | 4 | 100 | |
| January 2002 | 5 | 5 | 100 | |
| February 2002 | 4 | 4 | 100 | |
| March 2002 | 4 | 4 | 100 | |
| April 2002 | 4 | 4 | 100 | |
| April 2003 | 5 | 5 | 100 | |
| June 2002 | 4 | 4 | 100 | |
| July 2002 | 5 | 5 | 100 | |
| August 2002 | 4 | 4 | 100 | |
| 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 | |

Ove Arup & Partners Section 6

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

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

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

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

| Period | | 1-hour TSP Monitoring | |
|---------------|----------------------|-----------------------|---------------------------|
| renou | Number of Monitoring | Number of Compliance | Compliance Percentage (%) |
| February 2001 | - | - | - |
| March 2002 | 3 | 3 | 100 |
| April 2001 | 15 | 15 | 100 |

^{*} 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.

Section 6 Ove Arup & Partners

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

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

Ove Arup & Partners Section 7

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.

Section 7 Ove Arup & Partners

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APPENDIX 1

Noise Impact Monitoring Results for January 2003 to March 2003

Details of Day Time Noise Impact Monitoring

| | | NSR | Time p | eriods | Weather | Avg. wind | Noi | se Level dB | (A) |
|------------------|------------------------|------------|----------------|----------------|----------------|-------------|--------------|-----------------|-----------------|
| Month | Date | No. | Start | Finish | condition | speed (m/s) | L_{eq} | L ₁₀ | L ₉₀ |
| Jan-03 | 08-Jan-03 | NM2 | 9:50 | 10:20 | Sunny | 0.4 | 65.0 | 68.5 | 60.0 |
| Jan-03 | 08-Jan-03 | NM3 | 10:30 | 11:00 | Sunny | 0.3 | 65.5 | 69.0 | 61.0 |
| Jan-03 | 08-Jan-03 | NM4 | 11:10 | 11:40 | Sunny | 0.6 | 70.5 | 72.0 | 62.5 |
| Jan-03 | 08-Jan-03 | NM6 | 14:30 | 15:00 | Sunny | 0.6 | 72.0 | 74.5 73.0 | 63.5 62.0 |
| Jan-03 | 08-Jan-03 | NM7 | 13:00 13:40 | 13:30 14:10 | Sunny Sunny | 0.5 0.5 | 70.5 71.5 | 73.0 74.8 | 62.0 |
| Jan-03 Jan-03 | 08-Jan-03 16-Jan-03 | NM8 NM2 | 13:40 | 13:30 | sunny | 0.4 | 67.7 | 69.5 | 61.5 |
| Jan-03 | 16-Jan-03 | NM3 | 13:35 | 14:05 | sunny | 0.4 | 63.5 | 66.4 | 60.2 |
| Jan-03 | 16-Jan-03 | NM4 | 14:15 | 14:45 | sunny | 0.6 | 68.5 | 70.8 | 63.5 |
| Jan-03 | 16-Jan-03 | NM6 | 16:20 | 16:50 | sunny | 0.7 | 69.2 | 71.5 | 63.0 |
| Jan-03 | 16-Jan-03 | NM7 | 15:35 | 16:05 | sunny | 0.6 | 68.5 | 72.5 | 64.4 |
| Jan-03 | 16-Jan-03 | NM8 | 14:55 | 15:25 | sunny | 0.7 | 70.8 | 74.5 | 63.5 |
| Jan-03 | 22-Jan-03 | NM2 | 13:00 | 13:30 | sunny | 0.3 | 64.9 | 68.5 | 60.5 |
| Jan-03 | 22-Jan-03 | NM3 | 13:40 | 14:10 | sunny | 0.2 | 63.0 | 64.5 | 59.0 59.0 |
| Jan-03 | 22-Jan-03 | NM4 | 14:30 | 15:00 | sunny | 0.3 0.2 | 64.6 65.2 | 67.5 68.0 | 59.0 61.0 |
| Jan-03 | 22-Jan-03 | NM6 | 10:55 10:15 | 11:25 10:45 | sunny | 0.2 | 64.0 | 66.0 | 60.5 |
| Jan-03 Jan-03 | 22-Jan-03 22-Jan-03 | NM7 NM8 | 9:40 | 10:45 | sunny sunny | 0.3 | 67.9 | 70.5 | 64.5 |
| Jan-03 Jan-03 | 22-Jan-03 29-Jan-03 | NM2 | 9:30 | 10:10 | Sunny | 0.3 | 65.7 | 67.5 | 63.0 |
| Jan-03 Jan-03 | 29-Jan-03 29-Jan-03 | NM3 | 13:25 | 13:55 | Sunny | 0.4 | 64.4 | 66.5 | 59.5 |
| Jan-03 Jan-03 | 29-Jan-03 | NM4 | 13:15 | 13:45 | Sunny | 0.4 | 60.9 | 62.5 | 58.0 |
| Jan-03 | 29-Jan-03 | NM6 | 14:30 | 15:00 | Sunny | 0.3 | 66.2 | 68.0 | 62.5 |
| Jan-03 | 29-Jan-03 | NM7 | 14:25 | 14:55 | Sunny | 0.3 | 66.3 | 68.5 | 61.5 |
| Jan-03 | 29-Jan-03 | NM8 | 15:00 | 15:30 | Sunny | 0.4 | 74.7 | 77.0 | 70.5 |
| Feb-03 | 06-Feb-03 | NM2 | 13:10 | 13:40 | sunny | 0.4 | 65.0 | 68.5 | 62.5 |
| Feb-03 | 06-Feb-03 | NM3 | 13:45 | 14:15 | sunny | 0.3 | 62.5 | 64.0 | 60.0 |
| Feb-03 | 06-Feb-03 | NM4 | 14:25 | 14:55 | sunny | 0.4 | 62.0 | 65.5 | 60.5 |
| Feb-03 | 06-Feb-03 | NM6 | 16:15 | 16:45 | sunny | 0.5 | 67.5 | 70.0 | 63.0 |
| Feb-03 | 06-Feb-03 | NM7 | 15:00 | 15:30 | sunny | 0.5 | 67.0 | 69.5 | 61.5 |
| Feb-03 | 06-Feb-03 | NM8 | 15:35 | 16:05 | sunny | 0.5 0.3 | 70.0 66.0 | 73.5 68.5 | 67.5 60.0 |
| Feb-03 | 12-Feb-03 | NM2 NM3 | 13:00 13:45 | 13:30 14:15 | sunny sunny | 0.3 | 63.0 | 65.0 | 58.0 |
| Feb-03 Feb-03 | 12-Feb-03 12-Feb-03 | NM4 | 14:40 | 15:10 | sunny | 0.5 | 65.5 | 69.0 | 60.5 |
| Feb-03 | 12-Feb-03 | NM6 | 9:30 | 10:00 | sunny | 0.3 | 67.0 | 69.5 | 62.0 |
| Feb-03 | 12-Feb-03 | NM7 | 11:00 | 11:30 | sunny | 0.4 | 64.0 | 67.5 | 62.0 |
| Feb-03 | 12-Feb-03 | NM8 | 10:20 | 10:50 | sunny | 0.5 | 72.1 | 75.0 | 67.0 |
| Feb-03 | 19-Feb-03 | NM2 | 13:00 | 13:30 | sunny | 0.4 | 64.5 | 66.0 | 60.0 |
| Feb-03 | 19-Feb-03 | NM3 | 13:40 | 14:10 | sunny | 0.3 | 63.0 | 65.0 | 59.0 |
| Feb-03 | 19-Feb-03 | NM4 | 11:30 | 12:00 | sunny | 0.4 | 63.5 | 66.0 | 60.5 |
| Feb-03 | 19-Feb-03 | NM6 | 10:50 | 11:20 | sunny | 0.4 | 65.8 | 67.0 | 60.0 |
| Feb-03 | 19-Feb-03 | NM7 | 10:00 | 10:30 | sunny | 0.4 | 67.0 | 68.0 75.0 | 62.5 66.0 |
| Feb-03 | 19-Feb-03 | NM8 | 9:25 | 9:55 | sunny | 0.6 0.3 | 71.5 65.0 | 68.0 | 60.5 |
| Feb-03 | 26-Feb-03 26-Feb-03 | NM2 NM3 | 13:00 13:50 | 13:30 14:20 | Sunny Sunny | 0.3 | 63.5 | 66.0 | 60.5 |
| Feb-03 Feb-03 | 26-Feb-03 26-Feb-03 | NM4 | 9:15 | 9:45 | Sunny | 0.4 | 68.0 | 73.5 | 62.5 |
| Feb-03 | 26-Feb-03 | NM6 | 11:05 | 11:35 | Sunny | 0.5 | 67.0 | 70.5 | 63.0 |
| Feb-03 | 26-Feb-03 | NM7 | 14:30 | 15:00 | Sunny | 0.6 | 68.0 | 70.5 | 66.0 |
| Feb-03 | 26-Feb-03 | NM8 | 10:00 | 10:30 | Sunny | 0.5 | 74.2 | 76.5 | 69.0 |
| Mar-03 | 07-Mar-03 | NM2 | 8:40 | 9:10 | Sunny | 0.4 | 64.0 | 66.5 | 60.8 |
| Mar-03 | 07-Mar-03 | NM3 | 9:25 | 9:55 | Sunny | 0.3 | 62.0 | 63.8 | 57.5 |
| Mar-03 | 07-Mar-03 | NM4 | 10:05 | 10:35 | Sunny | 0.5 | 67.0 | 71.5 | 62.5 |
| Mar-03 | 07-Mar-03 | NM6 | 13:00 | 13:30 | Sunny | 0.6 | 68.5 | 73.5 | 64.0 |
| Mar-03 | 07-Mar-03 | NM7 | 11:30 | 12:00 | Sunny | 0.7 | 71.0 | 74.5 | 64.2 |
| Mar-03 | 07-Mar-03 | NM8 | 10:50 | 11:20 | Sunny | 0.6 | 70.4 66.1 | 75.0 70.0 | 63.0 60.5 |
| Mar-03 | 12-Mar-03 | NM2 | 14:10 | 14:40 | Sunny | 0.6 0.4 | 66.1 63.5 | 66.5 | 54.0 |
| Mar-03 Mar-03 | 12-Mar-03 12-Mar-03 | NM3 NM4 | 13:40 11:20 | 14:10 11:50 | Sunny | 0.4 | 66.7 | 67.5 | 57.0 |
| Mar-03 | 12-Mar-03 | NM6 | 11:30 | 12:00 | Sunny | 0.6 | 69.3 | 72.5 | 61.5 |
| Mar-03 | 12-Mar-03 | NM7 | 10:45 | 11:15 | Sunny | 0.9 | 70.8 | 71.0 | 60.0 |
| Mar-03 | 12-Mar-03 | NM8 | 10:40 | 11:10 | Sunny | 0.7 | 71.4 | 71.0 | 62.5 |
| Mar-03 | 19-Mar-03 | NM2 | 13:05 | 13:35 | Fine | 0.5 | 65.7 | 68.0 | 60.0 |
| Mar-03 | 19-Mar-03 | NM3 | 11:25 | 11:55 | Fine | 0.4 | 66.1 | 70.0 | 51.0 |
| Mar-03 | 19-Mar-03 | NM4 | 10:40 | 11:10 | Fine | 0.5 | 70.7 | 73.0 | 63.0 |
| Mar-03 | 19-Mar-03 | NM6 | 9:50 | 10:20 | Fine | 0.4 | 66.3 | 68.0 | 58.0 |
| Mar-03 | 19-Mar-03 | NM7 | 8:20 | 8:50 | Fine | 0.5 | 73.0 | 75.5 | 61.5 |
| Mar-03 | 19-Mar-03 | NM8 | 9:05 | 9:35 | Fine | 0.4 | 66.5 | 69.0 | 58.5 54.5 |
| Mar-03 | 27-Mar-03 | NM2 | 11:30 | 12:00 | sunny | 0.5 | 68.8 65.8 | 71.0 67.5 | 54.5 59.5 |
| Mar-03 | 27-Mar-03 | NM3 NM4 | 13:15 9:00 | 13:45 9:30 | sunny sunny | 0.3 0.4 | 67.3 | 70.5 | 57.5 |
| Mar-03 Mar-03 | 27-Mar-03 27-Mar-03 | NM4 NM6 | 11:25 | 11:55 | sunny | 0.4 | 69.9 | 72.0 | 56.5 |
| Mar-03 | 27-Mar-03 27-Mar-03 | NM7 | 10:00 | 10:30 | sunny | 0.6 | 70.2 | 73.0 | 58.5 |
| | 27-Mar-03 | NM8 | 10:10 | 10:40 | sunny | 0.4 | 68.7 | 71.5 | 54.5 |

Details of Evening time Noise Impact Monitoring

| | | | NSR | Time p | eriods | Weather | Avg. wind | Noi | se Level dB | (A) |
|--------|-----------|---------|-----|--------|--------|-----------|-------------|------|-----------------|-----------------|
| Month | Date | Set No. | No. | Start | Finish | condition | speed (m/s) | Leq | L ₁₀ | L ₉₀ |
| Jan-03 | 08-Jan-03 | 1 | NM3 | 19:00 | 19:05 | fine | 0.3 | 62.0 | 64.5 | 59.0 |
| Jan-03 | 08-Jan-03 | 2 | NM3 | 19:05 | 19:10 | fine | 0.3 | 60.5 | 62.0 | 58.5 |
| Jan-03 | 08-Jan-03 | 3 | NM3 | 19:10 | 19:15 | fine | 0.3 | 60.5 | 63.0 | 58.0 |
| Jan-03 | 08-Jan-03 | 1 | NM4 | 19:35 | 19:40 | fine | 0.4 | 62.5 | 65.0 | 59.0 |
| Jan-03 | 08-Jan-03 | 2 | NM4 | 19:40 | 19:45 | fine | 0.4 | 62.0 | 65.5 | 59.0 |
| Jan-03 | 08-Jan-03 | 3 | NM4 | 19:45 | 19:50 | fine | 0.4 | 62.5 | 65.5 | 59.0 |
| Jan-03 | 08-Jan-03 | 1 1 | NM6 | 20:30 | 20:35 | fine | 0.4 | 61.5 | 63.0 | 59.5 |
| Jan-03 | 08-Jan-03 | 2 | NM6 | 20:35 | 20:40 | fine | 0.4 | 60.5 | 62.0 | 58.0 |
| Jan-03 | 08-Jan-03 | 3 | NM6 | 20:40 | 20:45 | fine | 0.4 | 62.0 | 63.0 | 59.0 |
| Jan-03 | 08-Jan-03 | 1 1 | NM8 | 20:05 | 20:10 | fine | 0.4 | 61.5 | 63.0 | 59.0 |
| Jan-03 | 08-Jan-03 | 2 | NM8 | 20:10 | 20:15 | fine | 0.4 | 63.0 | 64.5 | 60.0 |
| Jan-03 | 08-Jan-03 | 3 | NM8 | 20:15 | 20:20 | fine | 0.4 | 62.0 | 65.0 | 60.0 |
| Jan-03 | 16-Jan-03 | 1 1 | NM3 | 20:20 | 20:25 | fine | 0.3 | 62.0 | 63.5 | 58.5 |
| Jan-03 | 16-Jan-03 | 2 | NM3 | 20:25 | 20:30 | fine | 0.3 | 63.2 | 64.0 | 59.0 |
| Jan-03 | 16-Jan-03 | 3 | NM3 | 20:30 | 20:35 | fine | 0.3 | 63.0 | 64.5 | 59.0 |
| Jan-03 | 16-Jan-03 | 1 | NM4 | 20:00 | 20:05 | fine | 0.4 | 62.0 | 63.5 | 59.5 |
| Jan-03 | 16-Jan-03 | 2 | NM4 | 20:05 | 20:10 | fine | 0.4 | 61.5 | 63.0 | 60.2 |
| Jan-03 | 16-Jan-03 | 3 | NM4 | 20:10 | 20:15 | fine | 0.4 | 61.8 | 63.0 | 60.0 |
| Jan-03 | 16-Jan-03 | 1 | NM6 | 19:30 | 19:35 | fine | 0.4 | 61.5 | 63.0 | 60.0 |
| Jan-03 | 16-Jan-03 | 2 | NM6 | 19:35 | 19:40 | fine | 0.4 | 63.0 | 64.5 | 60.5 |
| Jan-03 | 16-Jan-03 | 3 | NM6 | 19:40 | 19:45 | fine | 0.4 | 63.5 | 64.5 | 60.0 |
| Jan-03 | 16-Jan-03 | 1 | NM8 | 19:00 | 19:05 | fine | 0.3 | 62.5 | 65.0 | 58.5 |
| Jan-03 | 16-Jan-03 | 2 | NM8 | 19:05 | 19:10 | fine | 0.3 | 63.0 | 64.5 | 58.5 |
| Jan-03 | 16-Jan-03 | 3 | NM8 | 19:10 | 19:15 | fine | 0.3 | 63.0 | 65.0 | 59.0 |
| Jan-03 | 22-Jan-03 | 1 | NM3 | 20:15 | 20:20 | fine | 0.4 | 60.0 | 63.0 | 57.5 |
| Jan-03 | 22-Jan-03 | 2 | NM3 | 20:20 | 20:25 | fine | 0.4 | 60.0 | 63.0 | 59.6 |
| Jan-03 | 22-Jan-03 | 3 | NM3 | 20:25 | 20:30 | fine | 0.4 | 59.5 | 62.5 | 57.0 |
| Jan-03 | 22-Jan-03 | 1 | NM4 | 19:50 | 19:55 | fine | 0.3 | 61.2 | 63.0 | 58.0 |
| Jan-03 | 22-Jan-03 | 2 | NM4 | 19:55 | 20:00 | fine | 0.3 | 61.5 | 63.0 | 58.5 |
| Jan-03 | 22-Jan-03 | 3 | NM4 | 20:00 | 20:05 | fine | 0.3 | 61.5 | 62.5 | 58.0 |
| Jan-03 | 22-Jan-03 | 1 | NM6 | 19:25 | 19:30 | fine | 0.4 | 64.0 | 65.5 | 60.0 |
| Jan-03 | 22-Jan-03 | 2 | NM6 | 19:30 | 19:35 | fine | 0.4 | 64.5 | 66.0 | 60.5 |
| Jan-03 | 22-Jan-03 | 3 | NM6 | 19:35 | 19:40 | fine | 0.4 | 64.5 | 66.0 | 60.5 |
| Jan-03 | 22-Jan-03 | 1 | NM8 | 19:00 | 19:05 | fine | 0.3 | 61.5 | 63.8 | 58.0 |
| Jan-03 | 22-Jan-03 | 2 | NM8 | 19:05 | 19:10 | fine | 0.3 | 61.0 | 64.0 | 58.5 |
| Jan-03 | 22-Jan-03 | 3 | NM8 | 19:10 | 19:15 | fine | 0.3 | 60.0 | 63.5 | 58.0 |
| Jan-03 | 29-Jan-03 | 1 | NM3 | 19:10 | 19:15 | fine | 0.1 | 64.7 | 67.0 | 59.5 |
| Jan-03 | 29-Jan-03 | 2 | NM3 | 19:15 | 19:20 | fine | 0.1 | 64.8 | 67.0 | 61.0 |
| Jan-03 | 29-Jan-03 | 3 | NM3 | 19:20 | 19:25 | fine | 0.1 | 64.7 | 66.5 | 62.0 |
| Jan-03 | 29-Jan-03 | 1 | NM4 | 19:42 | 19:47 | fine | 1.2 | 58.2 | 61.5 | 52.5 |
| Jan-03 | 29-Jan-03 | 2 | NM4 | 19:47 | 19:52 | fine | 1.2 | 58.3 | 61.0 | 53.5 |
| Jan-03 | 29-Jan-03 | 3 | NM4 | 19:52 | 19:57 | fine | 1.2 | 60.1 | 63.0 | 64.5 |
| Jan-03 | 29-Jan-03 | 1 | NM6 | 20:40 | 20:45 | fine | 0.5 | 62.4 | 64.5 | 57.5 |
| Jan-03 | 29-Jan-03 | 2 | NM6 | 20:45 | 20:50 | fine | 0.5 | 63.5 | 65.5 | 59.0 |
| Jan-03 | 29-Jan-03 | 3 | NM6 | 20:50 | 20:55 | fine | 0.5 | 61.1 | 63.0 | 54.0 |
| Jan-03 | 29-Jan-03 | 1 | NM8 | 20:15 | 20:20 | fine | 0.8 | 50.4 | 51.5 | 48.5 |
| Jan-03 | 29-Jan-03 | 2 | NM8 | 20:20 | 20:25 | fine | 0.8 | 50.2 | 51.5 | 48.0 |
| Jan-03 | 29-Jan-03 | 3 | NM8 | 20:25 | 20:30 | fine | 0.8 | 52.4 | 54.5 | 49.0 |
| Feb-03 | 06-Feb-03 | 1 | NM3 | 20:30 | 20:35 | fine | 0.4 | 63.0 | 65.5 | 58.0 |
| Feb-03 | 06-Feb-03 | 2 | NM3 | 20:35 | 20:40 | fine | 0.4 | 63.5 | 66.0 | 59.5 |
| Feb-03 | 06-Feb-03 | 3 | NM3 | 20:40 | 20:45 | fine | 0.4 | 64.2 | 66.0 | 59.0 |
| Feb-03 | 06-Feb-03 | 1 | NM4 | 20:00 | 20:05 | fine | 0.4 | 59.0 | 62.0 | 61.5 |
| Feb-03 | 06-Feb-03 | 2 | NM4 | 20:05 | 20:10 | fine | 0.4 | 59.5 | 62.5 | 52.0 |
| Feb-03 | 06-Feb-03 | 3 | NM4 | 20:10 | 20:15 | fine | 0.4 | 58.5 | 62.0 | 51.0 |
| Feb-03 | 06-Feb-03 | 1 | NM6 | 19:35 | 19:40 | fine | 0.6 | 61.0 | 64.5 | 58.0 |
| Feb-03 | 06-Feb-03 | 2 | NM6 | 19:40 | 19:45 | fine | 0.6 | 60.5 | 64.0 | 58.5 |
| Feb-03 | 06-Feb-03 | 3 | NM6 | 19:45 | 19:50 | fine | 0.6 | 60.0 | 63.5 | 58.0 |
| Feb-03 | 06-Feb-03 | 1 | NM8 | 19:00 | 19:05 | fine | 0.6 | 56.0 | 58.5 | 52.0 |
| Feb-03 | 06-Feb-03 | 2 | NM8 | 19:05 | 19:10 | fine | 0.6 | 60.0 | 62.5 | 57.0 |
| Feb-03 | 06-Feb-03 | 3 | NM8 | 19:10 | 19:15 | fine | 0.6 | 58.0 | 60.5 | 53.5 |

Details of Evening time Noise Impact Monitoring

| | | | NSR | Time p | eriods | Weather | Avg. wind | Noi | se Level dB | (A) |
|------------------|------------------------|---------|------------|----------------|----------------|--------------|-------------|--------------|-----------------|-----------------|
| Month | Date | Set No. | No. | Start | Finish | condition | speed (m/s) | L_{eq} | Ĺ ₁₀ | L ₉₀ |
| Feb-03 | 12-Feb-03 | 1 | NM3 | 20:30 | 20:35 | fine | 0.3 | 64.5 | 67.0 | 60.0 |
| Feb-03 | 12-Feb-03 | 2 | NM3 | 20:35 | 20:40 | fine | 0.3 | 63.0 | 66.0 | 58.0 |
| Feb-03 | 12-Feb-03 | 3 | NM3 | 20:40 | 20:45 | fine | 0.3 | 64.0 | 66.0 | 59.0 |
| Feb-03 | 12-Feb-03 | 1 1 | NM4 | 19:55 | 20:00 | fine | 0.3 | 59.0 | 61.5 | 53.5 |
| Feb-03 | 12-Feb-03 | 2 | NM4 | 20:00 | 20:05 | fine | 0.3 | 58.5 | 61.0 | 53.5 |
| Feb-03 | 12-Feb-03 | 3 | NM4 | 20:05 | 20:10 | fine | 0.3 | 59.0 | 61.5 | 53.0 |
| Feb-03 | 12-Feb-03 | 1 1 | NM6 | 19:30 | 19:35 | fine | 0.4 | 62.5 | 65.0 | 57.0 |
| Feb-03 | 12-Feb-03 | 2 | NM6 | 19:35 | 19:40 | fine | 0.4 | 63.0 | 65.5 | 58.0 |
| Feb-03 | 12-Feb-03 | 3 | NM6 | 19:40 | 19:45 | fine | 0.4 | 61.5 | 66.0 | 57.5 |
| Feb-03 | 12-Feb-03 | 1 | NM8 | 19:00 | 19:05 | fine | 0.3 | 53.0 | 57.5 | 50.0 |
| Feb-03 | 12-Feb-03 | 2 | NM8 | 19:05 | 19:10 | fine | 0.3 | 56.0 | 58.5 | 51.0 |
| Feb-03 | 12-Feb-03 | 3 | NM8 | 19:10 | 19:15 | fine | 0.3 | 57.0 | 60.0 | 51.0 |
| Feb-03 | 19-Feb-03 | 1 | NM3 | 20:25 | 20:30 | fine | 0.3 | 60.5 | 63.0 | 57.5 |
| Feb-03 | 19-Feb-03 | 2 | NM3 | 20:30 | 20:35 | fine | 0.3 | 60.0 | 62.0 | 57.0 |
| Feb-03 | 19-Feb-03 | 3 | NM3 | 20:35 | 20:40 | fine | 0.3 | 59.0 | 61.0 | 57.0 |
| Feb-03 | 19-Feb-03 | 1 | NM4 | 19:55 | 20:00 | fine | 0.4 | 61.5 | 63.0 | 58.0 |
| Feb-03 | 19-Feb-03 | 2 | NM4 | 20:00 | 20:05 | fine | 0.4 | 61.5 | 63.5 | 58.5 |
| Feb-03 | 19-Feb-03 | 3 | NM4 | 20:05 | 20:10 | fine | 0.4 | 62.0 | 63.5 | 58.5 |
| Feb-03 | 19-Feb-03 | 1 | NM6 | 19:00 | 19:05 | fine | 0.4 | 60.5 | 63.0 | 59.0 |
| Feb-03 | 19-Feb-03 | 2 | NM6 | 19:05 | 19:10 | fine | 0.4 | 63.0 | 65.0 | 60.0 |
| Feb-03 | 19-Feb-03 | 3 | NM6 | 19:10 | 19:15 | fine | 0.4 | 60.0 | 62.5 | 59.0 |
| Feb-03 | 19-Feb-03 | 1 | NM8 | 19:35 | 19:40 | fine | 0.5 | 61.5 | 63.5 | 58.0 |
| Feb-03 | 19-Feb-03 | 2 | NM8 | 19:40 | 19:45 | fine | 0.5 | 62.0 | 64.0 | 58.5 |
| Feb-03 | 19-Feb-03 | 3 | NM8 | 19:45 | 19:50 | fine | 0.5 | 62.0 | 63.5 | 58.0 |
| Feb-03 | 26-Feb-03 | 1 1 | NM3 | 20:40 | 20:45 | fine | 0.3 | 62.0 | 64.0 | 58.5 |
| Feb-03 | 26-Feb-03 | 2 | NM3 | 20:45 | 20:50 | fine | 0.3 | 63.5 | 65.5 | 59.0 |
| Feb-03 | 26-Feb-03 | 3 | NM3 | 20:50 | 20:55 | fine | 0.3 | 63.5 | 65.0 | 59.0 |
| Feb-03 | 26-Feb-03 | 1 1 | NM4 | 20:15 | 20:20 | fine | 0.4 | 60.0 | 62.0 | 58.5 |
| Feb-03 | 26-Feb-03 | 2 | NM4 | 20:20 | 20:25 | fine | 0.4 | 59.5 | 62.0 | 55.5 |
| Feb-03 Feb-03 | 26-Feb-03 | 3 | NM4 NM6 | 20:25 19:40 | 20:30 19:45 | fine | 0.4 0.4 | 60.5 61.0 | 63.0 64.5 | 58.0 59.0 |
| Feb-03 | 26-Feb-03 26-Feb-03 | 2 | NM6 | 19:45 | 19:45 | fine fine | 0.4 | 60.5 | 64.5 | 58.5 |
| Feb-03 | 26-Feb-03 26-Feb-03 | 3 | NM6 | 19:45 | 19:55 | fine | 0.4 | 60.5 | 64.0 | 58.5 |
| Feb-03 | 26-Feb-03 | 1 | NM8 | 19:00 | 19:05 | fine | 0.4 | 58.5 | 61.0 | 57.0 |
| Feb-03 | 26-Feb-03 | 2 | NM8 | 19:05 | 19:10 | fine | 0.3 | 60.5 | 62.0 | 58.5 |
| Feb-03 | 26-Feb-03 | 3 | NM8 | 19:10 | 19:15 | fine | 0.3 | 61.0 | 62.5 | 58.5 |
| Mar-03 | 05-Mar-03 | 1 | NM3 | 20:50 | 20:55 | fine | 0.4 | 57.0 | 58.5 | 51.0 |
| Mar-03 | 05-Mar-03 | 2 | NM3 | 20:55 | 21:00 | fine | 0.4 | 58.5 | 60.0 | 53.0 |
| Mar-03 | 05-Mar-03 | 3 | NM3 | 21:00 | 21:05 | fine | 0.4 | 58.0 | 60.5 | 53.0 |
| Mar-03 | 05-Mar-03 | 1 | NM4 | 19:00 | 19:05 | fine | 0.3 | 56.5 | 58.0 | 56.0 |
| Mar-03 | 05-Mar-03 | 2 | NM4 | 19:05 | 19:10 | fine | 0.3 | 56.6 | 57.5 | 54.5 |
| Mar-03 | 05-Mar-03 | 3 | NM4 | 19:10 | 19:15 | fine | 0.3 | 56.3 | 59.0 | 50.0 |
| Mar-03 | 05-Mar-03 | 1 | NM6 | 20:10 | 20:15 | fine | 0.4 | 56.8 | 59.5 | 52.0 |
| Mar-03 | 05-Mar-03 | 2 | NM6 | 20:15 | 20:20 | fine | 0.4 | 56.0 | 59.8 | 51.0 |
| Mar-03 | 05-Mar-03 | 3 | NM6 | 20:20 | 20:25 | fine | 0.4 | 57.2 | 60.0 | 52.0 |
| Mar-03 | 05-Mar-03 | 1 | NM8 | 19:40 | 19:45 | fine | 0.5 | 54.5 | 55.5 | 51.5 |
| Mar-03 | 05-Mar-03 | 2 | NM8 | 19:45 | 19:50 | fine | 0.5 | 55.0 | 56.2 | 52.0 |
| Mar-03 | 05-Mar-03 | 3 | NM8 | 19:50 | 19:55 | fine | 0.5 | 54.0 | 56.0 | 51.0 |
| Mar-03 | 12-Mar-03 | 1 | NM3 | 19:30 | 19:35 | fine | 0.4 | 56.9 | 59.5 | 51.0 |
| Mar-03 | 12-Mar-03 | 2 | NM3 | 19:35 | 19:40 | fine | 0.4 | 57.9 | 60.0 | 51.5 |
| Mar-03 | 12-Mar-03 | 3 | NM3 | 19:40 | 19:45 | fine | 0.4 | 56.6 | 60.5 | 48.5 |
| Mar-03 | 12-Mar-03 | 1 | NM4 | 19:00 | 19:05 | fine | 0.5 | 59.7 | 62.5 | 54.5 |
| Mar-03 | 12-Mar-03 | 2 | NM4 | 19:05 | 19:10 | fine | 0.5 | 60.8 | 63.0 | 53.0 |
| Mar-03 | 12-Mar-03 | 3 | NM4 | 19:10 | 19:15 | fine | 0.5 | 60.7 | 63.0 | 53.0 |
| Mar-03 | 12-Mar-03 | 1 | NM6 | 20:00 | 20:05 | fine | 0.5 | 60.5 | 64.5 | 52.0 |
| Mar-03 | 12-Mar-03 | 2 | NM6 | 20:05 | 20:10 | fine | 0.5 | 60.5 | 63.5 | 53.0 |
| Mar-03 | 12-Mar-03 | 3 | NM6 | 20:10 | 20:15 | fine | 0.5 | 64.7 | 67.0 | 55.0 |
| Mar-03 | 12-Mar-03 | 1 | NM8 | 20:30 | 20:35 | fine | 0.5 | 62.2 | 65.5 | 53.5 |
| Mar-03 | 12-Mar-03 | 2 | NM8 | 20:35 | 20:40 | fine | 0.5 | 60.0 | 63.5 | 53.0 |
| Mar-03 | 12-Mar-03 | 3 | NM8 | 20:40 | 20:45 | fine | 0.5 | 61.6 | 65.5 | 52.0 |

Details of Evening time Noise Impact Monitoring

| | | | NSR | Time p | eriods | Weather | Avg. wind | Noi | se Level dB | (A) |
|--------|-----------|---------|-----|--------|--------|-----------|-------------|----------|-----------------|-----------------|
| Month | Date | Set No. | No. | Start | Finish | condition | speed (m/s) | L_{eq} | L ₁₀ | L ₉₀ |
| Mar-03 | 19-Mar-03 | 1 | NM3 | 19:00 | 19:05 | fine | 0.3 | 57.0 | 60.0 | 52.0 |
| Mar-03 | 19-Mar-03 | 2 | NM3 | 19:05 | 19:10 | fine | 0.3 | 59.5 | 61.5 | 53.0 |
| Mar-03 | 19-Mar-03 | 3 | NM3 | 19:10 | 19:15 | fine | 0.3 | 58.0 | 61.0 | 52.0 |
| Mar-03 | 19-Mar-03 | 1 | NM4 | 19:30 | 19:35 | fine | 0.4 | 60.5 | 67.0 | 58.0 |
| Mar-03 | 19-Mar-03 | 2 | NM4 | 19:35 | 19:40 | fine | 0.4 | 60.9 | 63.5 | 54.5 |
| Mar-03 | 19-Mar-03 | 3 | NM4 | 19:40 | 19:45 | fine | 0.4 | 60.0 | 63.0 | 56.0 |
| Mar-03 | 19-Mar-03 | 1 | NM6 | 19:55 | 20:00 | fine | 0.5 | 61.5 | 64.0 | 55.5 |
| Mar-03 | 19-Mar-03 | 2 | NM6 | 20:00 | 20:05 | fine | 0.5 | 60.5 | 65.0 | 56.0 |
| Mar-03 | 19-Mar-03 | 3 | NM6 | 20:05 | 20:10 | fine | 0.5 | 61.0 | 63.5 | 54.0 |
| Mar-03 | 19-Mar-03 | 1 | NM8 | 21:20 | 21:25 | fine | 0.5 | 61.0 | 63.5 | 54.0 |
| Mar-03 | 19-Mar-03 | 2 | NM8 | 21:25 | 21:30 | fine | 0.5 | 60.2 | 63.0 | 53.0 |
| Mar-03 | 19-Mar-03 | 3 | NM8 | 21:30 | 21:35 | fine | 0.5 | 62.0 | 65.0 | 55.5 |
| Mar-03 | 27-Mar-03 | 1 1 | NM3 | 19:00 | 19:05 | fine | 0.4 | 58.5 | 60.0 | 56.5 |
| Mar-03 | 27-Mar-03 | 2 | NM3 | 19:05 | 19:10 | fine | 0.4 | 60.5 | 62.5 | 58.5 |
| Mar-03 | 27-Mar-03 | 3 | NM3 | 19:10 | 19:15 | fine | 0.4 | 60.5 | 63.0 | 59.5 |
| Mar-03 | 27-Mar-03 | 1 | NM4 | 19:30 | 19:35 | fine | 0.3 | 63.5 | 66.0 | 60.6 |
| Mar-03 | 27-Mar-03 | 2 | NM4 | 19:35 | 19:40 | fine | 0.3 | 64.0 | 65.5 | 60.5 |
| Mar-03 | 27-Mar-03 | 3 | NM4 | 19:40 | 19:45 | fine | 0.3 | 63.0 | 65.0 | 60.5 |
| Mar-03 | 27-Mar-03 | 1 | NM6 | 20:35 | 20:40 | fine | 0.5 | 62.5 | 65.8 | 60.5 |
| Mar-03 | 27-Mar-03 | 2 | NM6 | 20:40 | 20:45 | fine | 0.5 | 63.5 | 66.5 | 61.0 |
| Mar-03 | 27-Mar-03 | 3 | NM6 | 20:45 | 20:50 | fine | 0.5 | 64.0 | 66.0 | 60.5 |
| Mar-03 | 27-Mar-03 | 1 | NM8 | 20:10 | 20:15 | fine | 0.4 | 61.5 | 65.0 | 58.5 |
| Mar-03 | 27-Mar-03 | 2 | NM8 | 20:15 | 20:20 | fine | 0.4 | 62.0 | 65.5 | 58.0 |
| Mar-03 | 27-Mar-03 | 3 | NM8 | 20:20 | 20:25 | fine | 0.4 | 61.5 | 66.0 | 59.0 |

APPENDIX 2

24-hour TSP Monitoring Results for January 2003 to March 2003

| | | | Receptor | Weather | Site | Filter Weight (g) | ight (g) | TSP | Flow Rate (m ³ /min) | (m³/min) | Average Flow | Elapse Time | • Time | Sampling | Total | 24-hour TSP |
|--------------|--------|-----------|----------|-----------|------------------|-------------------|----------|------------|---------------------------------|----------|---------------|-------------|---------|--------------|-----------|----------------|
| Filter No. N | Month | Date | No. | condition | condition | Initial | Final | weight (g) | Initial | Final | Rate (m³/min) | Start | Finish | Time (mins.) | vol. (m³) | Level (119/m³) |
| DQ73 | Jan-03 | 02-Jan-03 | AM2 | Sunny | normal operation | 3.7675 | 3.9531 | 0.1856 | 1.4685 | 1.3765 | 1.4225 | 2859.52 | 2883.52 | 1440.00 | 2048.40 | 9.06 |
| DQ74 | Jan-03 | 02-Jan-03 | AM3 | Sunny | normal operation | 3.7565 | 3.8982 | 0.1417 | 1.2777 | 1.2767 | 1.2772 | 2790.93 | 2814.93 | 1440.00 | 1839.17 | 0.77 |
| | Jan-03 | 02-Jan-03 | AM4 | Sunny | normal operation | 3.6342 | 3.8326 | 0.1984 | 1.4748 | 1.3599 | 1.4174 | 2822.23 | 2846.22 | 1439.40 | 2040.13 | 97.2 |
| DQ77 J | Jan-03 | 02-Jan-03 | AM5 | Sunny | normal operation | 3.6312 | 3.8222 | 0.1910 | 1.7023 | 1.7005 | 1.7014 | 2386.91 | 2410.91 | 1440.00 | 2450.02 | 78.0 |
| DQ78 | Jan-03 | 02-Jan-03 | AM6 | Sunny | normal operation | 3.6356 | 3.7568 | 0.1212 | 1.4423 | 1.3323 | 1.3873 | 960.31 | 984.31 | 1440.00 | 1997.71 | 2.09 |
| _ | Jan-03 | 07-Jan-03 | AM2 | Sunny | normal operation | 3.7356 | 3.8312 | 0.0956 | 1.4675 | 1.3848 | 1.4262 | 2883.52 | 2907.52 | 1440.00 | 2053.66 | 46.6 |
| _ | Jan-03 | 07-Jan-03 | AM3 | Sunny | normal operation | 3.7398 | 3.8262 | 0.0864 | 1.2767 | 1.2853 | 1.2810 | 2814.93 | 2838.93 | 1440.00 | 1844.64 | 46.8 |
| | Jan-03 | 07-Jan-03 | AM4 | Sunny | normal operation | 3.7263 | 3.8115 | 0.0852 | 1.4736 | 1.3697 | 1.4217 | 2846.22 | 2870.22 | 1440.00 | 2047.18 | 41.6 |
| | Jan-03 | 07-Jan-03 | AM5 | Sunny | normal operation | 3.7091 | 3.8085 | 0.0994 | 1.7374 | 1.7546 | 1.7460 | 2410.91 | 2434.91 | 1440.00 | 2514.24 | 39.5 |
| | Jan-03 | 07-Jan-03 | AM6 | Sunny | normal operation | 3.7131 | 3.7892 | 0.0761 | 1.3867 | 1.3417 | 1.3642 | 984.31 | 1008.31 | 1440.00 | 1964.45 | 38.7 |
| - | Jan-03 | 13-Jan-03 | AM2 | Sunny | normal operation | 3.8148 | 4.0382 | 0.2234 | 1.4420 | 1.3864 | 1.4142 | 2907.52 | 2931.52 | 1440.00 | 2036.45 | 109.7 |
| | Jan-03 | 13-Jan-03 | AM3 | Sunny | normal operation | 3.8203 | 4.0202 | 0.1999 | 1.2720 | 1.2608 | 1.2664 | 2838.93 | 2862.93 | 1440.00 | 1823.62 | 109.6 |
| | Jan-03 | 13-Jan-03 | AM4 | Sunny | normal operation | 3.8057 | 3.9984 | 0.1927 | 1.5139 | 1.4210 | 1.4675 | 2870.22 | 2894.22 | 1440.00 | 2113.13 | 91.2 |
| | Jan-03 | 13-Jan-03 | AM5 | Sunny | normal operation | 3.7974 | 4.0464 | 0.2490 | 1.5177 | 1.4723 | 1.4950 | 2434.91 | 2458.91 | 1440.00 | 2152.80 | 115.7 |
| | Jan-03 | 13-Jan-03 | AM6 | Sunny | normal operation | 3.7871 | 3.9587 | 0.1716 | 1.2842 | 1.2216 | 1.2529 | 1008.31 | 1032.31 | 1440.00 | 1804.18 | 95.1 |
| | Jan-03 | 22-Jan-03 | AM2 | Sunny | normal operation | 3.5416 | 3.8521 | 0.3105 | 1.4781 | 1.3757 | 1.4269 | 2931.52 | 2955.52 | 1440.00 | 2054.74 | 151.1 |
| | Jan-03 | 18-Jan-03 | AM3 | Sunny | normal operation | 3.5465 | 3.6840 | 0.1375 | 1.2608 | 1.1932 | 1.2270 | 2862.93 | 2886.93 | 1440.00 | 1766.88 | 77.8 |
| | Jan-03 | 18-Jan-03 | AM4 | Sunny | normal operation | 3.5419 | 3.6637 | 0.1218 | 1.3402 | 1.3016 | 1.3209 | 2894.22 | 2918.22 | 1440.00 | 1902.10 | 64.0 |
| _ | Jan-03 | 18-Jan-03 | AM5 | Sunny | normal operation | 3.5466 | 3.6785 | 0.1319 | 1.4134 | 1.3961 | 1.4048 | 2458.91 | 2482.91 | 1440.00 | 2022.84 | 65.2 |
| _ | Jan-03 | 18-Jan-03 | AM6 | Sunny | normal operation | 3.5389 | 3.6419 | 0.1030 | 1.3267 | 1.2106 | 1.2687 | 1032.31 | 1056.31 | 1440.00 | 1826.86 | 56.4 |
| DS57 | Jan-03 | 25-Jan-03 | AM2 | Sunny | normal operation | 3.5631 | 3.7557 | 0.1926 | 1.4662 | 1.3656 | 1.4159 | 2922.52 | 2979.52 | 1440.00 | 2038.90 | 94.5 |
| _ | Jan-03 | 25-Jan-03 | AM3 | Sunny | normal operation | 3.5806 | 3.7656 | 0.1850 | 1.2478 | 1.2079 | 1.2279 | 2886.93 | 2910.93 | 1440.00 | 1768.10 | 104.6 |
| DS59 | Jan-03 | 25-Jan-03 | AM4 | Sunny | normal operation | 3.5792 | 3.7786 | 0.1994 | 1.3282 | 1.3425 | 1.3354 | 2918.22 | 2942.22 | 1440.00 | 1922.90 | 103.7 |
| _ | Jan-03 | 25-Jan-03 | AM5 | Sunny | normal operation | 3.5974 | 3.7912 | 0.1938 | 1.3670 | 1.3873 | 1.3772 | 2482.91 | 2506.90 | 1439.40 | 1982.27 | 97.8 |
| | Jan-03 | 25-Jan-03 | AM6 | Sunny | normal operation | 3.6005 | 3.7604 | 0.1599 | 1.3144 | 1.2238 | 1.2691 | 1056.31 | 1080.31 | 1440.00 | 1827.50 | 87.5 |
| DT08 | Feb-03 | 04-Feb-03 | AM2 | Sunny | normal operation | 3.5343 | 3.6366 | 0.1023 | 1.5265 | 1.4374 | 1.4820 | 2979.52 | 3003.52 | 1440.00 | 2134.01 | 47.9 |
| _ | Feb-03 | 04-Feb-03 | AM3 | Sunny | normal operation | 3.5385 | 3.6173 | 0.0788 | 1.1525 | 1.1554 | 1.1540 | 2910.93 | 2934.93 | 1440.00 | 1661.69 | 47.4 |
| DT10 F | Feb-03 | 04-Feb-03 | AM4 | Sunny | normal operation | 3.5262 | 3.5830 | 0.0568 | 1.0724 | 1.0203 | 1.0464 | 2942.22 | 2966.22 | 1440.00 | 1506.74 | 37.7 |
| | Feb-03 | 04-Feb-03 | AM5 | Sunny | normal operation | 3.5616 | 3.6713 | 0.1097 | 1.3873 | 1.3915 | 1.3894 | 2506.90 | 2530.91 | 1440.60 | 2001.57 | 54.8 |
| DT12 F | Feb-03 | 04-Feb-03 | AM6 | Sunny | normal operation | 3.5446 | 3.6311 | 0.0865 | 1.3028 | 1.2265 | 1.2647 | 1080.31 | 1104.31 | 1440.00 | 1821.10 | 47.5 |
| | Feb-03 | 07-Feb-03 | AM2 | Sunny | normal operation | 3.6969 | 3.7910 | 0.0941 | 1.4835 | 1.3638 | 1.4237 | 3003.52 | 3027.52 | 1440.00 | 2050.06 | 45.9 |
| DT48 F | Feb-03 | 07-Feb-03 | AM3 | Sunny | normal operation | 3.7008 | 3.7915 | 0.0907 | 1.2667 | 1.2612 | 1.2640 | 2934.93 | 2958.93 | 1440.00 | 1820.09 | 49.8 |
| | Feb-03 | 07-Feb-03 | AM4 | Sunny | normal operation | 3.7225 | 3.8142 | 0.0917 | 1.4540 | 1.3136 | 1.3838 | 2966.22 | 2990.22 | 1440.00 | 1992.67 | 46.0 |
| _ | Feb-03 | 07-Feb-03 | AM5 | Sunny | normal operation | 3.7087 | 3.8214 | 0.1127 | 1.3915 | 1.3844 | 1.3880 | 2530.91 | 2554.91 | 1440.00 | 1998.65 | 56.4 |
| DT52 F | Feb-03 | 07-Feb-03 | AM6 | Sunny | normal operation | 3.5721 | 3.6443 | 0.0722 | 1.2794 | 1.2219 | 1.2507 | 1104.31 | 1128.31 | 1440.00 | 1800.94 | 40.1 |
| DU03 | Feb-03 | 13-Feb-03 | AM2 | Sunny | normal operation | 3.7228 | 3.8278 | 0.1050 | 1.4785 | 1.3614 | 1.4200 | 3027.52 | 3051.52 | 1440.00 | 2044.73 | 51.4 |
| DU04 | Feb-03 | 13-Feb-03 | AM3 | Sunny | normal operation | 3.7188 | 3.8164 | 0.0976 | 1.1505 | 1.2031 | 1.1768 | 2958.93 | 2982.93 | 1440.00 | 1694.59 | 57.6 |
| DU05 | Feb-03 | 13-Feb-03 | AM4 | Sunny | normal operation | 3.7170 | 3.8146 | 0.0976 | 1.3944 | 1.3109 | 1.3527 | 2990.22 | 3014.22 | 1440.00 | 1947.82 | 50.1 |
| 90NG | Feb-03 | 13-Feb-03 | AM5 | Sunny | normal operation | 3.7128 | 3.8374 | 0.1246 | 1.4139 | 1.4100 | 1.4120 | 2554.91 | 2578.91 | 1440.00 | 2033.21 | 61.3 |
| PU07 | Feb-03 | 13-Feb-03 | AM6 | Sunny | normal operation | 3.7203 | 3.8109 | 9060.0 | 1.3271 | 1.2194 | 1.2733 | 1128.31 | 1152.32 | 1440.60 | 1834.24 | 49.4 |
| DU13 F | Feb-03 | 18-Feb-03 | AM2 | Sunny | normal operation | 3.7169 | 3.8241 | 0.1072 | 1.4757 | 1.3516 | 1.4137 | 3051.52 | 3075.52 | 1440.00 | 2035.66 | 52.7 |
| | | | | | | | | | | | | | | | | |

| Filter No. Month Date No. Condition DU14 Feb-03 18-Feb-03 AM3 Sunny normal operation DU15 Feb-03 18-Feb-03 AM4 Sunny normal operation DU16 Feb-03 18-Feb-03 AM6 Sunny normal operation DV01 Feb-03 24-Feb-03 AM6 Sunny normal operation DV03 Feb-03 24-Feb-03 AM8 Sunny normal operation DV06 Feb-03 24-Feb-03 AM8 Sunny normal operation DV06 Feb-03 24-Feb-03 AM6 Sunny normal operation DV07 Feb-03 24-Feb-03 AM8 Sunny normal operation DV07 Mar-03 01-Mar-03 AM6 Sunny normal operation DV62 Mar-03 01-Mar-03 AM7 Sunny normal operation DV84 Mar-03 06-Mar-03 AM6 Sunny normal operation DV99 | 1 | Final 3.8283 3.8283 3.8080 3.6558 3.5667 3.7866 3.8116 3.7719 3.7719 3.7719 3.7872 3.7807 3.88143 3.7652 | weight (g) In 0.1093 1-10006 1-100000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-1000000 1-10000000 1-10000000 1-10000000 1-10000000 1-10000000 1-10000000 1-100000000 | Initial Final 1.3134 1.1915 1.3453 1.3000 1.3806 1.3647 1.1670 1.0020 1.3797 1.3647 1.3647 1.3647 1.3647 1.3647 1.3647 1.3687 1.3687 1.3687 1.3687 1.3687 1.3687 1.3687 1.3687 1.3689 1.3687 1.3687 1.3689 1.3687 1.3689 1.3687 1.3689 1. | Rate (m ³ /min) 1.2525 1.2525 1.3727 1.3727 1.3867 1.3667 1.3667 1.3667 1.3667 1.3669 1.2623 2.1.3882 2.1.3882 3.1.3428 9.1.2623 | Start 2982.93 3014.22 2578.91 1152.32 3075.52 3006.93 3038.22 2602.91 1176.32 3099.52 3030.93 3030.93 | 3006.93 1440.00 3038.22 1440.00 2802.91 1440.00 2802.92 1440.00 3099.52 1440.00 3062.22 1440.00 2626.91 1440.00 2626.91 1440.00 2626.91 1440.00 2626.91 1440.00 2626.91 1440.00 2626.91 1440.00 | 3 | Level (ug/m³) 60.6 48.9 62.7 26.8 63.7 70.4 |
|--|-------------------------|--|--|--|--|---|---|---|---|
| Month Date No. Condition Feb-03 18-Feb-03 AM4 Sunny Feb-03 18-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM3 Sunny Feb-03 24-Feb-03 AM3 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM7 Sunny Mar-03 06-Mar-03 AM7 Sunny Mar-03 06-Mar-03 AM7 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny | | 3.8283 3.8283 3.8283 3.6558 3.5657 3.7866 3.7866 3.7866 3.7749 3.7749 3.7807 3.7807 3.7807 3.7807 3.7807 | | 7 | 0.0000000000000000000000000000000000000 | 298233 3014.22 2578.91 1152.32 3075.52 3038.22 2602.91 1176.32 3039.52 | | | 60.6 48.9 62.7 26.8 63.7 70.4 73.7 |
| Feb-03 18-Feb-03 AM3 Sunny Feb-03 18-Feb-03 AM4 Sunny Feb-03 18-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM5 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny | | | | | | | | 1976.62 1976.62 1976.62 1561.68 1996.85 1757.16 1968.05 1817.64 1998.94 | 62.7 62.7 26.8 63.7 70.4 60.7 |
| Feb-03 18-Feb-03 AM4 Sunny Feb-03 18-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM3 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM7 Cloudy Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM8 Sunny | | | | | | | | 1976.62 1976.62 1561.68 1996.85 1757.16 1931.40 1968.05 1998.94 | 62.7 26.8 63.7 70.4 70.4 |
| Feb-03 18-Feb-03 AM5 Sunny Feb-03 18-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM3 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny | | | | | | | | 1976.62 1561.68 1996.85 1757.16 1931.40 1968.05 1998.94 | 62.7 26.8 63.7 70.4 60.7 |
| Feb-03 18-Feb-03 AM6 Sunny Feb-03 24-Feb-03 AM2 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny | | | | | | , ., ., ., ., | | 1561.68 1996.85 1757.16 1931.40 1968.05 1817.64 1998.94 | 26.8 63.7 70.4 60.7 |
| Feb-03 24-Feb-03 AM2 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM2 Sunny Mar-03 01-Mar-03 AM3 Sunny Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM3 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 14-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny | | | | | | | | 1996.85 1757.16 1931.40 1968.05 1817.64 1998.94 | 63.7 70.4 60.7 |
| Feb-03 24-Feb-03 AM3 Sunny Feb-03 24-Feb-03 AM4 Sunny Feb-03 24-Feb-03 AM5 Sunny Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM2 Cloudy Mar-03 01-Mar-03 AM4 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny Mar-03 20-Mar-03 AM7 Sunny <th></th> <th></th> <th></th> <th></th> <th></th> <th>., ., .,</th> <th></th> <th>1757.16 1931.40 1968.05 1817.64 1998.94</th> <th>70.4 60.7 73.2</th> | | | | | | ., ., ., | | 1757.16 1931.40 1968.05 1817.64 1998.94 | 70.4 60.7 73.2 |
| Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM2 Cloudy Mar-03 01-Mar-03 AM4 Cloudy Mar-03 01-Mar-03 AM6 Sunny Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM3 Sunny | | | | | | | | 1931.40 1968.05 1817.64 1998.94 1759.46 | 60.7 |
| Feb-03 24-Feb-03 AM5 Sunny Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM2 Cloudy Mar-03 01-Mar-03 AM3 Cloudy Mar-03 01-Mar-03 AM4 Cloudy Mar-03 01-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 14-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM3 Sunny | | | | | | | | 1968.05 1817.64 1998.94 1759.46 | 73.0 |
| Feb-03 24-Feb-03 AM6 Sunny Mar-03 01-Mar-03 AM2 Cloudy Mar-03 01-Mar-03 AM3 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM6 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 14-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM7 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM3 Sunny <th>5 5 5 5 5 5 5</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th><u> </u></th> <th>1817.64 1998.94 1759.46</th> <th>7.0.</th> | 5 5 5 5 5 5 5 | | | | | | <u> </u> | 1817.64 1998.94 1759.46 | 7.0. |
| Mar-03 01-Mar-03 AM2 Cloudy Mar-03 01-Mar-03 AM3 Cloudy Mar-03 01-Mar-03 AM4 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM2 Sunny Mar-03 06-Mar-03 AM3 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 14-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny Mar-03 20-Mar-03 AM7 Sunny <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1998.94</th> <th>56.3</th> | | | | | | | | 1998.94 | 56.3 |
| Mar-03 01-Mar-03 AM3 Cloudy Mar-03 01-Mar-03 AM4 Cloudy Mar-03 01-Mar-03 AM5 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM2 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 14-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM7 Sunny Mar-03 20-Mar-03 AM7 Sunny Mar-03 20-Mar-03 AM7 Sunny <th></th> <th></th> <th></th> <th></th> <th></th> <th>_</th> <th>_</th> <th>1759.46</th> <th>20.0</th> | | | | | | _ | _ | 1759.46 | 20.0 |
| Mar-03 01-Mar-03 AM6 Cloudy Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM3 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny | | | | | | _ | | | 57.2 |
| Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM2 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny AM7-03 20-Mar-03 AM6 Sunny AM7-03 20-Mar-03 AM6 Sunny AM7-03 20-Mar-03 AM6 Sunny AM7-03 Sunny | | | | | | 3062.22 308 | 3086.22 1440.00 | 1933.63 | 50.3 |
| Mar-03 01-Mar-03 AM6 Cloudy Mar-03 06-Mar-03 AM2 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM3 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM4 Sunny | | | | | • | 2626.91 265 | 2650.90 1439.40 | 1970.25 | 65.4 |
| Mar-03 06-Mar-03 AM3 Sunny Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM5 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM5 Sunny AM5 Sunny AM7-03 20-Mar-03 AM5 Sunny AM7-03 20-Mar-03 AM5 Sunny | | | | _ | _ | 1200.32 122 | 1224.31 1439.40 | 1800.33 | 45.8 |
| Mar-03 06-Mar-03 AM3 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 14-Mar-03 AM2 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM6 Sunny | | _ | | _ | 0 1.4061 | 3123.52 314 | 3147.52 1440.00 | 2024.78 | 50.8 |
| Mar-03 06-Mar-03 AM4 Sunny Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 14-Mar-03 AM2 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM5 Sunny | _ | 3.8856 | | .2493 1.2652 | 2 1.2573 | 3054.93 307 | 3078.93 1440.00 | 1810.44 | 53.8 |
| Mar-03 06-Mar-03 AM5 Sunny Mar-03 06-Mar-03 AM6 Sunny Mar-03 14-Mar-03 AM2 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM4 Sunny | rmal operation 3.7936 | | 0.0689 1. | 1.1697 1.1818 | 8 1.1758 | 3086.22 311 | 3110.22 1440.00 | 1693.08 | 40.7 |
| Mar-03 06-Mar-03 AM6 Sunny Mar-03 14-Mar-03 AM2 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM4 Sunny | | | 0.0801 | .3106 1.3304 | 1.3205 | 2650.90 267 | 2674.91 1440.60 | 1902.31 | 42.1 |
| Mar-03 14-Mar-03 AM2 Sunny Mar-03 13-Mar-03 AM3 Sunny Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM5 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM5 Sunny Mar-03 20-Mar-03 AM5 Sunny | rmal operation 3.8056 | 3.8817 | 0.0761 | .2638 1.2781 | _ | 1224.31 124 | | 1833.22 | 41.5 |
| Mar-03 13-Mar-03 AM3 Sunny Mar-03 13-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM5 Sunny AM7-03 20-Mar-03 AM5 Sunny Mar-03 20-Mar-03 AM5 Sunny | ormal operation 3.7622 | 3.8507 | 0.0885 1. | .2554 1.2523 | 3 1.2539 | 3171.51 319 | 3195.52 1440.60 | 1806.30 | 49.0 |
| Mar-03 13-Mar-03 AM4 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM5 Sunny Mar-03 20-Mar-03 AM5 Sunny | | | 0.0782 1. | .2743 1.2726 | 1.2735 | 3102.93 312 | 3126.93 1440.00 | 1833.77 | 42.6 |
| Mar-03 13-Mar-03 AM5 Sunny Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM6 Sunny | _ | <u>س</u> | 0.0950 | .4630 1.4609 | 9 1.4620 | 3134.23 315 | | 2105.21 | 45.1 |
| Mar-03 13-Mar-03 AM6 Sunny Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM6 Sunny | _ | ო | 0.0749 1. | .4817 1.5415 | 5 1.5116 | 2698.91 272 | 2722.91 1440.00 | 2176.70 | 34.4 |
| Mar-03 20-Mar-03 AM2 Sunny Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM5 Sunny | | | 0.0710 1. | .5549 1.6429 | _ | 1272.38 129 | _ | 2237.18 | 31.7 |
| Mar-03 20-Mar-03 AM3 Sunny Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM5 Sunny | ormal operation 3.6450 | 3.7059 | 0.0609 1. | 1.1167 1.1126 | _ | 3219.52 324 | | 1605.10 | 37.9 |
| Mar-03 20-Mar-03 AM4 Sunny Mar-03 20-Mar-03 AM5 Sunny | ormal operation 3.6421 | 3.7152 | 0.0731 1. | .2801 1.2741 | 1 1.2771 | | | 1839.02 | 39.7 |
| Mar-03 20-Mar-03 AM5 Sunny | ormal operation 3.6402 | | 0.0930 | .4700 1.5250 | 0 1.4975 | 3182.23 320 | | 2156.40 | 43.1 |
| | rmal operation 3.6568 | 3.7337 | 0.0769 1. | .3644 1.3568 | 1.3606 | 2746.59 277 | 2770.59 1440.00 | 1959.26 | 39.2 |
| DY10 Mar-03 20-Mar-03 AM6 Sunny normal operati | normal operation 3,6540 | | 0.0976 1. | .6835 1.6751 | 1 1.6793 | 1319.70 134 | 1343.70 1440.00 | 2418.19 | 40.4 |
| Mar-03 26-Mar-03 AM2 Sunny | _ | _ | 0.1404 1. | .2552 1.2477 | 7 1.2515 | 3243.52 326 | 3267.52 1440.00 | 1802.09 | 6.77 |
| Mar-03 26-Mar-03 AM3 Sunny | _ | 9 3.7826 | 0.1307 1. | .2741 1.2367 | 7 1.2554 | 3174.93 319 | 3198.93 1440.00 | 1807.78 | 72.3 |
| Mar-03 26-Mar-03 AM4 Sunny | normal operation 3.6410 | 0 3.7910 | 0.1500 1. | .4939 1.4827 | 7 1.4883 | 3206.23 323 | • | 2143.15 | 20.0 |
| Mar-03 26-Mar-03 AM5 Sunny | normal operation 3.6469 | 3.8087 | 0.1618 1. | .4191 1.4071 | | 2770.59 279 | 2794.59 1440.00 | 2034.86 | 79.5 |
| Mar-03 26-Mar-03 AM6 Sunny | _ | | 0.1532 1. | .7052 1.6923 | 1.6988 | 1343.70 136 | 1367.70 1440.00 | 2446.20 | 62.6 |

APPENDIX 3

1-hour TSP Monitoring Results for January 2003 to March 2003

| | | Receptor | | Time r | eriods | Weather | Site | Temp. | Pressure | 1-hour TSP |
|------------------|------------------------|------------|---------|----------------|----------------|----------------|-----------------------------------|--------------|----------------|----------------|
| Month | Date | No. | Set No. | Start | Finish | condition | condition | (°C) | (mmHg) | Level (μg/g³) |
| Jan-03 | 03-Jan-03 | AM2 | 1 | 8:12 | 9:12 | Sunny | normal operation | 16.0 | 768.0 | 144.1 |
| Jan-03 | 03-Jan-03 | AM2 | 2 | 9:12 | 10:12 | Sunny | normal operation | 16.0 | 768.0 | 139.1 |
| Jan-03 | 03-Jan-03 | AM2 | 3 | 10:12 | 11:12 | Sunny | normal operation | 16.0 | 768.0 | 148.7 |
| Jan-03 | 03-Jan-03 | AM3 | 1 | 8:13 | 9:13 | Sunny | normal operation | 16.0 | 768.0 | 177.6 |
| Jan-03 | 03-Jan-03 | AM3 | 2 | 9:33 | 10:33 | Sunny | normal operation | 16.0 | 768.0 | 176.9 |
| Jan-03 | 03-Jan-03 | AM3 | 3 | 10:33 | 11:33 | Sunny | normal operation | 16.0 | 768.0 | 188.3 |
| Jan-03 | 03-Jan-03 | AM4 | 1 | 8:15 | 9:15 | Sunny | normal operation | 16.0 | 768.0 | 174.5 176.5 |
| Jan-03 | 03-Jan-03 | AM4 | 2 | 9:35 | 10:35 | Sunny | normal operation | 16.0 16.0 | 768.0 768.0 | 184.9 |
| Jan-03 | 03-Jan-03 | AM4 | 3 | 10:35 | 11:35 9:22 | Sunny | normal operation normal operation | 16.0 | 768.0 | 142.4 |
| Jan-03 | 03-Jan-03 | AM5 | 1 | 8:22 9:22 | 10:22 | Sunny Sunny | normal operation | 16.0 | 768.0 768.0 | 144.1 |
| Jan-03 Jan-03 | 03-Jan-03 03-Jan-03 | AM5 AM5 | 2 | 10:22 | 11:22 | Sunny | normal operation | 16.0 | 768.0 | 142.3 |
| Jan-03 | 03-Jan-03 | AM6 | 1 | 8:12 | 9:12 | Sunny | normal operation | 16.0 | 768.0 | 148.2 |
| Jan-03 | 03-Jan-03 | AM6 | 2 | 9:27 | 10:27 | Sunny | normal operation | 16.0 | 768.0 | 153.9 |
| Jan-03 | 03-Jan-03 | AM6 | 3 | 10:27 | 11:27 | Sunny | normal operation | 16.0 | 768.0 | 162.0 |
| Jan-03 | 08-Jan-03 | AM2 | 1 | 9:24 | 10:24 | Sunny | normal operation | 11.0 | 770.0 | 205.5 |
| Jan-03 | 08-Jan-03 | AM2 | 2 | 10:59 | 11:59 | Sunny | normal operation | 11.0 | 770.0 | 225.4 |
| Jan-03 | 08-Jan-03 | AM2 | 3 | 13:04 | 14:04 | Sunny | normal operation | 11.0 | 770.0 | 187.0 |
| Jan-03 | 08-Jan-03 | AM3 | 1 | 9:01 | 10:01 | Sunny | normal operation | 11.0 | 770.0 | 205.9 |
| Jan-03 | 08-Jan-03 | AM3 | 2 | 10:56 | 11:56 | Sunny | normal operation | 11.0 | 770.0 | 220.9 |
| Jan-03 | 08-Jan-03 | AM3 | 3 | 13:01 | 14:01 | Sunny | normal operation | 11.0 | 770.0 | 183.5 |
| Jan-03 | 08-Jan-03 | AM4 | 1 | 9:15 | 10:15 | Sunny | normal operation | 11.0 | 770.0 | 176.3 |
| Jan-03 | 08-Jan-03 | AM4 | 2 | 10:55 | 11:55 | Sunny | normal operation | 11.0 | 770.0 | 193.7 |
| Jan-03 | 08-Jan-03 | AM4 | 3 | 13:00 | 14:00 | Sunny | normal operation | 11.0 | 770.0 | 141.0 |
| Jan-03 | 08-Jan-03 | AM5 | 1 | 9:29 | 10:29 | Sunny | normal operation | 11.0 | 770.0 | 177.8 |
| Jan-03 | 08-Jan-03 | AM5 | 2 | 10:54 | 11:54 | Sunny | normal operation | 11.0 | 770.0 | 196.6 |
| Jan-03 | 08-Jan-03 | AM5 | 3 | 13:04 | 14:04 | Sunny | normal operation | 11.0 | 770.0 | 157.2 |
| Jan-03 | 08-Jan-03 | AM6 | 1 | 9:14 | 10:14 | Sunny | normal operation | 11.0 | 770.0 | 178.6 |
| Jan-03 | 08-Jan-03 | AM6 | 2 | 10:54 | 11:54 | Sunny | normal operation | 11.0 | 770.0 | 192.0 |
| Jan-03 | 08-Jan-03 | AM6 | 3 | 13:04 | 14:04 | Sunny | normal operation | 11.0 | 770.0 | 188.5 |
| Jan-03 | 16-Jan-03 | AM2 | 1 | 13:03 | 14:03 | Sunny | normal operation | 17.0 | 769.0 | 199.6 |
| Jan-03 | 16-Jan-03 | AM2 | 2 | 14:03 | 15:03 | Sunny | normal operation | 17.0 | 769.0 | 193.8 239.4 |
| Jan-03 | 16-Jan-03 | AM2 | 3 | 15:03 | 16:03 | Sunny | normal operation | 17.0 17.0 | 769.0 769.0 | 239.4 |
| Jan-03 | 16-Jan-03 | AM3 | 1 | 13:08 | 14:08 | Sunny | normal operation | 17.0 | 769.0 | 233.3 |
| Jan-03 | 16-Jan-03 | AM3 | 2 | 14:08 | 15:08 16:08 | Sunny | normal operation | 17.0 | 769.0 | 206.2 |
| Jan-03 Jan-03 | 16-Jan-03 16-Jan-03 | AM3 AM4 | 3 | 15:08 13:06 | 14:06 | Sunny Sunny | normal operation | 17.0 | 769.0 | 139.5 |
| Jan-03 Jan-03 | 16-Jan-03 | AM4 | 2 | 14:06 | 15:06 | Sunny | normal operation | 17.0 | 769.0 | 141.0 |
| Jan-03 Jan-03 | 16-Jan-03 | AM4 | 3 | 15:06 | 16:06 | Sunny | normal operation | 17.0 | 769.0 | 147.9 |
| Jan-03 | 16-Jan-03 | AM5 | 1 | 13:05 | 14:05 | Sunny | normal operation | 17.0 | 769.0 | 156.0 |
| Jan-03 | 16-Jan-03 | AM5 | 2 | 14:05 | 15:05 | Sunny | normal operation | | 769.0 | 160.3 |
| Jan-03 | 16-Jan-03 | AM5 | 3 | 15:05 | 16:05 | Sunny | normal operation | 17.0 | 769.0 | 158.6 |
| Jan-03 | 16-Jan-03 | AM6 | 1 | 13:07 | 14:07 | Sunny | normal operation | 17.0 | 769.0 | 157.5 |
| Jan-03 | 16-Jan-03 | AM6 | 2 | 14:07 | 15:07 | Sunny | normal operation | 17.0 | 769.0 | 154.9 |
| Jan-03 | 16-Jan-03 | AM6 | 3 | 15:07 | 16:07 | Sunny | normal operation | 17.0 | 769.0 | 157.3 |
| Jan-03 | 22-Jan-03 | AM2 | 1 | 9:38 | 10:38 | Sunny | normal operation | 22.0 | 762.0 | 280.8 |
| Jan-03 | 22-Jan-03 | AM2 | 2 | 10:38 | 11:38 | Sunny | normal operation | 22.0 | 762.0 | 277.9 |
| Jan-03 | 22-Jan-03 | AM2 | 3 | 13:13 | 14:13 | Sunny | normal operation | 22.0 | 762.0 | 260.7 |
| Jan-03 | 22-Jan-03 | AM3 | 1 | 9:35 | 10:35 | Sunny | normal operation | 22.0 | 762.0 | 275.4 |
| Jan-03 | 22-Jan-03 | AM3 | 2 | 10:35 | 11:35 | Sunny | normal operation | 22.0 | 762.0 | 269.8 |
| Jan-03 | 22-Jan-03 | AM3 | 3 | 13:15 | 14:15 | Sunny | normal operation | 22.0 | 762.0 | 254.8 |
| Jan-03 | 22-Jan-03 | AM4 | 1 | 9:33 | 10:33 | Sunny | normal operation | | 762.0 | 324.2 |
| Jan-03 | 22-Jan-03 | AM4 | 2 | 10:58 | 11:58 | Sunny | normal operation | 1 | 762.0 | 318.0 |
| Jan-03 | 22-Jan-03 | AM4 | 3 | 13:18 | 14:18 | Sunny | normal operation | 22.0 | 762.0 | 301.8 |
| Jan-03 | 22-Jan-03 | AM5 | 1 | 9:33 | 10:33 | Sunny | normal operation | 22.0 | 762.0 | 294.9 |
| Jan-03 | 22-Jan-03 | AM5 | 2 | 10:58 | 11:58 | Sunny | normal operation | I . | 762.0 | 290.6 |
| Jan-03 | 22-Jan-03 | AM5 | 3 | 13:23 | 14:23 | Sunny | normal operation | | 762.0 | 273.9 |
| Jan-03 | 22-Jan-03 | AM6 | 1 | 9:48 | 10:48 | Sunny | normal operation | 22.0 | 762.0 762.0 | 255.3 262.6 |
| Jan-03 | 22-Jan-03 | AM6 | 2 3 | 10:58 | 11:58 14:08 | Sunny Sunny | normal operation normal operation | 22.0 22.0 | 762.0 | 242.6 |
| Jan-03 | 22-Jan-03 | AM6 | 1 3 | 13:08 | 14.00 | Suring | Inormal operation | 22.0 | 702.0 | 272.0 |

| | | Receptor | | Time n | eriods | Weather | Site | Temp. | Pressure | 1-hour TSP |
|------------------|------------------------|------------|---------|----------------|----------------|----------------|-----------------------------------|--------------|----------------|----------------|
| Month | Date | No. | Set No. | Start | Finish | condition | condition | (°C) | (mmHg) | Level (μg/g³) |
| Jan-03 | 29-Jan-03 | AM2 | 1 | 9:57 | 10:57 | Sunny | normal operation | 16.0 | 770.3 | 200.6 |
| Jan-03 | 29-Jan-03 | AM2 | 2 | 10:57 | 11:57 | Sunny | normal operation | 16.0 | 770.3 | 193.7 |
| Jan-03 | 29-Jan-03 | AM2 | 3 | 13:57 | 14:57 | Sunny | normal operation | 16.0 | 770.3 | 181.6 |
| Jan-03 | 29-Jan-03 | АМЗ | . 1 | 9:50 | 10:50 | Sunny | normal operation | 16.0 | 770.3 | 188.2 |
| Jan-03 | 29-Jan-03 | AM3 | 2 | 10:50 | 11:50 | Sunny | normal operation | 16.0 | 770.3 | 184.2 |
| Jan-03 | 29-Jan-03 | AM3 | 3 | 13:50 | 14:50 | Sunny | normal operation | 16.0 | 770.3 | 163.2 |
| Jan-03 | 29-Jan-03 | AM4 | 1 | 14:28 | 15:28 | Sunny | normal operation | 16.0 | 770.3 | 173.0 |
| Jan-03 | 29-Jan-03 | AM4 | 2 | 15:28 | 16:28 | Sunny | normal operation | 16.0 | 770.3 | 172.4 |
| Jan-03 | 29-Jan-03 | AM4 | 3 | 16:28 | 17:28 | Sunny | normal operation | 16.0 | 770.3 | 168.8 |
| Jan-03 | 29-Jan-03 | AM5 | 1 | 9:50 | 10:50 | Sunny | normal operation | 16.0 | 770.3 | 217.2 |
| Jan-03 | 29-Jan-03 | AM5 | 2 | 10:50 | 11:50 | Sunny | normal operation | 16.0 | 770.3 | 209.4 203.2 |
| Jan-03 | 29-Jan-03 | AM5 | 3 | 13:50 | 14:50 | Sunny | normal operation | 16.0 | 770.3 770.3 | 203.2 216.4 |
| Jan-03 | 29-Jan-03 | AM6 | 1 | 9:45 | 10:45 | Sunny | normal operation | 16.0 16.0 | 770.3 | 210.5 |
| Jan-03 | 29-Jan-03 | AM6 AM6 | 2 | 10:45 13:45 | 11:45 14:45 | Sunny Sunny | normal operation normal operation | 16.0 | 770.3 | 200.1 |
| Jan-03 | 29-Jan-03 | | | 13:16 | 14:45 | Sunny | normal operation | 14.0 | 770.0 | 240.7 |
| Feb-03 | 06-Feb-03 | AM2 AM2 | 1 2 | 14:16 | 15:16 | Sunny | normal operation | 14.0 | 770.0 | 224.3 |
| Feb-03 Feb-03 | 06-Feb-03 06-Feb-03 | AM2 | 3 | 15:16 | 16:16 | Sunny | normal operation | 14.0 | 770.0 | 215.0 |
| Feb-03 | 06-Feb-03 | AM3 | 1 | 13:15 | 14:15 | Sunny | normal operation | 14.0 | 770.0 | 202.0 |
| Feb-03 | 06-Feb-03 | AM3 | 2 | 14:15 | 15:15 | Sunny | normal operation | 14.0 | 770.0 | 209.0 |
| Feb-03 | 06-Feb-03 | AM3 | 3 | 15:15 | 16:15 | Sunny | normal operation | 14.0 | 770.0 | 228.2 |
| Feb-03 | 06-Feb-03 | AM4 | 1 | 13:06 | 14:06 | Sunny | normal operation | 14.0 | 770.0 | 204.1 |
| Feb-03 | 06-Feb-03 | AM4 | 2 | 14:06 | 15:06 | Sunny | normal operation | 14.0 | 770.0 | 231.4 |
| Feb-03 | 06-Feb-03 | AM4 | 3 | 15:06 | 16:06 | Sunny | normal operation | 14.0 | 770.0 | 217.8 |
| Feb-03 | 06-Feb-03 | AM5 | 1 | 13:19 | 14:19 | Sunny | normal operation | 14.0 | 770.0 | 213.3 |
| Feb-03 | 06-Feb-03 | AM5 | 2 | 14:19 | 15:19 | Sunny | normal operation | 14.0 | 770.0 | 221.7 |
| Feb-03 | 06-Feb-03 | AM5 | 3 | 15:19 | 16:19 | Sunny | normal operation | 14.0 | 770.0 | 226.0 |
| Feb-03 | 06-Feb-03 | AM6 | 1 | 13:18 | 14:18 | Sunny | normal operation | 14.0 | 770.0 | 236.6 |
| Feb-03 | 06-Feb-03 | AM6 | 2 | 14:18 | 15:18 | Sunny | normal operation | 14.0 | 770.0 | 222.8 |
| Feb-03 | 06-Feb-03 | AM6 | 3 | 15:18 | 16:18 | Sunny | normal operation | 14.0 | 770.0 | 223.2 |
| Feb-03 | 12-Feb-03 | AM2 | 1 | 8:55 | 9:55 | Sunny | normal operation | 16.0 | 767.0 | 157.4 |
| Feb-03 | 12-Feb-03 | AM2 | 2 | 9:55 | 10:55 | Sunny | normal operation | 16.0 | 767.0 | 166.2 |
| Feb-03 | 12-Feb-03 | AM2 | 3 | 10:55 | 11:55 | Sunny | normal operation | 16.0 | 767.0 | 164.8 |
| Feb-03 | 12-Feb-03 | AM3 | 1 | 8:59 | 9:59 | Sunny | normal operation | 16.0 | 767.0 | 192.8 |
| Feb-03 | 12-Feb-03 | AM3 | 2 | 9:59 | 10:59 | Sunny | normal operation | 16.0 | 767.0 | 204.8 |
| Feb-03 | 12-Feb-03 | AM3 | 3 | 10:59 | 11:59 | Sunny | normal operation | 16.0 | 767.0 | 200.0 157.4 |
| Feb-03 | 12-Feb-03 | AM4 | 1 | 8:53 | 9:53 | Sunny | normal operation | 16.0 16.0 | 767.0 767.0 | 166.7 |
| Feb-03 | 12-Feb-03 | AM4 | 2 | 9:53 | 10:53 | Sunny | normal operation | 16.0 | 767.0 | 164.1 |
| Feb-03 Feb-03 | 12-Feb-03 12-Feb-03 | AM4 AM5 | 3 | 10:53 8:59 | 11:53 9:59 | Sunny Sunny | normal operation | 16.0 | 767.0 | 176.6 |
| Feb-03 | 12-Feb-03 | | 2 | 9:59 | 10:59 | Sunny | normal operation | | 767.0 | 184.1 |
| Feb-03 | 12-Feb-03 | AM5 | 3 | 10:59 | 11:59 | Sunny | normal operation | 16.0 | 767.0 | 177.5 |
| Feb-03 | 12-Feb-03 | AM6 | 1 | 8:55 | 9:55 | Sunny | normal operation | I | 767.0 | 185.0 |
| Feb-03 | 12-Feb-03 | 1 | 2 | 9:55 | 10:55 | Sunny | normal operation | 16.0 | 767.0 | 195.9 |
| Feb-03 | 12-Feb-03 | | 3 | 10:55 | 11:55 | Sunny | normal operation | 16.0 | 767.0 | 191.5 |
| Feb-03 | 14-Feb-03 | | 1 | 8:38 | 9:38 | Sunny | normal operation | 17.0 | 765.0 | 190.3 |
| Feb-03 | 14-Feb-03 | | 2 | 9:38 | 10:38 | Sunny | normal operation | 17.0 | 765.0 | 173.7 |
| Feb-03 | 14-Feb-03 | AM2 | 3 | 10:38 | 11:38 | Sunny | normal operation | 17.0 | 765.0 | 191.9 |
| Feb-03 | 14-Feb-03 | 1 | 1 | 8:40 | 9:40 | Sunny | normal operation | 17.0 | 765.0 | 211.4 |
| Feb-03 | 14-Feb-03 | AM3 | 2 | 9:40 | 10:40 | Sunny | normal operation | 17.0 | 765.0 | 198.1 |
| Feb-03 | 14-Feb-03 | | 3 | 10:40 | 11:40 | Sunny | normal operation | ı | 765.0 | 211.7 |
| Feb-03 | 14-Feb-03 | E . | 1 | 8:43 | 9:43 | Sunny | normal operation | 1 | 765.0 | 212.2 |
| Feb-03 | 14-Feb-03 | AM4 | 2 | 9:43 | 10:43 | Sunny | normal operation | 1 | 765.0 | 196.0 |
| Feb-03 | 14-Feb-03 | 1 | 3 | 10:43 | 11:43 | Sunny | normal operation | I . | 765.0 | 208.4 |
| Feb-03 | 14-Feb-03 | 1 | 1 | 8:39 | 9:39 | Sunny | normal operation | | 765.0 | 182.5 |
| Feb-03 | 14-Feb-03 | 1 | 2 | 9:39 | 10:39 | Sunny | normal operation | | 765.0 | 163.5 |
| Feb-03 | 14-Feb-03 | 1 | 3 | 10:39 | 11:39 | Sunny | normal operation | 1 | 765.0 | 181.1 |
| Feb-03 | 14-Feb-03 | l . | 1 | 8:37 | 9:37 | Sunny | normal operation | | 765.0 | 181.1 |
| Feb-03 | 14-Feb-03 | | 2 | 9:37 | 10:37 | Sunny | normal operation | | 765.0 765.0 | 169.0 181.7 |
| Feb-03 | 14-Feb-03 | AM6 | 3 | 10:37 | 11:37 | Sunny | normal operation | 17.0 | 700.0 | 101./ |

| | | Receptor | | Time r | eriods | Weather | Site | Temp. | Pressure | 1-hour TSP |
|------------------|------------------------|------------|---------|----------------|----------------|----------------|-----------------------------------|--------------|----------------|----------------------------|
| Month | Date | No. | Set No. | Start | Finish | condition | condition | (°C) | (mmHg) | Level (μg/g ³) |
| Feb-03 | 19-Feb-03 | AM2 | 1 | 8:59 | 9:59 | Sunny | normal operation | 24.0 | 764.3 | 238.1 |
| Feb-03 | 19-Feb-03 | AM2 | 2 | 9:59 | 10:59 | Sunny | normal operation | 24.0 | 764.3 | 209.6 |
| Feb-03 | 19-Feb-03 | AM2 | 3 | 10:59 | 11:59 | Sunny | normal operation | 24.0 | 764.3 | 197.0 |
| Feb-03 | 19-Feb-03 | AM3 | 1 | 8:44 | 9:44 | Sunny | normal operation | 24.0 | 764.3 | 223.3 |
| Feb-03 | 19-Feb-03 | AM3 | 2 | 9:44 | 10:44 | Sunny | normal operation | 24.0 | 764.3 | 194.6 |
| Feb-03 | 19-Feb-03 | AM3 | 3 | 10:44 | 11:44 | Sunny | normal operation | 24.0 | 764.3 | 195.8 |
| Feb-03 | 19-Feb-03 | AM4 | 1 | 8:40 | 9:40 | Sunny | normal operation | 24.0 | 764.3 | 249.0 |
| Feb-03 | 19-Feb-03 | AM4 | 2 | 9:40 | 10:40 | Sunny | normal operation | 24.0 | 764.3 | 212.5 |
| Feb-03 | 19-Feb-03 | AM4 | 3 | 10:40 | 11:40 | Sunny | normal operation | 24.0 | 764.3 | 211.2 |
| Feb-03 | 19-Feb-03 | AM5 | 1 | 8:56 | 9:56 | Sunny | normal operation | 24.0 | 764.3 | 230.3 |
| Feb-03 | 19-Feb-03 | AM5 | 2 | 9:56 | 10:56 | Sunny | normal operation | 24.0 | 764.3 | 201.1 |
| Feb-03 | 19-Feb-03 | AM5 | 3 | 10:56 | 11:56 | Sunny | normal operation | 24.0 | 764.3 764.3 | 195.0 262.0 |
| Feb-03 | 19-Feb-03 | AM6 | 1 | 8:50 | 9:50 10:50 | Sunny | normal operation normal operation | 24.0 24.0 | 764.3 764.3 | 202.0 |
| Feb-03 | 19-Feb-03 | AM6 | 2 | 9:50 | 11:50 | Sunny Sunny | normal operation | 24.0 | 764.3 | 227.7 |
| Feb-03 Feb-03 | 19-Feb-03 26-Feb-03 | AM6 AM2 | 3 1 | 10:50 8:47 | 9:47 | Sunny | normal operation | 22.0 | 764.0 | 229.3 |
| Feb-03 | 26-Feb-03 | AM2 | 2 | 9:47 | 10:47 | Sunny | normal operation | 22.0 | 764.0 | 200.0 |
| Feb-03 | 26-Feb-03 | AM2 | 3 | 10:47 | 11:47 | Sunny | normal operation | 22.0 | 764.0 | 221.9 |
| Feb-03 | 26-Feb-03 | AM3 | 1 | 8:46 | 9:46 | Sunny | normal operation | 22.0 | 764.0 | 203.1 |
| Feb-03 | 26-Feb-03 | AM3 | 2 | 10:51 | 11:51 | Sunny | normal operation | 22.0 | 764.0 | 203.8 |
| Feb-03 | 26-Feb-03 | AM3 | 3 | 13:06 | 14:06 | Sunny | normal operation | 22.0 | 764.0 | 198.9 |
| Feb-03 | 26-Feb-03 | AM4 | 1 | 8:46 | 9:46 | Sunny | normal operation | 22.0 | 764.0 | 208.2 |
| Feb-03 | 26-Feb-03 | AM4 | 2 | 10:51 | 11:51 | Sunny | normal operation | 22.0 | 764.0 | 211.2 |
| Feb-03 | 26-Feb-03 | AM4 | 3 | 13:06 | 14:06 | Sunny | normal operation | 22.0 | 764.0 | 205.5 |
| Feb-03 | 26-Feb-03 | AM5 | 1 | 8:48 | 9:48 | Sunny | normal operation | 22.0 | 764.0 | 211.1 |
| Feb-03 | 26-Feb-03 | AM5 | 2 | 9:53 | 10:53 | Sunny | normal operation | 22.0 | 764.0 | 221.2 |
| Feb-03 | 26-Feb-03 | AM5 | 3 | 13:03 | 14:03 | Sunny | normal operation | 22.0 | 764.0 | 216.5 |
| Feb-03 | 26-Feb-03 | AM6 | 1 | 8:57 | 9:57 | Sunny | normal operation | 22.0 | 764.0 | 194.5 |
| Feb-03 | 26-Feb-03 | AM6 | 2 | 10:57 | 11:57 | Sunny | normal operation | 22.0 | 764.0 | 202.6 |
| Feb-03 | 26-Feb-03 | AM6 | 3 | 13:07 | 14:07 | Sunny | normal operation | 22.0 | 764.0 | 197.5 |
| Mar-03 | 07-Mar-03 | AM2 | 1 | 8:45 | 9:45 | Sunny | normal operation | 13.0 | 765.0 | 177.0 |
| Mar-03 | 07-Mar-03 | AM2 | 2 | 9:45 | 10:45 | Sunny | normal operation | 13.0 | 765.0 | 179.4 |
| Mar-03 | 07-Mar-03 | AM2 | 3 | 10:50 | 11:50 | Sunny | normal operation | 13.0 | 765.0 | 174.9 |
| Mar-03 | 07-Mar-03 | AM3 | 1 | 8:40 | 9:40 | Sunny | normal operation | 13.0 | 765.0 | 203.4 |
| Mar-03 | 07-Mar-03 | AM3 | 2 | 9:45 | 10:45 | Sunny | normal operation | 13.0 | 765.0 765.0 | 199.5 195.2 |
| Mar-03 | 07-Mar-03 | AM3 | 3 1 | 10:55 | 11:55 9:43 | Sunny Sunny | normal operation normal operation | 13.0 13.0 | 765.0 | 172.8 |
| Mar-03 Mar-03 | 07-Mar-03 07-Mar-03 | AM4 AM4 | 2 | 8:43 9:43 | 10:43 | Sunny | normal operation | 13.0 | 765.0 | 172.6 |
| Mar-03 | 07-Mar-03 | AM4 | 3 | 10:58 | 11:58 | Sunny | normal operation | 13.0 | 765.0 | 173.3 |
| Mar-03 | 07-Mar-03 | AM5 | 1 | 8:48 | 9:48 | Sunny | normal operation | 13.0 | 765.0 | 156.9 |
| Mar-03 | 07-Mar-03 | AM5 | 2 | 9:48 | 10:48 | Sunny | normal operation | | 765.0 | 163.5 |
| Mar-03 | 07-Mar-03 | AM5 | 3 | 10:58 | 11:58 | Sunny | normal operation | 13.0 | 765.0 | 167.1 |
| Mar-03 | 07-Mar-03 | AM6 | 1 | 8:34 | 9:34 | Sunny | normal operation | 13.0 | 765.0 | 180.1 |
| Mar-03 | 07-Mar-03 | AM6 | 2 | 9:39 | 10:39 | Sunny | normal operation | 13.0 | 765.0 | 182.2 |
| Mar-03 | 07-Mar-03 | AM6 | 3 | 10:59 | 11:59 | Sunny | normal operation | 13.0 | 765.0 | 183.9 |
| Mar-03 | 12-Mar-03 | AM2 | 1 | 9:49 | 10:49 | Sunny | normal operation | 19.0 | 768.0 | 156.9 |
| Mar-03 | 12-Mar-03 | AM2 | 2 | 10:59 | 11:59 | Sunny | normal operation | 19.0 | 768.0 | 139.4 |
| Mar-03 | 12-Mar-03 | AM2 | 3 | 13:04 | 14:04 | Sunny | normal operation | 19.0 | 768.0 | 132.1 |
| Mar-03 | 12-Mar-03 | AM3 | 1 | 9:53 | 10:53 | Sunny | normal operation | 19.0 | 768.0 | 188.4 |
| Mar-03 | 12-Mar-03 | AM3 | 2 | 10:58 | 11:58 | Sunny | normal operation | 1 | 768.0 | 176.2 |
| Mar-03 | 12-Mar-03 | AM3 | 3 | 13:03 | 14:03 | Sunny | normal operation | 19.0 | 768.0 | 180.5 |
| Mar-03 | 12-Mar-03 | AM4 | 1 | 9:43 | 10:43 | Sunny | normal operation | 19.0 | 768.0 | 175.8 |
| Mar-03 | 12-Mar-03 | AM4 | 2 | 10:58 | 11:58 | Sunny | normal operation | | 768.0 | 160.2 |
| Mar-03 | 12-Mar-03 | AM4 | 3 | 13:58 | 14:58 | Sunny | normal operation | | 768.0 | 163.5 |
| Mar-03 | 12-Mar-03 | AM5 | 1 | 10:05 | 11:05 | Sunny | normal operation | 19.0 | 768.0 768.0 | 149.9 140.6 |
| Mar-03 Mar-03 | 12-Mar-03 | AM5 | 2 3 | 13:05 | 14:05 | Sunny | normal operation normal operation | 19.0 19.0 | 768.0 | 173.7 |
| Mar-03 Mar-03 | 12-Mar-03 12-Mar-03 | AM5 AM6 | 1 1 | 14:10 10:04 | 15:10 11:04 | Sunny Sunny | normal operation | 19.0 | 768.0 | 153.1 |
| Mar-03 | 12-Mar-03 | AM6 | 2 | 11:04 | 12:04 | Sunny | normal operation | 1 | 768.0 | 143.1 |
| Mar-03 | 12-Mar-03 | AM6 | 3 | 13:04 | 14:04 | Sunny | normal operation | 19.0 | 768.0 | 132.7 |
| war-00 | 12-IVIA1-03 | L VINIÓ | | 10.04 | 1 17.07 | Louiniy | Thomas operation | 1 | , 50.0 | |

| | | Receptor | | Time p | eriods | Weather | Site | Temp. | Pressure | 1-hour TSP |
|--------|-----------|----------|---------|--------|--------|-----------|------------------|-------|----------|---------------|
| Month | Date | No. | Set No. | Start | Finish | condition | condition | (°C) | (mmHg) | Level (μg/g³) |
| Mar-03 | 19-Mar-03 | AM2 | 1 | 8:18 | 9:18 | Fine | normal operation | 15.0 | 766.0 | 173.6 |
| Mar-03 | 19-Mar-03 | AM2 | 2 | 10:58 | 11:58 | Fine | normal operation | 15.0 | 766.0 | 174.0 |
| Mar-03 | 19-Mar-03 | AM2 | 3 | 13:03 | 14:03 | Fine | normal operation | 15.0 | 766.0 | 176.0 |
| Mar-03 | 19-Mar-03 | AM3 | 1 | 8:23 | 9:23 | Fine | normal operation | 15.0 | 766.0 | 159.5 |
| Mar-03 | 19-Mar-03 | АМ3 | 2 | 9:58 | 10:58 | Fine | normal operation | 15.0 | 766.0 | 157.1 |
| Mar-03 | 19-Mar-03 | АМЗ | 3 | 10:58 | 11:58 | Fine | normal operation | 15.0 | 766.0 | 168.2 |
| Mar-03 | 19-Mar-03 | AM4 | 1 | 9:31 | 10:31 | Fine | normal operation | 15.0 | 766.0 | 189.6 |
| Mar-03 | 19-Mar-03 | AM4 | 2 | 10:56 | 11:56 | Fine | normal operation | 15.0 | 766.0 | 198.1 |
| Mar-03 | 19-Mar-03 | AM4 | 3 | 13:51 | 14:51 | Fine | normal operation | 15.0 | 766.0 | 208.8 |
| Mar-03 | 19-Mar-03 | AM5 | 1 | 9:56 | 10:56 | Fine | normal operation | 15.0 | 766.0 | 146.0 |
| Mar-03 | 19-Mar-03 | AM5 | 2 | 10:56 | 11:56 | Fine | normal operation | 15.0 | 766.0 | 159.3 |
| Mar-03 | 19-Mar-03 | AM5 | 3 | 13:36 | 14:36 | Fine | normal operation | 15.0 | 766.0 | 170.3 |
| Mar-03 | 19-Mar-03 | AM6 | 1 | 8:26 | 9:26 | Fine | normal operation | 15.0 | 766.0 | 148.2 |
| Mar-03 | 19-Mar-03 | AM6 | 2 | 9:56 | 10:56 | Fine | normal operation | 15.0 | 766.0 | 146.8 |
| Mar-03 | 19-Mar-03 | AM6 | 3 | 10:56 | 11:56 | Fine | normal operation | 15.0 | 766.0 | 148.5 |
| Mar-03 | 21-Mar-03 | AM2 | 1 | 9:29 | 10:29 | Sunny | normal operation | 18.0 | 765.0 | 181.2 |
| Mar-03 | 21-Mar-03 | AM2 | 2 | 10:59 | 11:59 | Sunny | normal operation | 18.0 | 765.0 | 176.1 |
| Mar-03 | 21-Mar-03 | AM2 | 3 | 14:15 | 15:15 | Sunny | normal operation | 18.0 | 765.0 | 155.4 |
| Mar-03 | 21-Mar-03 | AM3 | 1 | 9:11 | 10:11 | Sunny | normal operation | 18.0 | 765.0 | 189.5 |
| Mar-03 | 21-Mar-03 | AM3 | 2 | 10:56 | 11:56 | Sunny | normal operation | 18.0 | 765.0 | 180.5 |
| Mar-03 | 21-Mar-03 | AM3 | 3 | 13:01 | 14:01 | Sunny | normal operation | 18.0 | 765.0 | 150.2 |
| Mar-03 | 21-Mar-03 | AM4 | 1 | 9:09 | 10:09 | Sunny | normal operation | 18.0 | 765.0 | 184.7 |
| Mar-03 | 21-Mar-03 | AM4 | 2 | 10:59 | 11:59 | Sunny | normal operation | 18.0 | 765.0 | 178.9 |
| Mar-03 | 21-Mar-03 | AM4 | 3 | 13:04 | 14:04 | Sunny | normal operation | 18.0 | 765.0 | 155.3 |
| Mar-03 | 21-Mar-03 | AM5 | 1 | 9:27 | 10:27 | Sunny | normal operation | 18.0 | 765.0 | 210.8 |
| Mar-03 | 21-Mar-03 | AM5 | 2 | 10:57 | 11:57 | Sunny | normal operation | 18.0 | 765.0 | 205.2 |
| Mar-03 | 21-Mar-03 | AM5 | 3 | 13:02 | 14:02 | Sunny | normal operation | 18.0 | 765.0 | 183.5 |
| Mar-03 | 21-Mar-03 | AM6 | 1 | 9:26 | 10:26 | Sunny | normal operation | 18.0 | 765.0 | 216.8 |
| Mar-03 | 21-Mar-03 | AM6 | 2 | 10:26 | 11:26 | Sunny | normal operation | 18.0 | 765.0 | 203.5 |
| Mar-03 | 21-Mar-03 | AM6 | 3 | 11:26 | 12:26 | Sunny | normal operation | 18.0 | 765.0 | 206.8 |
| Mar-03 | 27-Mar-03 | AM2 | 1 | 8:50 | 9:50 | Sunny | normal operation | 22.0 | 762.0 | 202.4 |
| Mar-03 | 27-Mar-03 | AM2 | 2 | 9:50 | 10:50 | Sunny | normal operation | 22.0 | 762.0 | 156.1 |
| Mar-03 | 27-Mar-03 | AM2 | 3 | 10:50 | 11:50 | Sunny | normal operation | 1 | 762.0 | 158.6 |
| Mar-03 | 27-Mar-03 | AM3 | 1 | 8:53 | 9:53 | Sunny | normal operation | 22.0 | 762.0 | 203.2 |
| Mar-03 | 27-Mar-03 | AM3 | 2 | 9:58 | 10:58 | Sunny | normal operation | 22.0 | 762.0 | 164.8 |
| Mar-03 | 27-Mar-03 | AM3 | 3 | 10:58 | 11:58 | Sunny | normal operation | 22.0 | 762.0 | 173.8 |
| Mar-03 | 27-Mar-03 | AM4 | 1 | 8:48 | 9:48 | Sunny | normal operation | 22.0 | 762.0 | 231.1 |
| Mar-03 | 27-Mar-03 | AM4 | 2 | 9:48 | 10:48 | Sunny | normal operation | 1 | 762.0 | 189.2 |
| Mar-03 | 27-Mar-03 | AM4 | 3 | 10:48 | 11:48 | Sunny | normal operation | | 762.0 | 188.3 |
| Mar-03 | 27-Mar-03 | AM5 | 1 | 8:43 | 9:43 | Sunny | normal operation | | 762.0 | 233.5 |
| Mar-03 | 27-Mar-03 | AM5 | 2 | 9:43 | 10:43 | Sunny | normal operation | | 762.0 | 189.7 |
| Mar-03 | 27-Mar-03 | AM5 | 3 | 10:53 | 11:53 | Sunny | normal operation | | 762.0 | 184.9 |
| Mar-03 | 27-Mar-03 | AM6 | 1 | 8:39 | 9:39 | Sunny | normal operation | | 762.0 | 203.2 |
| Mar-03 | 27-Mar-03 | AM6 | 2 | 9:39 | 10:39 | Sunny | normal operation | | 762.0 | 163.2 |
| Mar-03 | 27-Mar-03 | AM6 | 3 | 10:49 | 11:49 | Sunny | normal operation | 22.0 | 762.0 | 144.4 |

APPENDIX 4 Correspondences of the Public Complaints from January 2003 to March 2003

本習檔言 OUR REF: EP 580/E6/3/9

來函檔號 YOUR REF: TEL. NO.:

國文傳章 2158 5823 FAX NO.: 2685 1155

E-MAIL: h[-

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 上禾裕路 號 沙田政府合署 10 楼

10 January 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)

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.

TDD c.c. (all w/e)

Maunsell

(Attn: Mr. George Mak (Attn: Mr. Y H Fung

Fax.: 2721 8630)

CHEC

(Attn: Mr Chan Man

Fax.: 2643 3559)

Fax.: 2492 3701)

NOTICE OF COMPLAINT

| Complaint Ref. | |
|----------------|--|
| ICC Def | |

N01/TN/00000277-03

ICC Ref:

CASE DETAILS

(1) Incident

09/01/2003

(2) Incident Location: KAM YING COURT,

NOI - SHATIN

地址:

(3) TPU:

757

(4) Description:

COMPLAINT OF GENERAL CONSTRUCTION NOISE EXCEPT RENOVATION FROM A SITE NEAR

KAM YING COURT, SHA TIN

(5) Nature

(6) Affected Party

(7) Pollution Pattern

N66-General construction noise except

DMS-Domestic Premises

C-Continuous, DE-Day & Evening,

A-Daily

renovation

C - Routine i.e. substantive reply to be made on or before 30/01/2003

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name: UNKNOWN

(8) Priority class:

姓名: 不知名

(2) Premises Address:

地址:

(3) Business Type:

511 - Construction site except renovation

COMPLAINANT.

(1) Name:

Mr

(2) Tel. No.: Day:

Night:

Mobile:

(3) Address:

地址:

(4) Email Address:

CHANNEL OF COMPLAINT

Source channel:

01

Phone

Source code:

Public

Remarks:

先生投訴在馬鞍山近錦英苑錦良閣對出的公路地盤,於平日07:00-23:00及公眾假期開工,發出很大的

聲浪.要求跟進

ACTION OFFICERS

EPO CI **SEPO** Nature Code CI[TN]2 N66 SITN₂ Coordinator

INFORMATION INPUTTED BY

Name -P.02

HAUE3 +825 5682 1122 Date:

09/01/2003

+825 S682 1122

Time:

11:07

10-1HN-2003 18:40

Maunsell Consultants Asia Ltd

茂盛(亞洲)工程顧問有限公司

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

> 香港新界沙田鄉事會路 138 號 新城市中央價場第2座8模

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

13 January 2003.

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: r7cso@netvigator.com

Your Ref.:

Our Ref.: T7/(ST86/2000)/M05/412(0153)

Ma On Shan, N.T.

The Agent China Harbour Engineering Company (Group) 9 Lok Wo Sha Lane

Dear Sir,

Sha Tin New Town Stage II Contract No. ST 86/2000 Construction of Road T7 in Ma On Shan Environmental Complaint EC-51 Noise Nuisance from Works near Kam Ying Court

I attach for your attention and necessary action a copy of EPD's letter ref. EP 580/E6/3/9 dated 10 January 2003 regarding the captioned on 9 January 2003.

hoosived

Yours faithfully,

K H Cheng Senior Resident Engineer

Encl. KHC:cc

cc: MCAL

OAP - w/o encl. (by fax only)

CHEC - HO



本名称號 OUR REF: EP 580/E6/3/9

來函檔號 YOUR REF: 電 語 TEL. NO.:

國文傳真 2158 5823 FAX NO.: 2685 1155

E-MAIL:

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) 密港新界抄田 上來從路一號 沙田政府合著 10 侯

16 January 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.

2315

Waster Ret.: E Bagly Ret. Auton Respired.

Received 1714

of the por

Yours faithfully,

(Jack KAN)

MARY

Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

Maunsell

CHEC

(Attn: Mr. George Mak

(Attn: Mr. Y H Fung

(Attn: Mr Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

NOTICE OF COMPLAINT

Complaint Ref.:

N01/TN/00000405-03

ICC Ref:

CASE DETAILS

(1) Incident

13/01/2003

(2) Incident Location : KAM YING COURT, NO1 - SHA TIN

地址:

(3) TPU:

757

(4) Description:

COMPLAINT OF SUNDAY CONSTRUCTION NOISE FROM THE CONSTRUCTION SITE OPPOSITE TO

KAM YING COURT . SHA TIN

(5) Nature

(6) Affected Party

(7) Pollution Pattern

N66-General construction noise except

DMS-Domestic Premises

renovation

(8) Priority class:

- Routine

i.e. substantive reply to be made on or before

DETAILS OF THE SUSPECTED POLLUTER

C

(1) Premises Name: UNKNOWN

姓名: 不知名

(2) Premises Address:

地址:

(3) Business Type:

511 - Construction site except renovation

COMPLAINANT

(1) Name:

Mr

(2) Tel. No.: Day:

Night:

Mobile:

(3) Address:

地址:

(4) Email Address:

CHANNEL OF COMPLAINT

Source channel:

01

Phone

Source code:

Public

Remarks:

先生投訴上址錦英苑對出,拓展署T7路地盤工程,於星期日開工,要求EPD儘快跟進

ACTION OFFICERS

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

INFORMATION INPUTTED BY

Name : 20 d

HAUEI

+825 5685 1155

Date:

13/01/2003

Time:

11:38

16-JAN-2003 17:59

+825 5682 1122

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

> 香港新界沙田挪事會路 138 设。 《新城市中央廣場第2座8模

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

20 January 2003

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(0155)

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

Dear Sir,

Sha Tin New Town Stage II

Contract No. ST 86/2000

Construction of Road T7 in Ma On Shan

Environmental Complaint EC-52

Noise Nuisance from Works near Kam Ying Court on Sunday

I attach for your attention and necessary action a copy of EPD's letter ref. EP 580/E6/3/9 dated 16 January 2003 regarding the captioned on 12 January 2003.

Arup Acuto ics is 25156

Waster Reflection Required

Received 2 U IAN 2003

Action Reside to the Indian Action Info Copy

Yours faithfully,

K H Cheng Senior Resident Engine

Encl. KHC:cc

cc : MCAL

OAP - w/o encl. (by fax only)

CHEC-HO

18:00 15-JAN-2003

OUR-REF: EP 580/E6/3/9 本艺術室

水压松菜

YOUR REF. 7

TEL NO. 國文條匠 2158 5823 FAX NO.: 2685 1155

农子郵件 E-MAIL:

肚 Hamepage: http://www.info.gov.hk/epd/ +425 5080 1100

Environmental Protection Department Local Control Office/Territory North

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



環境保護署 污染管制辦事區 否地新开沙田。 上深讯的一姓 沙田政府合署 10 福

16 January 2003

Contract No. ST86/29') N Trunt Road T7 MOS/412 File No. : JAN 2003 MCAL RSS CRUB 4 SRE 1 SBB-Z L RB1.2.3.G PB QS ARE ARE SIOW 1 Dear Sigw 2 IOW .mli:d:

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

(Attn: Mr Sam Tsoi)

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

Shallin 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

Maunsell · CHEC

(Arm: Mr. Y H Fung

(Atm: Mr Chan Man

(Atm: Mr. George Mak

Fax: 2721 8630) Fax.: 2643 3559)

Fax.: 2492 3701)

NOTICE OF COMPLAINT

Complaint Ref.:

N01/TN/00000405-03

ICC Ref.

CASE DETAILS

(1) Incident

13/01/2003

(2) Incident Location : KAM YING COURT,

(YING COURT, 地址:

NOI - SHATIN

(3) TPU:

757

(4) Description:

COMPLAINT OF SUNDAY CONSTRUCTION NOISE FROM THE CONSTRUCTION SITE OPPOSITE TO

KAM YING COURT, SHA TIN

(5) Nature

(6) Affected Party

(7) Pollution Pattern

N66-General construction noise except

DMS-Domestic Premises

renovation

(8) Priority class:

- Routine

i.e. substantive reply to be made on or before 05/02/2003

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name: UNKNOWN

姓名:不知名

(2) Premises Address:

地址:

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

COMPLAINANT

(1) Name:

Mr

(2) Tel. No. : Day:

Night:

Mobile:

(3) Address:

地址:

(4) Email Address:

CHANNEL OF COMPLAINT

Source channel:

01

Phone

Source code;

P

Public

Remarks:

先生投訴上址錦夾宛對出,拓展潛口路地盤工程於星期日開工,要求EPD儘快課達,

ACTION OFFICERS

 Nature Code
 SEPO
 EPO
 CI

 Coordinator
 N66
 S[TN]2
 CI[TN]2

INFORMATION INPUTTED BY

Name:

HAUE!

Date:

13/01/2003

Time: 11:38

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

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(0158)

CHINA HARBOUR ENG., CO. (CROUP)
Continut T 7 - Ma On Stan

2 2 JAN 2003

RECEIVED
Subject File: 0 | 0 | I
Serial No: 043 40

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 136 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

21 January 2003

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

Dear Sir,

Sha Tin New Town Stage II
Contract No. ST 86/2000
Construction of Road T7 in Ma On Shan
Environmental Complaint EC-53
Noise Nuisance in Night-time near Cheung Muk Tau

I attach herewith for your attention and necessary action a copy of ICC case ref. 1-20015209 dated 20 January 2003 regarding the captioned complaint.

Yours faithfully,

K H Cheng Senior Resident Engineer

Encl. KHC:cc

ce : MCAL CHEC - HO





```
ICC CASE: 1-20015209
 Request Type : Complaint
 Channel : Phone
 Case Creation Date : 2003-01-20 03:16:16
 DUE DATE:
 Acknowledgement : 2003-01-21 03:15:16
 Interm Reply :
 Final Reply :
 ASSIGNMENT HISTORY:
 [Date/Time] [Status] [Dept]
                                     (Assigned Tc)
EVENT DETAILS:
Event Date & Time : 2003-01-20 03:16
EVENT: LOCATION:
Room :
Floor :
Block No. :
Building Name :
Estate: 棒木畑村
Street No. :
Street Name:
District: Ma On Shan (馬鞍山)
Region: NT
CONTACT INFORMATION:
Last Name: Ms. 協
First Name: .
Alt Name:
Contact Address:
Daytime No.:
Nighttime No.:
Mobile: 90233946
Alt Tel No. :
```

Fax:

Email Address:

Case Source: General Public

CASE DETAILS:

Subject Matter: Territory Development Department - DQ

Description:

出電 TDO-NT EAST 23011393,到小姐表示如辖定是TDD的工程便可立即蔣介給她們跟進,傳真號碼;27218630

巴電27623938, hyd.officer交生表示<u>核位置並非議略工程,認是拓展器進行高速公路建設工程,應轉介給拓展署</u> 與進

=======

像小姐投诉、棒木镇村村入口全操路在掘出進行西越工程、現時有一頭泥頭率在運作,發出噪音、接小姐表示不是第一次深夜時份工作,要求部門區達。 (她提供不到街道名,工程位置對面是常學演逐區)

Specific Questions and Answers:



中國港灣建設(集團)總公司

香港代表: 旋華工程有限公司

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

2 2 JAN 2003

Date : 21 January 2003 Our Ref: T7/01.01/O/05724

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

Attention: Mr. K H Cheng- SRE

Dear Sir.

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

Environmental Complaint EC-51 & EC-52 - Noise nuisance from construction works near Kam Ying Court on 9 and 13 January 2003

Received

We refer to your letter dated 13 and 20 January 2003 regarding the captioned complaint involving the carrying out of construction works near Kam Ying Court.

To suit the progress of the works, we have obtained two Construction Noise Permits from EPD of no.: GW-TN0522-2002 and GW-TN0294-2002 to conduct construction works from 07:00 to 23:00 (from Monday to Sunday, including general holiday). For your information, we have already reduced the amount of prescribed construction works to a minimal as practical as possible in order to reduce the noise nuisance arising from works near Kam Leung House.

Noise measurements have been conducted on 10, 18, 19 and 20 January 2003 at the rooftop of Kam Leung House and Kam Yiu House at Kam Ying Court (witnessed by staff from Maunsell Consultant Asia Limited). The results showed that the construction noise levels were below the limit level as stated. Similar types of noise monitoring will be continued in the coming future.

Thank you very much for your kind attention.

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

Chan Man

Project Manager

ÁL – H.O.

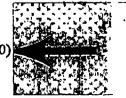
CHEC - H.O.

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

OAP - Mr. Thomas Chan (F: 2268 3950

TDD - Mr. George Mak

WW, ST, KCW, FC





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.

2 4 JAN 2003

Date

: 23 January 2003

Our Ref.

: T7/01.01/O/05834

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

N.T.

Attention: Mr. K.H. Cheng-SRE

Dear Sir,

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

Environmental Complaint EC-53 - Noise nuisance in Night-time near Cheung Muk Tau

We refer to your letter dated 21 January 2003 regarding the captioned complaint involving the operation of a dump truck near Cheung Muk Tau Village in the early morning.

Received

Please be informed that we have not carried out any construction activity around the area after 19:00 each day (no construction activity will be carried out on Sunday and public holiday). Through joint inspection MCAL inspectory staff on 20 January 2003 afternoon we did not observe any signs of dumping work operated by others as well.

However, we would instruct our night-time watchman on duty at this location to pay special attention to any dump truck operation and we will take necessary actions to prohibit any dump truck operation at restricted working hours.

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/QL/PL/GT/fc

c.c. M

MCAL - H.O.

CHEC - H.O.

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

TDD - Mr. George Mak

本芸檔號 OUR REF: EP 580/E6/3/9

來函檔號 YOUR REF: •Т, TEL. NO.:

剛文傳算 2158 5823 FAX NO.: 2685 1155

E-MAIL:

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) 乔港新界沙田 上未举路一號 沙田政府合署 10 樾

20 January 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.

2 1 JAN 2003 Received

Yours faithfully,

(Jack KAN)

Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (all w/e)

TDD

Maunsell

CHEC

(Attn: Mr. George Mak

(Attn: Mr. Y H Fung

(Attn: Mr Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

NOTICE OF COMPLAINT

| Compli | aint | Ref. | - |
|--------|------|------|---|
|--------|------|------|---|

N01/TN/00000665-03

ICC Ref:

CASE DETAILS

Incident

18/01/2003

(2) Incident Location:

地址: 翠擁華庭

N01 - SHATIN

(3) TPU:

(4) Description:

COMPLAINT OF GENERAL CONSTRUCTION NOISE (DURING PUBLIC HOLIDAY) FROM A

CONSTRUCTION SITE BEHIND MONTE VISTA, 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

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name: UNKNOWN

姓名:不知名

(2) Premises Address:

地址:

(3) Business Type:

511 - Construction site except renovation

COMPLAINANT

(1) Name:

(2) Tel. No.: Day:

姓名:

Night:

Mobile:

(3) Address:

地址:

(4) Email Address:

CHANNEL OF COMPLAINT

Source channel:

Phone

Source code:

Public

Remarks:

- 馬鞍山翠擁華庭後山有地盤.

ACTION OFFICERS

| | Namre Code | SEPO | EPO | Cl |
|-------------|------------|--------|-----|---------|
| Coordinator | N66 | S[TN]2 | | CI[TN]2 |

INFORMATION INPUTTED BY

Name: Z0.9

+825 5682 1155

Date:

18/01/2003

Time:

+825 5682 1122

09:54

20-144-2003 17:58

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 Pax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.:

Our Ref.: T7/(ST86/2000)/M05/412(0159)

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

> 香港新界沙田輝寧會路 138 號 新城市中央廣場第2座8模

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

22 January 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-54** Noise Nuisance from Works near Monte Vista

I attach herewith for your attention and necessary action a copy of EPD's letter ref. EP 580/E6/3/9 dated 20 January 2003 regarding the captioned complaint on 18 January 2003.

> 2 2 JAN 2003 Hacelved

Yours faithfully,

K H Cheng

Senior Resident Engineer

KHC:it

Encl.

cc: MCAL

OAP - w/o encl. (by fax only)

CHEC - HO



本语檔號 OUR REF: EP 580/P6/3/9

米迪兹敦 YOUR FIEF: 32 游 TEL NO.:

以文怀 2158 5823 FAX NO.: 2085 1156

世子邮件 2685 1155

E-MAIL:

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

Environmental Protection Department
Local Control Office/Territory North

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



行及官制辦事員 (新界北) 發級新外沙田 上采金路一边 沙田政府會第10 恪

20 January 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.

Contract No. STB67066

IN Trust Road 17.
File No.: Moy [4/12/176]

Lect : 2 U JAN 2003

Lect

Yours faithfully,

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

Encl.

c.c. (all w/e)

TDD Maunsell

(Attn: Mr. George Mak

(Attn: Mr. Y H Fung

CHEC

(Attn: Mr Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

NOTICE OF COMPLAINT

| | 1 | | | | | | | | , |
|--------------------------------|--------------------|----------------|----------------|-----------|----------------|----------|----------|-------------|----------|
| Complaint Ref.: | N01/TN/00000665 | -03 | | | | | , | | |
| ICC Ref: | • | | | | | | | 1 | 1 |
| CASE DETAILS | | | | | | | • | , \ | .''' |
| (1) Incident | 18/01/2003 | | | | , | • . | | • | |
| (2) Incident Location | : Nol - Shati | ٧ | | 地址; | 泰妮華庭 , | | , | • | |
| | | | | | | • | | • | |
| (3) TPU: | 757 | | | | | , , | | ٠. | • |
| (4) Description: | COMPLAINT OF GE | | | | תח | · | | | • |
| (5) Nature | , | (6) Affect | ed Party | | (7) P | ollution | Pattern | | |
| N66-General construct | non noise except | DMS-Dor | nestic Premi | ses | | , | , , | , | • |
| (8) Priority class: | C - Routine | | j. d. 3 | rineredus | re reply to be | made on | or befo | ore 12 | 2/02/200 |
| DETAILS OF THE S | SUSPECTED POLI | LUTER | | | | | | , | |
| (1) Premises Name: | UNKNOWN | | | 姓名: | 不知名 | , | | , | |
| (2) Premises Address | : | | | 地址: | | `, | | , , | ' ' |
| | .: | | | | | | | ` . | , |
| (3) Business Type: | 511 - Construction | site except | renovation | | | | * ; | | |
| COMPLAINANT | | | | | | • | , | | |
| (1) Name: | | | | (2) Te | L No. ; Day ; | | | | |
| 姓名: | ; | | | | Night Mobil | | | | |
| (3) Address; | | | | 地址: | | | ,,, | • | , |
| | | | | | | , | , | ٠, | |
| (4) Email Address: | | | | | | `,` | | | |
| | ONE A PARTI | | | | | , | . , | ` . | , |
| CHANNEL OF COM Source channel: | Ol . | Phone | | | | | | | , |
| Source code: | P - | | | | | , | , | | |
| Remarks : | - 冯鞍山翠標等底後 | Public 山有地盤 | | | | | | , | i |
| ACTION OFFICERS | ; | | | | | | | | |
| | Nature Code | | SEPO | | EPO | ` | CI . | , . | |
| Coordinator | N66 | | S[TN]2 | | • | ` , , | CILL | 1] 2 | , , |

INFORMATION INPUTTED BY

Name:

HAUE4

Date:

18/01/2003

Time: 09:54

TOTAL P.02 TOTAL P.03



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 : 25 January 2003 Our Ref.: T7/01.01/O/05881

23156

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

Attention: Mr. Albert Lam - CRE

It in Japan Fr Te 1

Dear Sir,

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

Environmental Complaint EC-54 - Noise nuisance from Works near Monte Vista

We refer to your letter dated 22 January 2003 regarding the captioned complaint involving the carrying out of construction works near Monte Vista during public holiday.

We have obtained the Construction Noise Permit (CNP) of no. GW-TN0550-2002 from Environmental Protection Department so as to suit the progress of the works in TC5 & TC6 area. And according to our site records on that day, the powered mechanical equipments used near Monte Vista was covered by this CNP.

We will instruct our site foreman assigned on Sunday duty to ensure the construction works compile with the conditions stated in the CNP and to keep the noise nuisance to minimal as practical as possible.

Thank you very much for your kind attention.

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

Pr Chan Man

Project Manager

CC

CM/CL/P

MCAL - H.O.

TDD - Mr. George Mak

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

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

CHEC-H.O.

Int:

WW/KCW

P.03/04

平安村里 OUR REF: EP 580/E6/3/9 来的保險 YOUR REF: . NO.: 到工伤互

2158 5823

FAX NO. 2685 1155 设了解件

E-MAIL

hl:

Homepaga: 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 污染管制跳事 (新界北) **和代码被副译** 22一路 移入出 沙州政府会等 10.4

6 February 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

CHEC

Maunsell

(Attn: Mr. George Mak

(Attn: Mr. Y H Fung

(Attn: Mr. Chan Man

Fax.: 2721 8630)

Fax.: 2643 3559)

Fax.: 2492 3701)

RECYCLED PAPER

NOTICE OF COMPLAINT

Complaint Ref.: NO1/TN/00001216-03

ICC Ref.

CASE DETAILS

Incident (1)

06/02/2003

(2) Incident Location:

地址: 翠瓶華屋.

NOI - SHATIN

(3) TPU:

757

(4) Description:

COMPLAINT OF GENERAL CONSTRUCTION NOISE FROM A CONSTRUCTION SITE NEXT TO

MONTE VISTA, MA ON SHAN, SHA TIN

(5) Nature

(6) Affected Party

(7) Pollution Pattern

N66-General construction noise except

DMS-Domestic Premises

renovation

") Priority class:

- Routine

i.e. substantive reply to be made on or before 27/02/2003

DETAILS OF THE SUSPECTED POLLUTER

(1) Premises Name:

姓名: 拓展處地縣

(2) * Premises Address:

地址:

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

POLLUTER HISTORY

Complaint Ref No.

Date of Complaint Substantive Reply Date

Nature Code

COMPLAINANT

(1) Name:

(2) Tel. No.: Day:

Night:

Mobile:

(3) Address:

地址:

翠耀蒂庭,9座

(4): Email Address:

CHANNEL OF COMPLAINT

Source channel:

01

Phone

Source code:

Public

Remarks:

ACTION OFFICERS

| 1: | Nature Code | SEPO | EPO | CI |
|-------------|-------------|--------|-----|---------|
| Coordinator | N66 | S[TN]2 | | CI[TN]2 |

INFORMATION INPUTTED BY

Name:

HATIFA

かん/ハフ/フのかる

Maunsell Consultants Asia Ltd

茂盛(亞洲)工程顧問有限公司

Chief Resident Engineer's Office

Trunk Road T7

7 Lok Wo Sha Lane, Ma On Shan

Telephone: 2643 9020 Fax: 2643 3559

E-mail: t7cso@netvigator.com

Your Ref.:

Our Ref.: T7/(ST86/2000)/M05/412(0169)

CHINA HARBOUR ENC., CO., (CROOP)
Contract T7 - Ma Ou Shan

- 6 FEB 2003

RECEIVED
Subject Plia: 01,01 I
Serial No: 044 23

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 壁 8 換

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

6 February 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-56
Noise Nuisance from Works near Block 9 of Monte Vista

I attach herewith for your attention and necessary action a copy of EPD's letter ref. EP 580/E6/3/9 dated 6 February 2003 regarding the captioned complaint on the same day.

Yours faithfully,

K H Cheng Senior Resident Engineer

KHC:jt

Encl.

cc : MCAL

OAP - w/o encl. (by fax only)

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.

Master Ref.

Date : 8 February 2003 Our Ref.: T7/01.01/O/05930

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

Attention: Mr. Albert Lam- CRE

Dear Sir,

Contract No. ST86/2000 Sha Tin New Town, Stage II Construction of Road T7 in Ma On Shan Received 10 FEB 2003

22683950

Environmental Complaint EC-56 - Noise nuisance from Works near Block 9 of Monte Vista

We refer to your letter dated 6 February 2003 regarding the captioned complaint involving the carrying out of construction works near Block 9 of Monte Vista.

For your information, 2-3 excavator-mounted breakers were used to carry out the rock-breaking activity at the slope opposite to Monte Vista. Noise measurements have been conducted on 6 & 8 February 2003 and the noise levels measured (L_{eq30}) at the rooftop of Block 9 of Monte Vista were within the acceptable noise level (i.e. not higher than 75 dB (A)) when working behind the solid noise barriers.

We will continue to monitor the sound level closely and will keep the noise nuisance to minimal as practical as possible.

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/*CZ/PM/G*7/1c c.c. MCAL – H.O.

CHEC - H.O.

TDD – Mr. George Mak

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

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