

Kowloon-Canton Railway Corporation

KCRC East Rail Extensions Sheung Shui to Lok Ma Chau

Monthly EM&A Report –
April 2003

May 2003

Report no: EA00761/R89/1



Kowloon-Canton Railway Corporation

KCRC East Rail Extensions Sheung Shui to Lok Ma Chau

Monthly EM&A Report – April 2003

Author: Claudine Lee

Checker: Jacquelyn Anderson

Approver: Jacquelyn Anderson

Report no: EA00761/R89/1

Date: May 2003

This report has been prepared for Kowloon-Canton Railway Corporation in accordance with the terms and conditions of appointment for KCRC East Rail Extensions Sheung Shui to Lok Ma Chau Spur Line dated March 2001. Hyder Consulting Limited (COI number 126012) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.



Contents

Executive Summary	1
1 Introduction	4
2 IEC monthly site audits	4
2.1 Contract LDB201	4
2.2 Contract LCC202	5
2.3 Contract LCC300	5
3 Public Consultation	6

Appendix 1

LDB201 Sheung Shui to Chau Tau Tunnels Monthly EM&A Report

Appendix 2

LCC202 West Section Alignment and Associated Works Monthly EM&A Report

Appendix 3

LCC300 Lok Ma Chau Station and Associated Works Monthly EM&A Report

EXECUTIVE SUMMARY

INTRODUCTION

This Report (in HTML format) is the tenth Monthly EM&A Report for the Sheung Shui to Lok Ma Chau Spur Line and includes the Monthly EM&A Reports for construction contracts LDB201, LCC202 and LCC300. This Report and all monitoring data collected under the EM&A Programme are available on the KCRC East Rail Extensions Environmental Monitoring and Audit Website at www.env-ere.kcrc.com.

LDB201 Shueng Shui to Chau Tau Tunnels

The construction works for LDB201 commenced in late November. This report presents the EM&A findings in the period from 26 March to 25 April 2003. The main construction activities undertaken in the reporting month include hoarding and sheet pile installation, excavation, drainage diversion and footbridge demolition on East Approach Area at San Wan Road, shaft excavation, reinforcement fixing, concreting for gantry beam and gantry crane installation for launching shaft on Sheung Shui Launching Shaft Area, works area installation, spoil basin excavation and concreting, building workshop and wastewater treatment system setting on TBM Works Area, site formation works on East EAP Area, site formation works, erection of hoardings and noise barrier, drainage channel conversion, construction of access road and guide wall excavation on Kwu Tung Enabling Works Area, and site clearance works on West Approach Area.

LDB201 has taken over all the monitoring locations AM1, NM3, URS and SR1 from LCC206 and the monitoring works at AM2, URB, RB1, NM1, NM2, NM4, NM5, NM6, NM7, NM8 and NM9 were commenced in this reporting month.

TSP monitoring was conducted once every six days and three sets of 1-hr TSP monitoring were conducted once every six days at the two monitoring locations. No exceedance was recorded at the monitoring locations in this reporting month.

Noise monitoring was conducted once every six days during non-restricted hours at the identified monitoring locations. There was no exceedance recorded in the reporting month. No construction works were conducted during restricted hours.

Water quality monitoring was conducted at the identified water quality monitoring locations. Exceedances of dissolved oxygen, total suspended solids and pH value were recorded during the reporting month. Contractor explained that the exceedances were not related to the site activities as they didn't have construction works conducted near the streams.

No notification of summons, warning or complaint was received during the reporting month.

Weekly site inspections were carried out by the CET and an IEC monthly site audit was conducted on 22 April. The Contractor has proposed mitigation measures to rectify the environmental deficiencies in response to the observations raised by the IEC during the monthly site audit. The proposed mitigation measures include ensuring the entire covering of the stockpiles, cleaning up the soil deposited outside the site entrance, fencing off the trees from construction works and more frequent watering on site. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.

LCC202 West Section Alignment and Associated Works

The commencement date for LCC202 started on 26 March 2003. This report presents the EM&A works during the period from 26 March to 25 April 2003. Within this reporting month, the major construction works include the construction of noise barriers and site investigation at W53, bored piling works at W58, W59 and W60, fence erection at site boundary of W50 to W53 and site clearance for access at W50 to W54. No construction works conducted during restricted hours.

A total of 15 sets of 1-hr TSP and a total of 5 sets of 24-hr TSP measurement were conducted at AM4 during the reporting month. No exceedance was recorded.

Four sets of noise measurement were conducted at NM15 during the reporting month. No noise monitoring has been conducted during restricted hours as no construction works were carried out in that period of time. No exceedance was recorded.

Water monitoring was undertaken at one upstream station USTR, one downstream monitoring location STR1 at San Tin River, and three selected fishponds, namely, FP1, FP2 and FP3. The DO measurements complied with the Action/Limit Levels at all monitoring stations. There were a total of 12 Action Level exceedances and 1 Limit Level exceedance in pH value, 6 Limit Level exceedances in turbidity and 3 Limit Level exceedances in suspended solids. The contractor explained that the exceedances are unlikely related to the construction works conducted on site.

No complaint or notification of summons was received during the reporting month.

The ET Leader has carried out weekly site inspections and an IEC monthly site audit has been conducted on 24 April 2003. In response to the findings and observations raised by the ET Leader and the IEC, the Contractor has proposed mitigation measures including the provision of drip tray, realignment of the concrete block to minimise the gaps, more frequent water spraying on the stockpiles, the provision of water browser, more frequent water browsing on the access road, and more frequent cleaning of wheel washing area. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.

LCC300 Lok Ma Chau Station and Associated Works

The EM&A programme for LCC300 commenced in mid-December. This report summarises the EM&A works conducted during the period from 26 March to 25 April. During the reporting month the principal work activities include site clearance for remaining vegetation, sand filling, construction and fitting out of the site offices, installation of visual monitoring system, surveying, site investigations, connection of the western drainage outfall, the mobilisation of bored piling operations and the clearance of some structures adjacent to Lok Ma Chau Road.

Five sets of 24-hr TSP and 14 sets of 1-hr TSP monitoring were conducted at AM4, Ha Wan Tsuen Village Playground. No exceedance was recorded in the reporting month.

Four sets of noise monitoring were conducted once every six days during non-restricted hours at three monitoring locations: NM13, Rear of house of Lok Ma Chau Closed Area Police Checkpoint, NM14, Rear of shop at Lok Ma Chau Closed Area Police Checkpoint and NM15, Ha Wan Tsuen Village. No noise level exceedance was recorded during monitoring period. There is no report of noise monitoring undertaken during restricted hours.

Water quality monitoring was conducted at one upstream station USTR, one downstream monitoring location STR1 at San Tin River, and three selected fishponds, namely, FP1, FP2 and FP3. There were a number of exceedances recorded on dissolved oxygen, turbidity and pH during the reporting month. The Contractor explained that the exceedances were not related to Contract LCC300 as there was no construction works conducted in the vicinity of the monitoring locations and it is likely due to seasonal fluctuations and other adjacent construction works.

No complaint or notification of summons was received during the reporting month.

ET Leader and the Engineer have conducted regular site inspections and the IEC has conducted a monthly site audit on 22 April during the reporting month. These resulted in the improvements including securing the tarpaulins over the stockpiles, increasing the height of the bund and putting the sand bags in place. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.

1 Introduction

Hyder has been commissioned by KCRC as the IEC for the East Rail Extensions, which include the Ma On Shan to Tai Wai Rail, the Hung Hom to Tsim Sha Tsui Extension and the Lok Ma Chau Spur Line. A requirement of the Contract is for the IEC to prepare a combined EM&A Report on a monthly basis for each of the above rail lines. The combined report combines the Monthly EM&A Reports for each of the construction contracts within each rail line. This Report (in HTML format) is the tenth IEC Monthly EM&A Report for the Sheung Shui to Lok Ma Chau Spur Line and includes the Monthly EM&A Reports for construction contracts LDB201, LCC202 and LCC300 and a summary of the reports. It also includes a brief summary of the IEC Site Audits and information supplied by KCRC on Public Consultation activities.

2 IEC monthly site audits

IEC monthly site audit was conducted on 22 April. Non-compliances and observations issued by the IEC are based on the requirements of KCRC's Environmental Management System.

2.1 Contract LDB201

The IEC site audit for LDB201 was undertaken on 22 April. The major construction activities include hoarding and sheet pile installation, excavation, drainage diversion and footbridge demolition on East Approach Area at San Wan Road, shaft excavation, reinforcement fixing, concreting for gantry beam and gantry crane installation for launching shaft on Sheung Shui Launching Shaft Area, works area installation, spoil basin excavation and concreting, building workshop and wastewater treatment system setting on TBM Works Area, site formation works on East EAP Area, site formation works, erection of hoardings and noise barrier, drainage channel conversion, construction of access road and guide wall excavation on Kwu Tung Enabling Works Area, and site clearance works on West Approach Area. Five observations have been raised during the site audit:

East Approach Area – San Wan Road

1. Stockpiles in the storage yard were not entirely covered.
2. Soil deposited outside the site exit of the storage yard was observed.
3. Trees should be fenced off from the construction works.

East EAP site area

4. Dusty ground was observed. Frequent watering is recommended.

5. Dust emission was observed during the loading/unloading of soil on the truck.

As a result of the observation raised by the IEC, the contractor proposed mitigation measures including ensuring the entire covering of the stockpiles, cleaning up the soil deposited outside the site entrance, fencing off the trees from construction works and more frequent watering on site. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.

2.2 Contract LCC202

The IEC site audit for LCC202 was undertaken on 24 April. The major construction works include the construction of noise barriers and site investigation at W53, bored piling works at W58, W59 and W60, fence erection at site boundary of W50 to W53 and site clearance for access at W50 to W54. Two observations have been raised during the site audit:

1. The wheel washing area next to the bored piling works near DSD site (W58) was silty.
2. The bare ground area was found dry and dusty.

As a result of the observation raised by the IEC, the contractor proposed mitigation measures including more frequent cleansing of the wheel washing area and more frequent water spray on the bare ground. The implementation and effectiveness of the corrective actions will be assessed during the next site audit.

2.3 Contract LCC300

The IEC site audit was conducted on 22 April. The major construction works include site clearance for remaining vegetation, sand filling, construction and fitting out of the site offices, installation of visual monitoring system, surveying, site investigations, connection of the western drainage outfall, the mobilisation of bored piling operations and the clearance of some structures adjacent to Lok Ma Chau Road. Two observations have been raised during the site audit:

1. The stockpile of clay excavated from the pipe jack was not entirely covered with tarpaulin sheet.
2. The loose soil on the side of bund along the diverted western drainage channel was likely to fall off into the drain. Compaction of the bund is recommended.

The Contractor will implement mitigation measures including securing the tarpaulins over the stockpiles, increasing the height of the bund and putting the sand bags in place. The implementation and effectiveness of the measures will be assessed and verified during the next site audit.

3 Public Consultation

The Community Liaison Group Meeting for Eastern has been held on 8 April 2003. The Meeting for Western has been postponed until further notice.
