

Kowloon-Canton Railway Corporation

KCRC East Rail Extensions Sheung Shui to Lok Ma Chau

Monthly EM&A Report –
January 2003

February 2003

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Executive Summary

Introduction

This Report (in HTML format) is the seventh Monthly EM&A Report for the Sheung Shui to Lok Ma Chau Spur Line and includes the Monthly EM&A Reports for construction contracts LCC206, LDB201 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.environment.kcrc.com.

LCC206 TBM Launching Shaft Diaphragm Wall

The EM&A programme for LCC206 commenced on 23 July 2002. 24-hr TSP monitoring was conducted once every six days and three sets of 1-hr TSP monitoring were conducted once every six days at AM1 Village House in Tsung Pak Long. There were exceedances of the Action/Limit Level recorded on 9 January for 1-hour TSP and on 21 January for 24-hour TSP. The Contractor explained that this was due to the fugitive dust emission from adjacent construction site.

Noise monitoring was conducted once every six days during non-restricted hours at NM3 Village House in Tsung Pak Long. There was one noise level exceedance recorded on 9 January. The Contractor reported that the exceedance was due to the operation of construction plants (e.g. roller compactor, excavator and trucks) on LDB201 construction site. No night-time noise measurement has been reported in this reporting month.

Water quality monitoring was conducted at one upstream control station URS and one downstream monitoring location RS1 in the River Sutlej. Full compliance for pH, oil & grease, suspended solids and turbidity were reported during January. However an exceedance of the limit level of dissolved oxygen on 29 January was recorded during the reporting month. CET explained that the exceedance was subject to natural seasonal variation in River Sutlej.

No complaints or notification of summons were received during the reporting

month.

Weekly site inspections were carried out by the CET and an IEC monthly site audit was conducted on 21 January. No observation or non-compliance has been raised in the reporting month.

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 December 2002 to 25 January 2003. As part of the site area of LCC206 has been handed over to LDB201 for site preparation works, the major works area for LDB201 was on the same site as the LCC206 Contract.

Currently monitoring is still being undertaken by LCC206 however it is anticipated that LDB201 will take over existing locations AM1, NM3, URS and SR1 in next 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 AM1 Village House in Tsung Pak Long. There were exceedances of the Action/Limit Level recorded on 9 January for 1-hour TSP and on 21 January for 24-hour TSP. The Contractor explained that this was due to the fugitive dust emission from diaphragm wall breaking in launching shaft area and a stockpile on adjacent construction site respectively.

Noise monitoring was conducted once every six days during non-restricted hours at NM3 Village House in Tsung Pak Long. There was one noise limit level exceedance recorded on 9 January. The Contractor reported that the noise source was the concrete breaking of diaphragm wall in launching shaft area. No construction activities were undertaken during restricted hours in the reporting month.

Water quality monitoring was conducted at one upstream control station URS and one downstream monitoring location RS1 in the River Sutlej. Full compliance for all parameters were recorded during the reporting month.

No complaints or notification of summons were received during the reporting month. A warning was received from EPD during their site visit on 20 January regarding the dry and dusty main access road (around site office) was observed.

Weekly site inspections were carried out by the CET and an IEC monthly site audit

was conducted on 21 January. These resulted in the improvements including the more frequent water spraying on the haul road, bare ground breaking areas to control dust emissions, the provision of vehicle washing area and the provision of sandbags along the edge of sheet piling wall along DSD channel. 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 15 December to 25 December. During the reporting month no major construction works were conducted. The preparation works carried out on site include the erection of hoarding and site offices, site investigation, and the preparation of site installations and pipe-jacking for the drainage outfall.

One set of 24-hr TSP and two sets of 1-hr TSP monitoring were conducted at AM4, Ha Wan Tsuen Village Playground. One exceedance of the Action Level for 24-hr was recorded during the monitoring period. However there were no construction works conducted for LCC300. The constructor explained the exceedance is likely due to the adjacent construction works and other influences (e.g. traffic).

Noise monitoring was conducted once every six days during non-restricted hours at three monitoring locations: NM13, Rear of Shop at Lok Ma Chau Closed Area Police Checkpoint, NM14, Front of house south of 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. Turbidity reading exceeded the action level at STR1 and URST was recorded on 27 December. The pH measurements indicated the exceedances of the action level during the reporting month. There were also action level exceedances of dissolved oxygen in FP2 recorded on 30 December, 10 and 24 January. 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 that the exceedances are due to outside influences.

One complaint was received from the Engineer's office regarding dust emission from the haul roads within the site on 16 January. No notification of summons was received during the reporting month.

ET Leader has conducted site inspections during the reporting month. Due to the limited works on site, no significant environmental impact was observed during the site inspections. Nevertheless the ET Leader has given recommendations to assist site installation and management.

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 seventh 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 LCC206, LDB201 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 21 January. Non-compliances and observations issued by the IEC are based on the requirements of KCRC's Environmental Management System.

2.1 Contract LCC206

Site audit was undertaken by the IEC on 21 January. The major construction activities had already been completed and only the installation of diaphragm wall was observed during the audit. No observation or non-compliance has been raised.

2.2 Contract LDB201

The IEC site audit for LDB201 was also undertaken on the same day. The major construction activities include the clearance of planters at East Approach – San Wan Road, slurry wall construction and ground treatment works at Sulej Channel, diaphragm wall and launching shaft construction, reinforcement fixing and concreting for gantry beam of launching shaft, site clearance and installation of wire fence in East EAP area, and site preparation works in Kwu Tung Enabling Works Area. Three observations has been raised during the site audit:

Sheung Shui Launching Shaft area

1. The environmental management records including licenses, permits and trip tickets should be kept on site and made available for inspection.
2. The site area near the channel works should be watered more frequently.
3. Water spray on breaking area should be provided.

As a result of the observation raised by the IEC, the Contractor proposed more frequent water spray on the breaking area. The implementation and effectiveness of the measures will be assessed and verified during the next site audit.

2.3 Contract LCC300

The IEC site audit was conducted on the same day. The major construction works include the erection of site hoarding, surveying, site investigations, piling and excavation for construction of the pipe jacking facilities to drive the culvert from the western end of the site to the Shenzhen River, site clearance and fish pond filling. No observation and non-compliance has been raised during the site audit.

3 Public Consultation

No information on Public Consultation was provided by KCRC in December.
