

Mass Transit Railway Corporation Limited

Contract 5032 – Mong Kok Station New Integrated Entrance C3

Environmental Monitoring and Audit Report

(May 2003)

Certified:



(Dr. Kam Chan)

Position:

Environmental Team Leader

Date:

16 June 2003

Verified:



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Position:

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Date:

16 JUN 2003

**EXECUTIVE SUMMARY**

**1 INTRODUCTION**

- 1.1 Scope of the Report**
- 1.2 Structure of the Report**

**2 PROJECT INFORMATION**

- 2.1 Construction Programme**
- 2.2 Construction Activities**

**3 IMPACT NOISE MONITORING**

- 3.1 Monitoring Parameters**
- 3.2 Monitoring Locations**
- 3.3 Monitoring Time, Frequency, Duration and Weather**
- 3.4 Monitoring Schedule for Next Month**
- 3.5 Monitoring Results**

**4 ASSESSMENT AND AUDIT RESULTS**

**5 ACTION TAKEN IN EVENT OF CONSTRUCTION NOISE LEVEL EXCEEDANCE**

**6 CONSTRUCTION WASTE DISPOSAL**

**7 RECORD OF COMPLAINTS FROM PUBLIC & EPD**

**8 STATUS OF PERMITS AND LICENCES OBTAINED**

**9 ACTION ITEMS FOR SITE AUDITS IN PAST MONTH**

**10 CONCLUSION**

**Appendix A**

- Reference Figures

-

-

**Appendix B**

- Environmental Monitoring Data

-

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### ***EXECUTIVE SUMMARY***

This is the 2<sup>nd</sup> report prepared to document the environmental monitoring and audit works conducted for the modification works of Mong Kok Station under Contract 5032. Monitoring works for noise impact from the construction works were carried out during the period of May 2003. During this period, the major civil construction activities, including site investigation, road slab breaking, site hoarding and noise barrier installation, demolition of Entrance C3 and concrete in-filling to Entrance C3 subway, were carried out.

With reference to the collected monitoring data and by field observation, environmental conditions of the construction site were said to be satisfactory in general. There were no limit level exceedance recorded in regular construction noise monitoring at the agreed sensitive receivers. In addition, no formal prosecution and complaint were received in this reporting period. The Contractor have provided reasonable effort to control the environmental impacts generated from the construction activities to the nearby surrounding.

As the concerned construction site is located in an urban area of Mong Kok, the noise and dust level are significantly affected by the busy traffic on Argyle Street and Portland Street and the works activities performed on the adjacent URA K2 Development site.

## **1 INTRODUCTION**

### **1.1 Scope of the Report**

The Environmental Team lead by the ET leader Dr. Kam Chan was responsible to provide baseline and impact environmental monitoring services for the Project and give advice to ER to supervise Contractor's performance on site environmental matters in order to comply with the requirements of the Project Profile, EM&A Manual and Environmental Permit approved by the Environmental Protection Department of HKSAR.

This is the 2<sup>nd</sup> impact monitoring report to cover the environmental monitoring works in the period of May 2003.

### **1.2 Structure of the Report**

The structure of the report is as follows:

- Section 1: Introduction – details the scope and structure of the report.
  - Section 2: Project Information – summarizes the scope of the construction activities in this monitoring reporting period and the coming month.
  - Section 3: Impact Noise Monitoring – summarizes the monitoring programme, locations and results.
  - Section 4: Compliance checking which compares the impact monitoring results with the A/L Levels to determine whether the construction activities have any adverse impacts on the environment and gives comment in order to alleviate those impacts.
  - Section 5: Actions taken in events of noise level exceedance.
  - Section 6: Construction wastes disposal.
  - Section 7: Record of complaints from public & EPD.
  - Section 8: Status of permits and licences obtained.
  - Section 9: Action items for site audits recorded.
  - Section 10: Conclusion.
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## **2 PROJECT INFORMATION**

### **2.1 Construction Programme**

The construction for modifications to the existing Mongkok Station are scheduled to commence in April 2003 and to be completed in early 2005. MTRCL is responsible for overall programming of the construction works. It is recommended that the programming is such that environmental impacts are reduced as far as possible. Site location plan is shown on Appendix A EMOKC3-001.

### **2.2 Construction Activities**

Major site activities carried out by the Contractor during this monitoring period include the following:-

- Erection of site hoarding and noise barriers.
- Demolition of Entrance C3 structure.
- Breaking concrete road slabs for construction activities.
- Trench excavation for drain pipe and cable laying.
- Works for concrete in-filling to Entrance C3 subway.

Scheduled major site activities carried out by the Contractor in the next reporting period are as follows:-

- Continue demolition of Entrance C3 structure.
- Continue concrete road slab breaking.
- Continue works for concrete in-filling to Entrance C3 subway.
- Commence sheetpiling works at Argyle Road hoarding site.
- Continue drain pipe laying works.

### 3 IMPACT NOISE MONITORING

#### 3.1 Monitoring Parameters

During this monitoring period, regular noise monitoring were made once a week at logging interval of 5 minutes in 30 minutes. 4 sets of 5 minutes average of Leq, L10 and L90 (in A-Weighting) were taken at N1MOKC3 and N2MOKC3.

#### 3.2 Monitoring Locations

##### Noise

Noise monitoring was undertaken at the following locations:

N1MOKC3 Residential Building at 43-49A Argyle Street (Argyle House)  
N2MOKC3 Residential Building at 35-37A Argyle Street

Location of the above agreed monitoring stations are shown on Appendix A Figure EMOKC3-001.

#### 3.3 Monitoring Time, Frequency, Duration and Weather

##### Noise

Noise monitoring was performed once every six days. Below is the time schedule that noise monitoring was performed in this monitoring period.

Location	Date and Time of Monitoring		Climate
N1MOKC3 (Argyle House)	5/5/03	3:17pm	Cloudy
	12/5/03	1:40pm	Cloudy
	20/5/03	4:49pm	Clear
	31/5/03	9:27am	Clear
N2MOKC3 (Residential Bldg 35-37A Argyle Street)	5/5/03	4:06pm	Cloudy
	12/5/03	1:00pm	Cloudy
	20/5/03	3:37pm	Clear
	31/5/03	10:37am	Clear

#### 3.4 Monitoring Schedule for Next Month

Noise monitoring at N1MOKC3 and N2MOKC3 will be performed on 5, 12, 19 & 26 June 2003.

### 3.5 Monitoring Results

#### Noise

A summary of the results (Leq30min) recorded during this monitoring period is shown in following table. Relevant details of the noise monitoring results and graphic plots are presented in Appendix B. Having compared the results with the limit levels, no exceedance were found.

Summary of Noise Monitoring Results measured in 30 minutes and dBA

Location	N1MOKC3 (Argyle House)						
	Date	Leq (30 min)	Leq corrected (30 min)	L10(30min)	L90(30min)	Allowable limit (30min)	Exceedance
	5/5/03	73.8	68.9	73.2	69.4	75	N
	12/5/03	75.9	73.9	78.0	73.0	75	N
	20/5/03	72.7	65.4	76.3	70.7	75	N
	31/5/03	72.7	66.2	73.8	69.8	75	N
				N2MOKC3 (Residential Building at 35-37A Argyle Street)			
	5/5/03	77.6	73.4	81.2	73.4	75	N
	12/5/03	77.0	72.5	79.5	72.0	75	N
	20/5/03	78.0	75.0	81.0	73.0	75	N
	31/5/03	76.8	70.6	78.5	70.8	75	N

Note:- \*\*\*\* measured noise level Leq(30min) less than or equal to background noise.

Leq(30min) corrected Measured noise level Leq(30min) with background correction.

**4 ASSESSMENT AND AUDIT RESULTS**

With reference to the monitoring results obtained, there was no exceedance of limit level occurred in noise monitoring taken during this reporting period. Levels of the construction noise recorded at the agreed NSRs in this reporting period are lower than the allowable limit. By site observations, the major noise sources mainly came from the busy traffic on Argyle Street and Portland Street, the construction activities in URA K2 Development site and the Project construction activities. The Contractor have provided reasonable monitoring and supervision to control the construction noise generated from the construction site.

**5 ACTION TAKEN IN EVENT OF CONSTRUCTION NOISE LEVEL EXCEEDANCE**

There was no exceedance recorded during regular noise monitoring recorded at the agreed NSRs during this reporting period hence no actions were required to take.

**6 CONSTRUCTION WASTE DISPOSAL**

Certain amount of excavated material and concrete debris were generated from the construction activities during this reporting period. The Contractor have to set up implementation of the delivery trip ticket system for waste disposal.

	Amount of Construction Wastes Disposed		
	Inert Waste (to PPE) (m <sup>3</sup> )	Non-inert waste (to Landfill) (m <sup>3</sup> )	Chemical waste (trip)
April 2003	0	0	0
May 2003	78	0	0
Accumulated total since April 2003	78	0	0



**7 RECORD OF COMPLAINTS FROM PUBLIC & EPD**

No complaint was received during this monitoring period.

Formal complaint				
	Air	Noise	Water	Others
April 2003	0	0	0	0
May 2003	0	0	0	0
Accumulated total since April 2003	0	0	0	0

**8 STATUS OF PERMITS AND LICENCES OBTAINED**

The Contractor have registered as chemical waste producer. Relevant environmental permit/licence for site water discharge has obtained from EPD. CNP for night works application submitted in April has been rejected.

Type	Reference No.	Commencement Date	Expired Date	Remarks
Chemical waste disposal	WPN5117-229-K2801-01	29/4/03	end of the Project	
Waste water disposal	EP482/229/0302/1	30/4/03	31-5-2008	

9 ***ACTION ITEMS FOR SITE AUDITS IN PAST MONTH***

During this monitoring period, regular weekly joint site audits lead by the senior of MTRC and the Contractor were taken. The Contractor's performance on the environmental matters were assessed and concerned items were raised for rectification. Status of required actions taken by the Contractor can be summarised as follows.

	<b>Description</b>	<b>Status</b>
1.	The Contractor reminded to have regular check on site to ensure the compliance of relevant environmental regulations, permits and licence	On going
2.	The Contractor reminded to provide proper mitigation measures to control construction noise.	Done
3.	The Contractor reminded to remove C&D waste off site as soon as practicable.	On going
4.	The Contractor reminded to minimize the stagnant water on site	Done
5.	The Contractor reminded to provide drip dray in order prevent land contamination.	Done

EPD staffs took a site inspection on 11/5/03 and expressed their concerns on proper control on construction noise generated from site and maintaining the working condition of the existing drains. They have been explained in general the project scope of works.

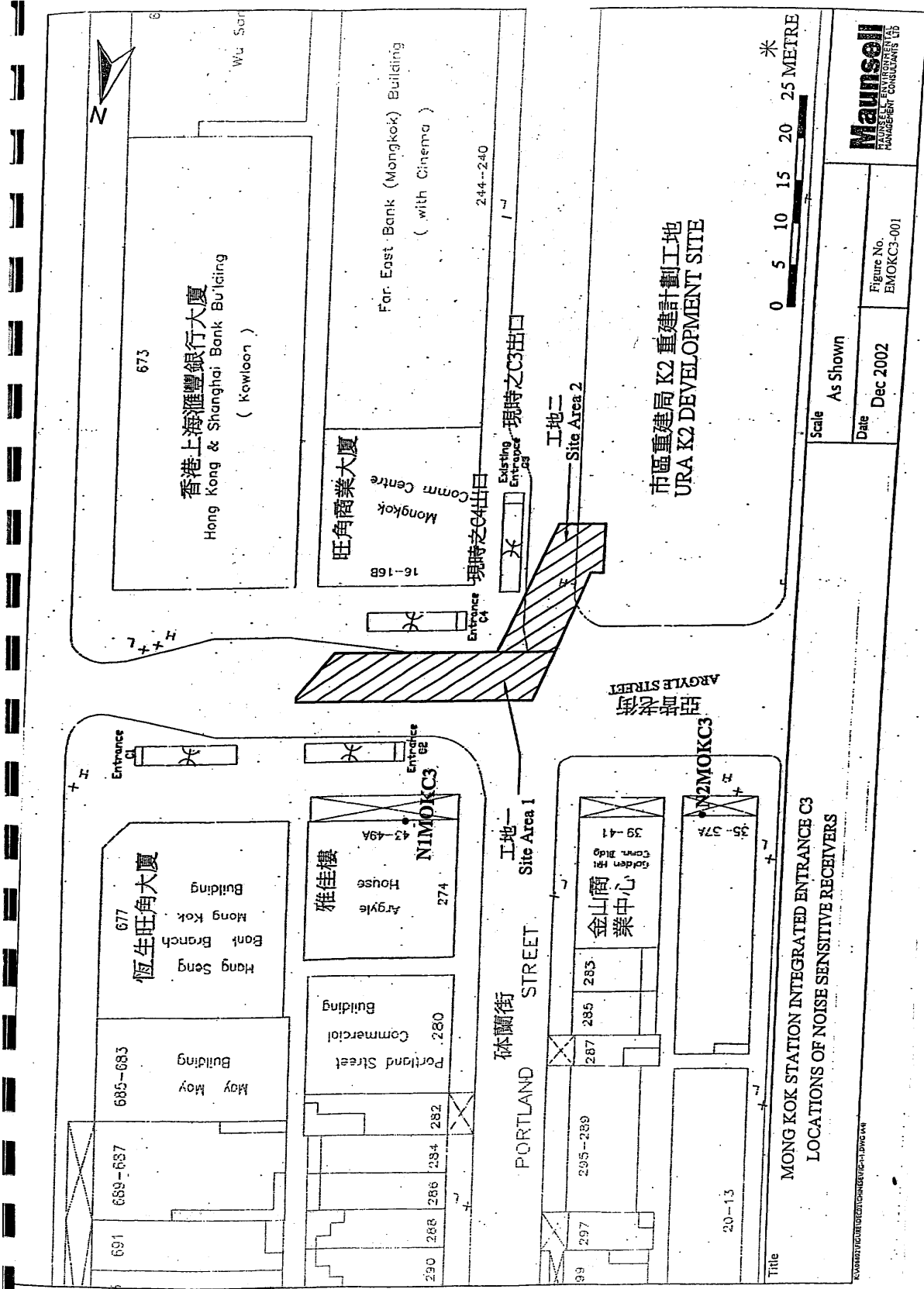
## **10 CONCLUSION**

Major civil activities including demolition of Entrance C3, concrete in-filling work for Entrance C3 subway, drain pipe laying, site investigation and road slab breaking were carried out by the Contractor during this reporting period. Regular meetings and joint site audits lead by the seniors for discussing site environmental matters were held to resolve the site environmental problems.

By field observation, the environmental pollution control measures provided by the Contractor were generally acceptable. The construction noise levels recorded during the reporting period were below the allowable limits. No formal complaint and prosecution obtained in this monitoring period. Concerned site environmental items raised have been followed by the Contractor in a reasonable time.

Appendix A

- Reference Figures
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MONG KOK STATION INTEGRATED ENTRANCE C3  
LOCATIONS OF NOISE SENSITIVE RECEIVERS

**Mausell**  
MAUSSELL ENVIRONMENTAL  
MANAGEMENT CONSULTANTS LTD

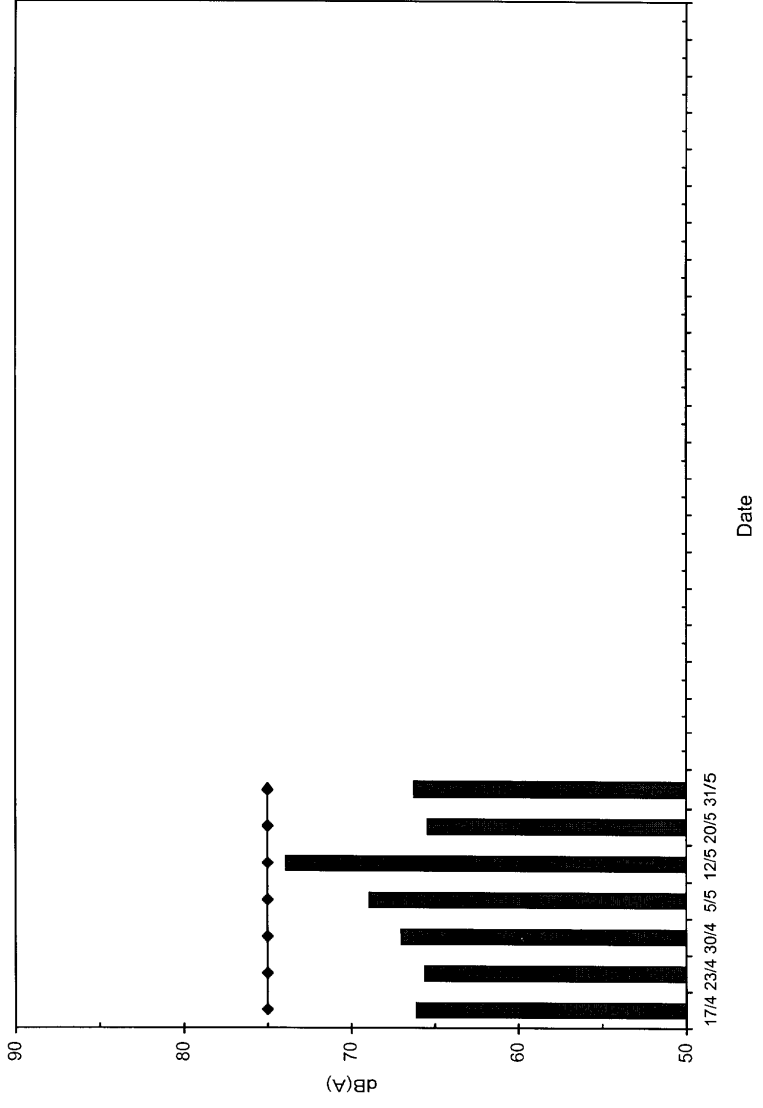
Scale As Shown  
Date Dec 2002  
Figure No. EMOKC3-001

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Appendix B

- Environmental Monitoring  
Data

**C5032- Noise Level at Monitoring Station N1MOKC3 (May 03)**



■ Daytime Noise Corrected Level  
◆ Daytime Limit

C5032 - Noise Level at Monitoring Station N2MOKC3 (May 03)

